



SELF STUDY REPORT

(NAAC Accreditation - Third Cycle)

Submitted to

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
BANGALORE**

September 2016



Estd. 1969

Gondia Education Society's
DHOTE BANDHU SCIENCE COLLEGE, GONDIA

College with Potential for Excellence (CPE)

Centre for Higher Learning and Research

B.Voc. Centre

Affiliated to RTM Nagpur University, NAGPUR

Re-accredited with Grade "A" by NAAC, Bangalore

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Self Study Report



Dr. P. A. S. Naidu

Principal

Date :

Gondia

It gives me immense pleasure in submitting this very significant document to the National Assessment and Accreditation Council, Bangalore. It is the product of hard work put in by all the staff members of the college during the last five years. I am quite aware of the hurdles and inconveniences faced by my colleagues in terms of time, energy and space.

It was a herculean task to compile and systematize such a huge data and present it in a form of compact document while handling the regular teaching and other academic duties. Our staff members have successfully done this job in order to ensure better prospects for the institution.

On behalf of my staff, once again reiterate our wholehearted commitment towards the welfare of our students and continuous innovations in the teaching learning process to carve future citizens of the society.

(Dr. P. A. S. Naidu)



Self Study Report



CONTENTS

Items/Particulars	Page no.
NAAC Steering Committee	001
Preface	002
Executive Summary	004
SWOC analysis of College	008
SELF STUDY REPORT	
1. Profile of Institution	010
2. Criterion wise inputs	
Criteria-I Curricular Aspects	020
Criteria-II Teaching-Learning and Evaluation	050
Criteria-III Research, Consultancy and Extension	085
Criteria-IV Infrastructure and Learning Resources	114
Criteria-V Student Support and Progression	132
Criteria-VI Governance Leadership and Management	161
Criteria-VII Innovations and Best Practices	185
3. Evaluative reports of the departments	
Department of Chemistry	204
Department of Electronics	212
Department of Computer Science	219
Department of Mathematics	226
Department of Physics	232
Department of Zoology	240
Department of Botany	246
Department of Languages	253
Department of Software Development	258
Department of Microbiology	263
Department of Biotechnology	274
Department of Food Processing and Engineering	280
Department of Vocation	287



4.	Post-accreditation Initiatives	292
5.	Recommendations received from NAAC and compliance fulfilled	297
6.	Declaration by the Head of the Institution	299
7.	Certificate of Compliance	300
8.	ANNEXURE: A -Copy of recognition of college under section 2(f) and 12(B) of UGC Act	301
9.	ANNEXURE: B -Affiliation of the Courses and Details	302
10.	ANNEXURE : C -Copy of certificate of NAAC Accreditation and Peer Team Report (2 nd Cycle)	305
11.	ANNEXURE : 1.1----7.1	318--410



Gondia Education Society's
BHOTE BANDHU SCIENCE COLLEGE, GONDIA

STEERING COMMITTEE
(NAAC accreditation: Third cycle)

Dr. P. A. S. Naidu (Principal and Chairperson, IQAC)
 Dr. D. S. Choudhary (Co-ordinator, NAAC Steering Committee and IQAC)
 Dr. H. R. Trivedi (Member, IQAC)
 Shri. S. P. Timande (Member, IQAC)
 Dr. J. G. Mahakhode (Member, IQAC)
 Dr. K. M. Hatzade (Member, IQAC)
 Shri. Y. S. Bopche (Member IQAC)
 Dr. Ms. D. S. Tembhare (Member, IQAC)
 Shri. S. A. Roy (Member, IQAC)

WORKING COMMITTEE

Cri. I: Curricular Aspects	Cri. II: Teaching Learning and Evaluation	Cri. III: Research, Consultancy and extension	Cri. IV: Infrastructure and Learning Recourses
Shri. S. P. Timande Shri. R. K. Dhuware Shri. Y. S. Bopche	Dr. M. R. Patle Dr. M. V. Kawale Shri. A. M. More Dr. Ms. D. R. Tembhare Dr. Ms. S. B. Juneja Ms. S. S. Jaiswal	Dr. J. G. Mahakhode Shri. D. A. Chouhan Shri. Y. S. Bopche	Dr. S. K. Paliwal Dr. A. M. Ghatole Shri P. M. Walde
Cri. V : Student Support and Progression	Cri. VI: Governance, Leadership and Management	Cri. VII: Innovations and Best Practices	Office and Technical Support
Dr. G. P. Gadekar Ms. P. K. Nagpure Dr. Ms. S. D. Tambekar Dr. M. A. Sheikh	Dr. P. A. S. Naidu Dr. H. R. Trivedi Shri. V. M. Soni	Shri. D. G. Nalamwar Shri. A. A. Bhoyar Ms. S. B. Narde	Shri. S. A. Roy Shri. N. M. Ganvir Shri. N. P. Motghare



Self Study Report



PREFACE

THE INSTITUTE

Dhote Bandhu Science College, Gondia has established itself as a premier science college of the region. It has been imparting quality science education to the socially and economically disadvantaged students for the last Four Decades. Established in 1969 by the great visionary and epitome of humanity Late Manoharbhairao Patel, it has traveled through difficult times to create a special niche for itself in the academic arena of the region. Geographically it is located in the remotest eastern corner of Maharashtra and is nearly 165 Kms away from Nagpur, the second capital of the State.



Late Shri Manoharbhairao Patel

CAMPUS HIGHLIGHTS

College life is undoubtedly the most loved and cherished memory for an individual. This institution ensures that every student gets perfect lessons in discipline, sincerity and hard work along with fun and enjoyment during his stay



Campus view



Campus front view

in the campus. There is a good rapport between the students and the faculty as well as the other staff members. This harmonious bonding makes the entire ambience a nice place for learning. Spread in a campus of 03 acres, the college is made rich with a lush-green lawn at the very entrance to make perfectly an eco-friendly one. Nearly 1500 students

of Degree and Post-graduate level are nurtured in the best possible way in this leading science college to ensure academic excellence for them.

ACADEMICS AND INFRASTRUCTURE

Dhote Bandhu Science College has always been a pioneer in the field of academics in this region. From initiating new need-based courses to the holding of Campus Placement drives for the students of this region, this institution has always taken a lead role and proved its social commitment. Considering the needs of the global standards of education, a latest and modernized infrastructure has been raised which has opened new vistas in the field of basic sciences and research. Besides fulfilling its academic promises and goals, the institution is ever committed to stand true to its



Auditorium



social responsibilities. Efforts are made to improve aptitude & comprehensive intelligence of the students. Through optimum use of infrastructure, set goals are achieved only to give space for higher & noble goals.

ADMINISTRATIVE STRUCTURE

Dhote Bandhu Science College, Gondia is a permanently affiliated college of RTM Nagpur University, Nagpur. It is recognized under Section 2(f) and 12(B) of UGC Act 1956. The Governing Body of Gondia Education Society and the Local Managing Committee of the College look after the overall functioning of the college with the Principal working as a link among these constituents. Besides the Principal, there are various committees which look after different administrative and academic activities.

ACCREDITATION

Dhote Bandhu Science College, Gondia has been accredited with B⁺ Grade by National Assessment and Accreditation Council, Bangalore in 2004 and with grade 'A' in 2011 i.e. 2nd cycle of NAAC accreditation.



Receiving Accreditation Certificate



Chemistry Laboratory



Instrumentation Laboratory



EXECUTIVE SUMMARY

During the last five years after NAAC reaccreditation of second cycle, the college has made efficient efforts to build excellence in teaching, learning, research and extension activities. In addition to offering traditional courses the college has taken steps by offering skill based vocational courses, career oriented courses in developing areas like food technology, software, power plant etc.

The college is leading a steady transformation in education with 02 UG, 05 PG, 03 Ph.D. programmes, 05 UGC funded Career Oriented Certificate Courses, 02 vocational degree programmes funded by UGC, 02 certificate courses under community college scheme of UGC.

Our college is University recognized research centres for three subjects and has 10 recognized research guides. Currently 13 students are pursuing their Ph.D. degree. During the academic year 2015-16, a total of 1459 students were admitted in the college.

Our college is surging ahead in the right direction under the stewardship and collective wisdom of learned and able Management. They have taken efforts to fulfill short term as well as long term goals through promoting skill based courses and research in science by augmenting advanced infrastructure and using resources. Recently UGC, New Delhi has approved 'College with Potential for Excellence' status.

Advent of accreditation of the institution by NAAC has proved as a revolutionary step in Indian education system. NAAC's pre-condition of functional IQAC at HEIs has made visible transformation through steps leading to quality sustenance and enhancement. In fact, NAAC role in assessment and accreditation of colleges served in realization of institutional vision, mission and objectives. The recommendations made by NAAC Peer Team acted as guidelines for marching ahead to provide an all-inclusive atmosphere for holistic education that not only focuses on employability but also strives to uphold Knowledge, Character, Service, Management and Love. The concert assessment of the college based on seven criteria is briefed as under.

Criterion-I : Curricular Aspects

More than 40% of teachers contribute in Design and Development of University Curriculum as Dean/Members on Board of Studies (BOS), RTM Nagpur University.

Staffs have sincerely contributed in Design and Development of Curriculum for in-house Career Oriented Certificate Courses. Faculty members hold positions and are represented as members in University Senate, Local enquiry Committee (LEC), Research and Recognition Committee (RRC) and as Subject Experts. These members play important role in curriculum design and update through interactions and suggestions received through various meetings. 02 UG, 05 PG, 03 Ph.D. programmes, 05 COPs, 02 Vocational degree programmes funded by UGC, 02 skill based certificate courses under community college scheme of UGC offer enough flexibility and vertical/horizontal mobility under regular and self-financed programmes. Curricula of all subjects are updated under semester, CBS and CBCS schemes introduced by University. Regular feedback on curriculum is obtained from students and stakeholders. College level IQAC involves students and external stakeholders in getting feedback on curriculum for its further up-gradation. These suggestions are conveyed to University BOS. The skill based certificate courses and vocational degree programmes introduced as the analytical feedback obtained from the alumni and other stakeholders. Substantial number of staff has participated in 'Workshops on Revised Syllabus'.



The workshop are organized for the faculty to handle the new curricula and any new concept. The governing body of college has taken effective steps for curriculum delivery and transaction through establishment and provision of ICT enabled Smart Classroom and Video Conferencing facility, Projectors, Television Sets, Strengthening of Research Infrastructure and research laboratories.

Criterion-II: Teaching-Learning and Evaluation

Student diversity and accommodation is visible with about 85% proportion of students from economically weaker sections, reserved category, minorities and more than 65% students as girl students. Admission process follows university rules, based on merit and personal counseling. 60% teachers possess Ph.D. qualification, 24% are PG with NET/SLET, 8% with M.Phil. and rest have PG qualification. Contributions of few teachers are recognized at regional and state level with awards and honors. Six teachers have presented their research outcomes abroad. 49 teachers are employed on full time temporary for dealing with number of courses. Introduction of semester, semester and CBCS pattern allows for continuous evaluation of students. Additionally, college level tests are conducted for internal evaluation. Evaluation methods involve class assignments, tutorials, oral examinations, open book test, research project submission etc. Teachers use ICT enabled teaching-learning process through e-resources, power point presentations, soft-wares, smart classroom, video-conferencing etc.

We organize a large number field visits, excursion tours, industrial visits, skill development programmes and special counseling and lecture sessions for effective delivery of course curriculum. The hands on training, Personality development programme, Campus recruitment training are the regular activities conducted to cope up with the demand. Average passing results for last five years are above university average result. In last two years the number of students securing first division and distinction has been increased remarkably. Every year at least one student shine in the list of merit of RTM Nagpur university.

Criterion-III: Research, Consultancy and Extension

College Research Advisory Committee promotes and monitors progress of research work. 11 Minor are undertaken and successfully completed. Total outlay of Minor Research projects was Rs.1089146/- and utilized Rs.12,06,500/- towards organization of national conference /seminar/ workshop funded by UGC. The college recognized as 'Centre for Higher learning and Research', 03 research laboratories in Physics, Chemistry and Botany approved for Ph.D. work. 10 University recognized research guides and 13 Ph.D. students are currently undertaking their research work. Faculty conduct basic and interdisciplinary as well inter-institutional research work and the outcomes are visible through substantial number of publications in various peer reviewed journals. Number of equipments are added to strengthen the research. About 180 publications were published, of which 95 are published in peer reviewed national / International Journals and 87 in proceedings. Formal MoUs established with 12 various different organizations. NSS, NCC, ACEEE and Science Departments conduct wide range of extension activities. Number of activities were organized annually to address issues of Gender, Environment, Human Rights, Human Duties, Girl Child, Water, Conservation, Wild Life, Blood Donation, Tree Plantation, Cleanliness, women empowerment etc. Most of the staff members serve as resource persons in various institutes as part of their social responsibilities towards community.



Some staff have received honors and recognition for their contribution in academic activities. Students participation in national conference is encouraging. Some students receive fellowship from DST INSPIRE. UG and PG students have received noteworthy achievements in Research Festival 'Avishkar'.

Criterion- IV: Infrastructure and Learning Resources

Eco friendly campus with lush green lawn is major adornment of the institution. Adequate infrastructure is provided for Teaching, Learning, Research, Extension, Sports, and Cultural activities. Laboratories are well equipped for basic and research in most of the subjects. College governing body provides hostel facility for Girls. Library, Girls Common Room, Reading room, Fully equipped auditorium, Seminar Hall, Conference room, Cafeteria, students section, NCC-NSS room, Botanical garden and sufficient Parking Area facilities are available. College has utilized adequate funds for maintenance and creation of newer facilities through establishment of ICT enabled Smart Classroom, CCTVs, RO Water, Vermicomposting Unit, Rainwater Harvesting Unit, Solar Panels, Newer Furniture and Repairs, Purchase of Newer Equipments, Building Maintenance, Annual Maintenance Contracts (A.M.C.) of Instruments and their Insurance. Library has more than 45000 books. Additionally, 97,000 e-books, 6000 e-journals (Accessible through NLIST), 115 journals and magazines, CDs/DVDs, e-databases on books, notes, power points hosted by staff for exchange with students, large collection of books on Competitive Examination and fully automated library with Internet and Reprographic facility. Library has a students reading rooms, Centralized net access and some Departmental Library Facility in some Departments. Library organizes annually Book Exhibition. Centralized Internet Facility at Computer Department. Additionally all departments have net connectivity through LAN and whole campus is networked with secured Wi-Fi facility. An auditorium with 200 seating capacity, 01 Seminar Halls, 01 conference room, Playgrounds, Gymnasium, outdoor and indoor game facility, canteen, RO Water facility, Generator Backup, Guest House and Quarters are available.

Criterion-V: Student Support and Progression

Percentage of students progression in B.Sc. programme is high where majority of the students opting for higher education. Overall passing percentage is enhancing every year and always more than the university average result. Every year at least one student shine in merit positions in University. Dropout rate is less. Various types of scholarships, free ships are timely distributed to SCs/ STs/OBCs and others. Some students receive scholarship through DST-Inspire Fellowship. College has instituted a scholarship 'Manohar Memorial Scholarship' as an aid to needy and poor students for continuation of education and to reduce dropout rate. College has a scheme to reduce or waive the tuition fees to poor students. College encourages entrepreneurial skills through Career Oriented Certificate/diploma Courses, COPs and a substantial number of students were placed through on and off campus drives. The college provides support through Mentoring Scheme. In addition to providing monetary aid these schemes also provide personal and psycho-social guidance to students. The college conducts Bridge Courses and offers opportunities for advanced learners through various forums like university level presentations, participation in summer school programme in research institutes of national repute, Organisation of annual mega events, felicitation programme like 'Achievers Day' and so on.



The college has outstanding performance in extension, social outreach activities and in sports. Sports department has shown exemplary performance with trophies in University/state level events. Our performance in sports is peaking with higher participation of students in University and state level participation.

Criterion-VI: Governance, Leadership and Management:

Gondia Education Society, Gondia is one of the oldest and well known educational trusts in Maharashtra and caters to the needs of inclusive higher education in Arts, Science, Social Sciences, Education, and Engineering. The Management is committed and has clear vision of present and future growth in education. Principal and IQAC act as a bridge between Local Management Committee (LMC) and Governing Council. Organizational hierarchy is well defined with Governing Council guiding and Principal coordinating and monitoring down the line. Numerous college level Committees work concertedly and have necessary freedom to implement decentralized governance. Some of the committees have 'Students Representative' including IQAC and strategies are developed collectively through the involvement of Heads and coordinators of various Departments. Student Council plays major role in smooth conduction of literary and cultural activities. Performance Appraisal of Staff is assessed regularly and most of the promotion cases of staff are cleared for Career Advancement Scheme. Credit Co-operative Society provides varied Loan Facilities and other saving schemes. Group Insurance and Medical Insurance is schemes are availed by staff. Pension documents of retired staff are processed timely and service details are maintained up-to date. Most of the staff vacancies are filled and Management has appointed required number of full time teachers on temporary and contractual basis. College makes available various Staff Welfare Schemes and motivates teachers to avail FIPs and participate in Orientation, Refresher, Summer and Winter Training, Short Term Training programmes etc. Necessary leaves are sanctioned for improving their academic and professional skills. Our college has received funding from various schemes of UGC, MNRE etc. and also through self-funded courses and college fees as financial resources. The academic audit is performed by academic peers. College has system for Internal and External Auditing from Government Auditor. The last audit report received in 2015 carried no major objections. Office and financial work are fully automated with Shikshankranti Software. IQAC acts as a template between Management and College and provides inputs for sustenance of quality in each sphere of college activity. IQAC prepares annual AQAR report for timely submission to NAAC, Bengaluru.

Criterion-VII: Innovations and Best Practices

More than 80% of students belong to SC/ST/OBC/Minority category. Security is provided through Close Circuit Cameras, security personnel and compound wall to the whole campus. Green Auditing is performed for conservation of nature and natural resources for sustainable future. Effective steps were taken to recharge rainwater through installation of Rainwater Harvesting. Steps were taken to save energy through use of CFL, LED Lights. Solar Panels were installed as a source of renewable energy. Efforts were made for 'Carbon Neutrality' through Tree Plantation, practicing Zero Waste and Plastic Free Campus. Most of the biodegradable waste is recycled in 'Vermicomposting Unit'. College conducts a large number steps to promote message of Eco-mission through direct participation of staff and students in eco club.



SWOC Analysis of College

(1) Strengths:

- UGC identified 'College with Potential for Excellence', Government Aided and NAAC reaccredited with 'A' grade.
- Committed and Visionary Management.
- Academically encouraging atmosphere.
- Dynamic and diverse students population with more than 80% belonging to reserve category.
- Qualified, experienced and motivated teaching, administrative and menial staff.
- Adequate Infrastructure for ICT enabled Teaching, Learning, Research and Extension activities.
- Well equipped laboratories.
- Strong research output.
- Digitized library with rich collection of titles, journals, magazines and e-resources.
- Sports, N.S.S. and N.C.C. activities.
- Enough opportunity for vertical and horizontal mobility with UG, PG, COPs, M.Phil., and Ph.D. programmes.
- Good placement in multinational companies.
- MoUs with industry partner.
- Skill development and entrepreneurship development centre.
- Eco- friendly campus.
- Very small drop outs.

(2) Weakness:

- Higher proportion of students with poor economic background.
- Poor communication skills of admitted students.
- Limited academic flexibility since we are implementing University curriculum.
- Few departments offer research projects at UG level.

(3) Opportunities:

- Scope for improvement in academic results of UG
- Scope for Inter-institutional student exchange programmes.
- Increase in infrastructural facility in library.
- Strengthening of campus placements.
- Augmentation of consultancy services.
- Networking with alumni.
- Scope do develop technology based farming and processing



(4) Challenges:

- Technology transfer from academics to industries.
- Honing students of rural background.
- Improvements in contents of curriculum as per the needs of industries.
- Enhancement of interdisciplinary research.
- Consultancy services.



Committed for activities (15th Aug, 26th Jan) for promoting National Integration



SELF STUDY REPORT

1. Profile of the Affiliated College

1. Name and address of the college:

Name:	Dhote Bandhu Science College, Gondia
Address :	Ramnagar, Tirora Road
City :	Gondia
Pin:	441614
State :	Maharashtra State
Website:	www.dbscience.org

For communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. P. A. S. Naidu	O: 07182-252623 R: 07182-253888	94234 12712	07182-252467	principal@dbscience.org
Vice-Principal		O: R:			
Steering Committee Co-coordinator	Dr. D. S. Choudhary	O: 07182-252467 R: 07182-250417	94234 14117		dschoudhary@dbscience.org

1. Status of the Institution:

Affiliated College	<input checked="" type="checkbox"/>
Constituent College	<input type="checkbox"/>
Any other (specify)	<input type="checkbox"/>

2. Type of Institution :

a. By Gender	
i. For Men	<input type="checkbox"/>
ii. For Women	<input type="checkbox"/>
iii. Co-education	<input checked="" type="checkbox"/>



b. By Shift

- i. Regular ☒
- ii. Day ☐
- iii. Evening ☐

3. It is a recognized minority institution?

- Yes ☐
- No ☒

If yes specify the minority status (Religious/linguistic/any other) and provide documentary evidence.

4. Sources of funding:

- Government ☒
- Grant-in-aid ☐
- Self-financing ☒
- Any other ☐

5. a. Date of establishment of the college : 01 July 1969

b. University which the college is affiliated :

Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur

c. Details of UGC recognition:

Under Section	Date, Month & Year	Remarks (If any)
i. 2(f)	July 1969	# Since inception
ii. 12(B)	July 1969	

(# Enclosed the certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act- **ANNEXURE : A**)

d. Details of recognition/approval by statutory / regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI, NSQF/Industries etc.)

Under Section / Clause	Recognition/approval Details Institution/ Department programmer	Day, Month And year (dd-mm-yyyy)	Validity	Remarks
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(Enclose the recognition/approval letter)



6. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes ☐ No ☒

if yes, has the College applied for availing the autonomous status?

Yes ☐ No ☐

7. Is the college recognized

- a. by UGC as a college with potential for Excellence (CPE)

Yes ☒ No ☐

if yes, date of recognized 21/04/2016

- b. for its performance by any other governmental agency ?

Yes ☐ No ☐

If yes, Name of the agency and
date of recognition(dd/mm/yyyy)

8. Location of the campus and area in sq. mts :

Location *	Rural
Campus area in sq. mts:	12141 Sq.Mtr.
Built up area in sq. mts.	2457 Sq. Mtr.

(Urban, semi – Rural, Tribal, Hilly Area, Any others specify)

9. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement

■ Auditorium/ seminar complex with infrastructural facilities: **Available-**

Auditorium : 01
Seminar Hall : 01
Conference Room : 01

■ Sports facilities

Play ground : Large play ground
Swimming : Not available
Gymnasium : 01

**■ Hostel**

- i. Numbers of hostels : --
- ii. Numbers of inmates : --
- iii. Facilities (mention available facilities) : --

*** Girls' hostel:**

- i. Numbers of hostels : 01 (Under control of Gondia Education Society)
- ii. Numbers of intimates : --
- iii. Facilities (mention available facilities) : Basic amenities like Canteen, Mess, TV, RO Water, Newspapers, Doctor, Security etc

*** Working women's hostel : Not Available**

- i. Number of inmate
- ii. Facilities (mention available facilities)

*** Residential facilities for teaching and non-teaching staff :**

- i. Staff quarters : Available
- ii. Guest House : 02 (as and when required)

■ Cafeteria : 01**■ Health centre : 01***** First aid, Emergency care facility (on call)***** Health Centre : staff-**Qualified doctor Full time ☐ Part- Time ☒ (on call visiting)Qualified Nurse Full time ☐ Part- Time ☐**■ Facilities like banking, post office, book shops : Not available****■ Transport facilities to the needs of students and staff : Not available****■ Animal house : Not available****■ Biological waste disposal : Available****■ Generator or other facility for management /regulation of electricity and voltage:**
Generator back-up with 85 KVA capacity is available for entire campus.**■ Solid waste management : Available****■ Waste water management : Available****■ Water harvesting : Available**



10. Details of programmers offered by the college (Academic year : 2015-16)

Sl. No.	Program Level	Name of the program Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ Approved student strength	Other state Students	No. of student admitted
1.	U.G.	B.Sc.	3 Year	HSC	English	320+100 20% add.	9	1099
2.	U.G.	B.C.A.	3 Year	HSC	English	120	2	146
3.	U.G.	B.Voc.	3 Year	HSC/equivalent	English	100	--	98
4.	P.G.	M.Sc.	2 Year	B.Sc.	English	110	3	119
5.	Research	Ph.D.	5 Year	M.Sc.	English	30	--	13
6.	Certificate	PPC*	6 months	HSC	English	50	--	28
7.	Diploma	IWT*	1 Year	HSC/Degree	English	50	--	48

* Power Plant Chemistry

Information & Web Technology

(The details of the programmes is tabulated in- ANNEXURE : B)

11. Does the college offer self- financed Programmers?

Yes ☒ No ☐If yes, how many?

12. New programmers introduced in the college during the last five years if any ?

Yes ☒ No ☐ Numbers

13. List the departments:

Faculty	Departments	UG	PG	Research
Science	Chemistry	B.Sc.	M.Sc.	Ph.D.
	Zoology	B.Sc.		
	Botany	B.Sc.	M.Sc.	Ph.D.
	Mathematics	B.Sc.		
	Physics	B.Sc.	M.Sc.	Ph.D.
	Computer Science	B.Sc.	M.Sc.	
	Microbiology	B.Sc.	M.Sc.	
	Biotechnology	B.Sc.		



	Electronics	B. Sc.		
	Food Processing and Engineering	B.Voc.		
	Software Development	B.Voc.		
	Languages	B. Sc, B.C.A.		
Arts		---		
Commerce		---		
Any Other (Specify)	Department of Vocation	Certificate & Diploma (skill based)		

14. Number of Programmes offered under (Programmes means a degree course like BA, BSc, MA, M.Com)

- a. Annual system
- b. Semester system
- c. Trimester system

15. Number of Programmes with

- a. Choice Based Credit System
- b. Semester system (Credit Based System)
- c. Trimester system

16. Does the college offer UG and/or PG programmes in teacher Education?

Yes No ☒

17. Is the institution opting for assessment and accreditation of Physical Education Programmer separately?

Yes No ☒



20. Number of teaching and non-teaching positions in the Institution:

Positions	Professor		Associate Professor		Assistant Professor		Non-teaching staff		Technical Staff	
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC/University/ state Government (recruited)	01		09	---	10	06	47	03	---	---
Sanctioned by the Management/Society or other authorized bodies			---	---	10	33	---	---	---	---

* M - Male * F - Female

21. Qualifications of the teaching staff:

Highest Qualification	Professor		Associate Professor		Assistant Professor	
	Male	Female	Male	Female	Male	Female
Permanent teachers						
D. Sc/D.Litt.						
Ph.D.	01		06	---	06	03
M. Phil.						01
PG			03		03	02
Temporary teachers						
Ph.D.						
M. Phil.					01	
PG					09	33
Part-time teachers						
Ph.D.						
M. Phil.						
PG						

22. Number of Visiting Faculty/ Guest Faculty engaged with the College: 04



23. Furnish the number of the students admitted to the college during the last four academic years.

Categories	2011-12			2012-13			2013-14			2014-15			2015-16		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
General	52	160	212	53	152	205	122	295	417	64	153	217	69	162	231
OBC	178	339	517	168	431	599	104	242	346	251	554	805	420	496	916
SC	45	62	107	46	68	114	30	45	75	56	99	155	57	121	178
ST	08	13	21	16	23	39	18	44	62	11	16	27	23	32	55
VJ	00	01	01	02	4	06	00	01	01	00	01	01	00	00	00
NT	06	11	17	05	7	12	05	12	17	04	07	11	05	17	22
NT(B)	00	00	00	00	00	00	00	00	00	06	04	10	04	08	12
SBC	10	13	23	12	33	45	20	64	84	08	18	26	11	20	31
Other State			13			16			12			13			14
Total	229	599	911	302	718	1036	299	702	1014	400	852	1265	589	856	1459

24. Details on students enrollment in the college during the current academic year.

Type of student	UG	PG	M. Phil.	Ph. D.	Total
Students from the same state where the college is located	1432	89	--	13	1534
Student from other states of India	11	03	--	--	14
NRI students					
Foreign students					

25. Dropout rate in UG and PG (average of the last two batches)

UG	0.24%
PG	0.00 %

26. Unit Cost of Education

(a) including the salary component

Rs.42860/-

(b) excluding the salary component

Rs.4680/-



27. Does the college offer any programme/s in distance education mode (DEP)?

Yes ☒ No ☐

If yes,

a) is it a register centre for offering distance education programmers of another University

Yes ☒ No ☐

b) Name of the University which has granted such registration

Indira Gandhi National Open University, New Delhi

c) Number of programmers offered

d) Programmers carry the recognition of the Distance Education Council.

Yes ☐ No ☐

28. Provide Teacher-student ratio for each of the programmer/ course offered:

B.Sc. : 1:25

B.C.A : 1:24

M.Sc. : 1:07

29. Is the college applying for Accreditation:

Cycle 1: ☐
 Cycle 2: ☐
 Cycle 3: ☒
 Cycle 4: ☐

Re-Assessment:

30. Date of accreditation *(applicable for Cycle 2, cycle 3, Cycle 4, and re-assessment only)

Cycle 1: 16/02/2004 Accreditation outcome/ Result - B⁺ (Score-78-2)

Cycle2: 16/09/2011 Accreditation outcome/Result -A (CGPA- 3.04)

Cycle3:..... Accreditation outcome/Result.....

(Enclosed copy of accreditation certificate(s) and peer team report - ANNEXURE : C)

31. Number of working days during the last academic year :

32. Number of teaching days during the last academic year :

33. Date of establishment of Internal Quality Assurance Cell (IQAC) :



34. Details regarding Submission of Annual Quality Assurance Report (AQAR) to NAAC:
- AQAR of the Session: 2010-11 submitted on 20.09-2011
 - AQAR of the Session: 2011-12 submitted on 25.09-2012
 - AQAR of the Session: 2012-13 submitted on 27.08-2013
 - AQAR of the Session: 2013-14 submitted on 14.09-2014
 - AQAR of the Session: 2014-15 submitted on 18.09.2015
 - AQAR of the Session: 2015-16 submitted on 31.08.2016
35. Any other relevant data (not covered above) the college would like to include.
- Established as skill development centre
 - Recognized the college as 'Centre for Higher Learning and Research'
 - MoUs established with partner industries.





2. Criteria-wise Inputs

CRITERION-I CURRICULAR ASPECTS

1.1 Curriculum Planning and Implementation

1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

Dhote Bandhu Science College, Gondia is a premier science college located in Eastern Vidarbha and situated in an economically backward and rural area. The founder of this institution, Late Shri. Manoharbhai Patel, envisioned a pious dream for the betterment of the people of this region, which ultimately became the guiding force and vision of this institution.

The institution has been engaging in the educational service with a unique vision and mission of its own for the uplift of rural youth since its inception in 1968. The college mostly caters to the higher educational needs of the students from the surrounding villages who are not able to migrate to big cities for their higher educational needs. This vision of the college perfectly matches with the country's vision of 'Higher Education for All'. The college is an educational hub that has all modern facilities and science subjects for study.

A. STATEMENT OF VISION, MISSION AND OBJECTIVES

VISION:

Vision of the institute is ***“To take education to the doorsteps of the downtrodden and economically backward people of Eastern Vidarbha”***.

We recall this vision of Late Shri. Manoharbhai Patel on his Birth Anniversary on February 9th every year and reiterate our commitment to it.

Considering the challenges of the changing times and the demands of skill-based education, the institution has been striving hard to bring into reality its multi-dimensional mission for the last four decades.



We have a five fold **Mission** :

The following actions (Missions) are identified to fulfill the Vision of the College.

- To disseminate the latest and updated knowledge.
- To promote in-campus research activity.
- To ensure all-round development of our students.
- To train and equip our students with skills for self-employment.
- To carve out genuine citizens and skilled professionals.

Objectives

The following objectives are identified to achieve the stated vision and mission through its action plans and relevant activities. We are determined to achieve the following objectives:

- To educate students of all sections of the society.
- To foster advanced, skill-based, career oriented education / learning by incorporating the latest scientific and technological developments in the curriculum.
- To develop the skills of students for holistic employment prospects.
- To foster innovation and research culture in students and staff.
- To mentor students to be quality-conscious, socially-responsible, morally upright and environmentally conscious.
- To motivate students to be enterprising, independent and versatile.
- To provide equal opportunity to both genders.

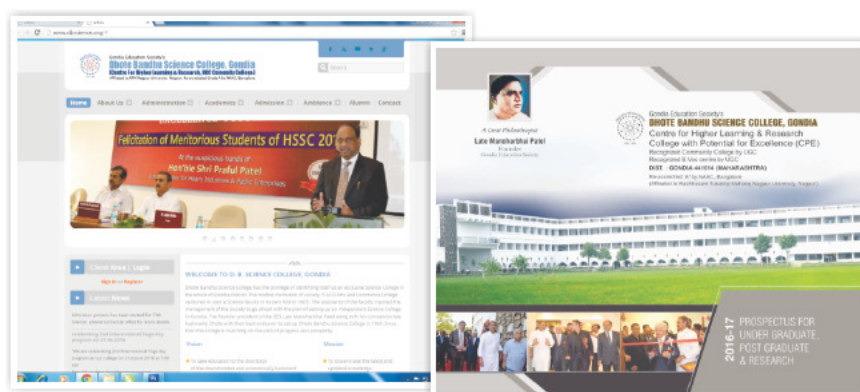


Communicating Vision & Mission of College to the Stakeholders

B. COMMUNICATION TO STAKEHOLDERS

This vision and mission is communicated to every stakeholder including students, teachers, non teaching staff, parents and other stake-holders through both formal and informal channels i.e.

- Through the college website (www.dbscience.org).
- Through declaration in the prospectus.
- Through display boards at conspicuous places.
- By posting notices and circulars.
- Through college magazine.
- Through proceedings of seminars organized by the institution.
- Through departmental newsletters.
- Through flex banners.
- Through print and electronic media.
- Through counseling lectures especially at the beginning of each academic session.
- Through Teacher-Parent meeting.
- Through Outreach popularization.
- Through Introductory speeches (as a prelude to seminars, workshops and other literacy programs).
- Through on-stage presentations during cultural programs as fresher's welcome, teachers day celebrations, etc.
- During social welfare programs e.g. blood donation camps, literacy programs, etc.
- By references in official discussion forums (Teachers council meetings, Teacher-staff meetings etc.) as and when necessary, to ensure that work targets are in conformity with the vision and mission statements.



Communicating the Mission of College through different ways



1.1.2 How does the institution develop and deploy action-plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

At the beginning of each academic session, the affiliating University provides an academic calendar. However, for effective implementation of the curriculum, the following steps have been taken.

■ **Meetings**

Principal and HODs regularly conduct meetings with faculty.

S. No.	Meetings Taken	Aim
1.	Meeting of Staff Council by the principal.	To prepare institution's own comprehensive curricular and co-curricular calendar of events. To constitute committees for supervision of the overall admission process, academic and extra-curricular activities
Timetable is prepared by the time table committee		
2.	Departmental meetings with faculty members by HODs	To develop academic plan based on the college calendar to prepare timetable for distribution of the curriculum and the classes among the faculty members, keeping in mind the syllabus to be taught in various unit tests.

■ **Seminars and Workshops**

Faculty from individual departments are also encouraged to participate in and/or attend seminars and workshops organized by the University, under the aegis of University Grants Commission, as well as other academic institutions so as to enable them to keep themselves abreast with the latest trends in their fields.

■ **Work dairies**

The institution directs faculty to maintain work dairies along with the attendance register wherein regular implementation of the curriculum is recorded systematically. These work dairies are also monitored periodically by the coordinators. The backlog, if any, in the teaching the curriculum, is completed through extra classes.

**■ ICT enabled course material**

For curriculum delivery, college has equipped all the class rooms with smart interactive boards. The institute encourages faculty to use ICT enabled course material.

■ Learner- centered innovative techniques

Faculty vastly uses Learner centered innovative techniques such as class room seminars, project reports, PPT presentations, case studies, group discussions, study tours, home assignments, special lectures on current issues and field study for inculcating self-confidence and the ability to think independently among the students.

■ Periodic evaluation

A systematic structure of periodic evaluation has been set up by the institution. To make aware of the academic standing of their ward, results are communicated to their guardian also.

■ Parent teacher meetings

College conducts parent teacher meetings for their suggestions.

Parent teacher meetings have an important role in the chain of linkages between the college and its stakeholders.

■ Feedback

Institution collects feedback from the students regarding the quality of teaching & the syllabus. College has a committee of senior teachers which takes a written feedback from students on various aspects of teaching such as:

- Teacher's communication skills.
- Syllabus completion.
- Teacher Student rapport.
- Other required activities as presentations, assignments, projects, etc.

Thus, it is ensured that teacher is actually involved in curriculum completion along with other activities. In case of adverse remark case is referred to principal who takes the required necessary action.

■ Curriculum development

The heads and senior faculty of several departments are promoted by institute to be the members of their respective BOS so as to contribute towards curriculum development.

1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?**Support from University :**

- Inviting the teaching faculty of college to university bodies/ committees.



■ **Dispatching Annual academic calendar and circulars-**

The university dispatches annual academic calendar and circulars to all its affiliated colleges which forms the basis for curriculum planning at institutional level.

■ **Designing the curricula for teaching -**

The University designs the curricula for teaching. For every subject it has a body called Board of Studies which comprises senior faculty members from the University Teaching Departments, the affiliated colleges and industry persons. The Boards of Studies meet once in every academic year for finalizing the curricula for the coming academic session. This board is authorized to make additions/alterations in the syllabi according to the development that has taken place related to the subject.



Workshop On Skill Development

■ **Arranging workshops and short term training programmes-**

The university arranges workshops and short term training programmes on revised curricula (UG & PG) and institute encourage the faculty to participate in it. Also, university gives training to the teachers for in-house e-content development. Faculty of institute participates in these workshops to get acquainted with new syllabus **(ANNEXURE -1.1.)**

■ **Organizing regular Orientation and Refresher Courses -**

Academic Staff College of the University also organizes regular Orientation and Refresher Courses which help teachers to update their knowledge and improve their teaching skills.

Support from College :

College encourages –

- Industry – teacher interaction for design need based syllabi of the courses.
- The faculty members to become members of University bodies like Board of Studies (BOS).
- The teachers to participate in Faculty Development Programs/ seminars /symposia/ Workshops/conferences in concerned subjects.
- The teachers to attend refresher and orientation courses organized by Human Resource Development Center (ASC) of UGC from time to time so as to help them to update their knowledge and improve teaching skills.

- The teachers to enhance the teaching learning process through interactive sessions and workshops, guest lectures and field trips so as to give them an opportunity to interact with the experts of the field.
- The teachers to pursue hand on trainings for using these technological devices.
- The teachers to use advanced teaching aids for effectively translating the curriculum and improving teaching practice (interactive boards, fully ICT enabled classrooms, an enriched library, multimedia lab and net access). To integrate teaching with technology, institute organized training program for Junior and Degree college teachers to train them in use of advanced teaching aids.
- The teachers for students' industrial visits.
- The teachers to upgrade laboratories with quality infrastructure and library with books, and journals by suggesting good books for addition.



Industrial Visit

1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.

The college takes sincere efforts for effective delivery and transaction of curriculum. Some of the initiatives are emphasized below.

College suggest faculty for-

- Addition of new books in library as per the revised curriculum.
- Compulsory use of ICT tools.

As the college is Wi-Fi enabled, the on-line information in the form of film through YouTube is also very effective in curriculum transaction. For example Food Technology students find it very interesting to see the process of food processing at food processing industries. The new product development by food technology students is hands on approach to the curriculum.

- Participation as the members of syllabus forming committee/sub-committee, so that they involved in curriculum design and restructuring.
- Our a few senior faculties are involved in framing the syllabus of semester pattern for UG programs.



Faculty using ICT

**Table No. 1: Showing details of participation of faculty as member of syllabus forming committee**

Sr. No	Session	Faculty	Subject
1	2012-13	Dr. J. G. Mahakhode	Electronics (B.Sc.)
2	2014-15	Dr. P. A. S. Naidu	Software Development (B.Voc)
3	2014-15	Prof. S. P. Timande	Food Processing and Engineering (B.Voc)
4	2014-15	Prof. R. K. Dhuware	Software Development (B.Voc)

- Participation of staff in workshops or meetings on curriculum design and restructuring.
- Purchase of instruments as necessary in science laboratories.
- Conducting industrial visits, research projects, seminars, discussions and report writing on topics from curriculum.
- Regular update of the notices and circulars issued by the university regarding revision of syllabus on college website.
- Circulation of hard copy of syllabus and circulars among the staff.
- Organization of the workshops on receipt of new syllabus from university for the staff so that every faculty gets acquainted.

Table No. 2 : Showing details of the Workshop Organized on Revised Syllabus

Sr. No.	Date	Organizer	Level	Coordinator	Subject	Nature of Participants
1	2 nd July 2013	D. B. Science College, Gondia	UG	Dr. S. R. Chopane	CBCS	Faculty of Dhote Bandhu Science College, Gondia
2	3 rd Sept 2012		PG	Dr. S. R. Chopane	CBCS	
3	30 th June 2012		UG	Dr. J. G. Mahakhode	Electronics	Faculty from RTMNU

1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalization of the curriculum

The college interacts actively with various stakeholders in effective operationalization of the curriculum. In order to fulfill this objective, the institution takes following initiatives.

**Table No 3: Showing details of interaction of institution with beneficiaries**

Initiatives	Aim
The institution organizes lectures, talks and interactive sessions for students through regular seminars, industrial visits, industrial training and entrepreneurship development program.	These activities make students aware of the utility of subjects being taught to them in their syllabus and acquaint them how theoretical knowledge is put into practice.
The institution has several MoU's with reputed industries.	This activity operationalization the curriculum effectively through knowledge sharing.
The institution invites dignitaries from industry, research bodies, domain experts and subject experts through various departmental and subject societies.	This activity is included to share the vast knowledge and experience of experts with students
College invites experts in field of personality development and communication skills.	This activity offer guidance for personality development and enrichment of communication skills.

- The college has signed the memorandum of understanding (MoU) with industries for effective operationalization of B.Voc. and Community College curricula as under –

Table No. 4: Showing details of memorandum of understandings and collaboration with the other institutions

Sr. No.	Course	Industry/Research Body/University	Nature of Network	Duration of network(Yrs)	Type of Network
1	B.Voc (Software Development)	Tata Consultancy Services Ltd. Chennai	Collaboration	02 Year	Training and Placement Visiting Faculty Faculty Induction Program
		NASSCOM	Collaboration	02 Year	Training and Placement Visiting Faculty Faculty Induction Program. Certification
		EPHP Solution Private Ltd, Gondia	MoU	02 Year	Training and Placement Visiting Faculty Faculty Induction Programed
		Light House Info system Pvt. Ltd. Gondia	MoU	02 Year	Training and Placement Visiting Faculty Faculty Induction Program



2	B.Voc (Food Processing & Engineering)	S. K. V. Milk & Milk Products, Bhandara	MoU	02 Year	Training and Placement Visiting Faculty Faculty Induction Program
		Kisan Milk, Bhandara.	MoU	02 Year	Training and Placement Visiting Faculty Faculty Induction Program
		S. V. K. Milk & Milk Products, Bhandara.	MoU	02 Year	Training and Placement Visiting Faculty Faculty Induction Program
		G. V. Bevarages, Gondia	MoU	02 Year	Training and Placement Visiting Faculty Faculty Induction Program
3	Advanced certificate in Power Plant Chemistry	Adani Power Maharashtra, Ltd. Gondia.	Collaboration	02 Year	Training and Placement Visiting Faculty Faculty Induction Program
		Vidharbha Power Maharashtra Ltd., Nagpur.	Collaboration	02 Year	Training and Placement Visiting Faculty Faculty Induction Program. Certification
		Maharashtra Enviro Power Ltd., Nagpur.	MoU	02 Year	Training and Placement Visiting Faculty Faculty Induction Programed
4	Diploma in Information & Web Technology	Tata Consultancy Services Ltd.	Collaboration	02 Year	Training and Placement Visiting Faculty Faculty Induction Program
		EPHP Solution Private Ltd, Gondia	MoU	02 Year	Training and Placement Visiting Faculty Faculty Induction Program
		Light House Solution Pvt. Ltd. Gondia	MoU	02 Year	Training and Placement Visiting Faculty Faculty Induction Program
		NASSCOM	Collaboration	02 Year	Training and Placement Visiting Faculty Faculty Induction Program Certification

TATA CONSULTANCY SERVICES LTD. (TCS) is a leading service provider of business process outsourcing services focusing on multiple horizontals and verticals. The TCS Ltd. has a special tie up with our institute for recruiting our students. During last four years, TCS Ltd. has recruited 47 college students including 03 third year B. Sc. Microbiology students in their life sciences division. To train students for recruitment drive Department of Computer Science conducts special training to students for placement in TCS using Vaidushi Online Software developed by TCS (Client based learning software).

This software can connect 25 users at a time. Three faculties from Department of Computer science had participated in faculty induction program conducted by TCS, Chennai to learn about Vaidushi Online Software (for training) & Code ground Software (to learn and execute JAVA) on 16th & 17th Sept, 2015 at Chennai.



Students placed in TCS

ADANI POWER MAHARASHTRA, LTD. GONDIA has a special tie-up with our institute for recruiting and training our students. In last three years, it has recruited 07 students. One student is recruited at Vidharbha Power Maharashtra Ltd., Nagpur and one at Maharashtra Enviro Power Ltd. Nagpur. To train students for recruitment drive; senior officers from power plant are invited. Department of Chemistry and Placement Cell conduct this activity.

- The institution invites dignitaries from industry through various departmental and subject societies. This activity is included to share the vast knowledge and experience of experts with students.

Table No. 5: Showing details of experts from industries

Sr. No	Date	Resource Person	Industry	Designation	Topic Delivered
1	14/03/13	Mr. Durgesh Kulkarni	Adani Power Maharashtra, Ltd. Gondia.	DGM (MO)	Renewable energy and energy audit
2	16/08/13	Mr. Vijay Gandhewar	Adani Power Maharashtra, Ltd. Gondia.	DGM (Tech. Training)	Quality enhancement

- The institution organizes regular industrial visits. This activity makes students aware of the utility of subjects being taught to them in their syllabus and acquaints them how theoretical knowledge is put into practice.

**Table No. 6 : Showing details of industrial visits**

Date	Nature of Participants	Industry Visited	Tour Coordinator
28 th Feb, 2015	B. Voc. (FP & E) students	Hi-tech Health Care Laboratory and Research Center, Ahmedabad	Prof. S. P. Timande
		Kitchen Xpress Overseas Ltd, Ahmedabad.	
		Shah Paper Plastic Industries Ltd, Nadiad	
		Sweety Industries, Nadiad, Gujarat.	
5 th Nov, 2015		G. V. Beverages LLP, Sawritola	Prof. S. P. Timande
7 th Oct, 2015		Prabhu Cold Storage, Khamari	Prof. S. P. Timande

- We run classes by inviting soft skill trainers for soft skill development (to improve English Communication Skills, Computer Skills, and Corporate etiquette and also intend to build and enhance the confidence level of the students). Short term Campus Recruitment Training also conducted for the students.

The activities include-

1. Improving English communication skills, usage of English grammar, building English vocabulary, listening and reading comprehension.
2. Introduction to computer Basics – MS-Word, MS-Excel and Internet, Google browsing, surfing, etc. at BCA Level.
3. Group discussions, Newspaper reading and analysis, Public Speaking and Debates, Presentations, Skits etc.
4. Use of dramatic pieces and story telling to improve confidence and spoken English.

Table No. 7: Showing details of trainers

Resource Person	Organisation	Designation
Vijaya Mehar	N. R. College of Engineering, Hyderabad	Head, Training & Placement
Vijay Kalidas	Mahindra Namaste Pvt. Ltd. Chennai	Training Manager
Mr. Sesha Bhatther Venu	Overseas Education Consultant, Hyderabad.	Verbal Trainer, and trainer for GMAT/GRE/ToFEL
Mr. Anil Nair (National Motivator)	CAT Trainer and Motivational speaker, Hyderabad	CAT Trainer and Motivational speaker
Mrs. Savitri Krishnamurthy	A trainer for spoken and written English, Bangalore	Academic Consultant, (English and Communication)

The Computer Laboratory has a Video Conferencing facility. Using this facility, online lectures on above topics are organized for teachers.

- The institution organizes industrial trainings. This activity promote Student Industry interactions.

Table No. 8 : Showing details of industrial trainings

Sr. No	Date	Nature of Participants	Trainer Industry	Tour Coordinator
1	28 th Feb, 2015	B.Voc. (FP & E) students	Hi-tech Health Care Laboratory and Research Center, Ahmedabad	Prof. S. P. Timande
2	31 st Dec, 2013		G. V. Beverages LLP, Sawaritola.	Prof. S. P. Timande

The institution organizes entrepreneurship development programs. This activity also promote interactions of students with industry and banking.

During this cycle of NAAC accreditation, institution in association with **Mitcon Consultancy and Engineering Services, Pune** organized entrepreneurship development programs twice.

MITCON Consultancy and Engineering Services Ltd, a state government agency that imparts training in the field of entrepreneurship development and self-employment. From **03/08/2011 to 1/09/2015**, Dhote Bandhu Science College, Gondia in collaboration with **MITCON Consultancy and Engineering Services, Pune** has organized a long Entrepreneurship Development Program in food processing for setting up food processing -based enterprises involving B. Voc students. This program was sponsored by **State food processing mission directorate, MIDC, Mumbai**.

- 1.1.6. What are the contributions of the institution and / or its staff members to the development of the curriculum by the University? (Number of staff members / departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided specific suggestions etc.**

Representation on the Board of Studies :

Though our college is not multidisciplinary institution, comparatively good numbers of teachers are representing the Board of Studies of the university. The college does not design curriculum. It only abides by the Curriculum framed by its affiliating university However in courses like B.Voc in Food Processing and Engineering, B.Voc. in Software Development, the department of Microbiology and Computer Science

are front runners in developing and modifying syllabus because a very few colleges are offering these courses. Teachers, as members of Board of Studies of the University, often provide suggestions on revision of syllabus and thereby contribute indirectly to the designing of curriculum.



District level consultation meet on education policy

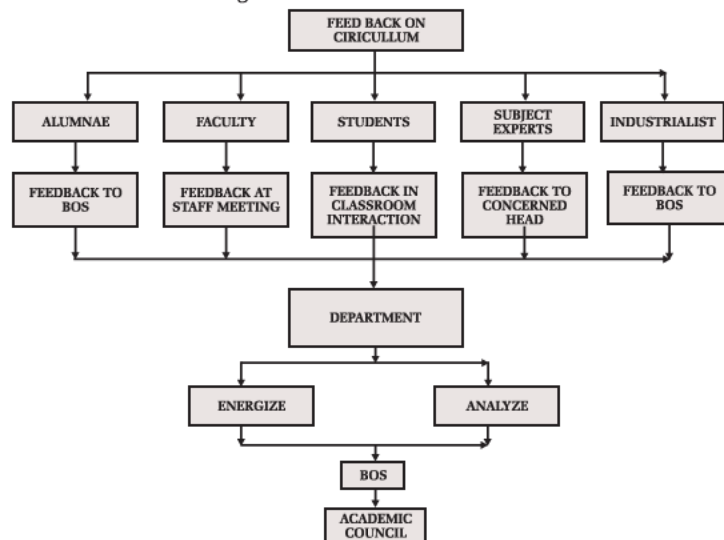


Table No.9: Showing details of staff representing the Board of Studies and Research Committee at RTM Nagpur University.

S. No.	Faculty	Subject	Designation
1	Dr. P. A. S. Naidu	Mathematics	Dean - Faculty of Science Chairman –Research Recognition Committee
2	Dr. H. R. Trivedi	Mathematics	Member of task force in B.Voc. (Food Processing and Engineering) of RTMNU, Nagpur.
3	Dr. S. R. Chopane	Physics	Member of task force in subject Physics of RTMNU, Nagpur.
4	Shri. S. P. Timande	Microbiology	Member of task force in B.Voc. (Food Processing and Engineering) of RTMNU, Nagpur.
5	Dr. J. G. Mahakhode	Electronics	Member of task force in subject Electronics of RTMNU, Nagpur.
6	Shri. R. K. Dhuware	Computer Science	Coordinator of task force in B.Voc. (Software Development) of RTMNU, Nagpur.
7	Shri. D. G. Nalamwar	Electronics	Member of task force in subject Textiles of RTMNU, Nagpur.

Feedback from the different stakeholders:

Protocol followed to collect feedback for development and enrichment of curriculum from the different stakeholders is shown in figure.





College has conducted following activities to collect feedback for development and enrichment of curriculum from the different stakeholders:

Table No.10: Showing details of activities to collect feedback for development and enrichment of curriculum from the different stakeholders.

Sr. No	Details of activity	Stakeholder
1	District level meeting for seeking consultations on New Higher Education Policy sponsored by Ministry of Human Resource Development, GOI was organized on 28.10.2015.	Academicians, Office bears of education \societies, Govt. officers, NGO'S, Reporters and Industrialists.
2	Principal's Address	Students and Parents
3	Mentoring scheme	Students
4	IQAC meets	Students, Parents, alumni and industry persons

Feedback from stakeholders on curriculum is communicated to the University Board of Studies by BOS members for further suggestions and implementations.

Table No. 11: showing details of the changes suggested in syllabus by BOS Members

Date	Faculty	Subject	Feedback obtained From	Suggestions
22 nd Feb 2016	Dr. S. R. Chopane	Physics (UG)	Students & Teachers	Changes in theory papers
23 th Feb 2016	Shri. S. P. Timande	B.Voc. FP&E	Students	Changes in theory papers (Sem:I, Paper:II)
23 th Feb 2016	Dr. J. G. Mahakhode	Electronics (UG)	Students & Teachers	Minor changes in practical papers and Sem IV theory paper.
23 th Feb 2016	Shri. R. K. Dhuware	B.Voc.	Students & Industry	Minor changes in theory paper

Feedback from the students and teachers

- Feedback received from the students and teachers on the comprehensibility and utility of the given curriculum is conveyed to the affiliating University through two channels mentioned above viz: discussions in Board of Studies and participation in workshops on Syllabus Revision. (Departments of Microbiology, Electronics, Physics, Botany and Chemistry have participated in such workshops).



- In B.Voc, efforts are made by the institution to collect feedback for development and enrichment of curriculum from the different stakeholders through formal and informal meets. The teachers garner the suggestions and opinions of the B.Voc. students on curricular inputs. Feedback from students after visit also helps the teachers to incorporate many new aspects in curriculum. Thus students play important role in Industry-academia interface.

Feedback from Industry

The feedback from local industry is hunted deliberately by interacting with the industry people during the industry visit and the campus interviews. The syllabus is obtained as per their need, as the skill they want and two skill based courses: Advance Certificate course in Power Plant Chemistry and Diploma course in Information and Web technology has been started under community college scheme of UGC.

Feedback from the global professors of other universities of the country and alumni

Professionals and representatives of the university, research institutions, software industry, and alumni suggested to inculcate some courses as per their requirement. The staff members in association with these fellows design the curriculum keeping in mind the functional requirements. Also, the strong alumni network is continuous source of information relating to latest developments in industries. The College is always open to them to share their views in person. The alumni visit the college to interact with students. Their suggestions communicated to university through BOS members to incorporate changes in curriculum.

1.1.7 Does the institution develop curriculum for any courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

Yes, our college has developed curriculum for following courses,

- UGC sponsored **Bachelor of Vocation** (Diploma / Advanced Diploma / Degree in food Processing & Engineering / Software Development).
- UGC sponsored **Career Oriented Programmes** (Certificate/Diploma/Advanced Diploma in Tissue Culture, Biofertilizer and Biopesticide Technology, E-commerce).
- UGC sponsored courses under **Community College** (Six months advanced certificate course in Power Plant Chemistry and one year diploma course in Information and Web Technology).

These courses are intended to make the students more employable. The curriculum is developed by institution keeping in view the requirements of job market and demands of industry.

Syllabus framing Process

It is said that Education, Research and innovation can only nurture talent and develop power of mind, power of connectivity, power of creativity and innovation in young talented minds to serve society with distinction. A mere tinkering with the present system is no longer good enough and satisfying.

The teachers design a new curriculum with a great deal of deliberations. To prepare a new course takes 6-12 months. Critical planning, curriculum development workshops and visits to the industry - all take place before a new course is framed and implemented.

The following flow chart gives the pictorial representation of the curriculum development process:



- Expert committee is constituted for the purpose.
- The committee members develop the curriculum taking into account the aim and objectives of the course.
- The course was approved by the BOS and academic council of the affiliating university.
- The following are the courses for which the department concerned has designed and developed the curriculum based on need assessment.

Table No.12: Showing the curriculum developed by the Institution

S. No.	Course	Needs Assessment	Design, Development and Planning
1	B.Voc.(Food Processing and Engineering)	The Sector skill council has Identified that Food processing sector has tremendous employment potential in future. Although good number science graduates are produced every year due to lack of required skill they are unemployed. Hence,college has taken initiative to introduce this course with support from UGC.	As modular curriculum of this course is not available with sector skill council, university has prepared the syllabus in which college has played leading role. This course is implemented with credit based semester pattern. The course content includes food quality analysis & food products processing.
2	B.Voc. (Software Development)	IT-ITES Sector Skill Council has identified that although IT industry has great employment potential, industry is lacking in human resource with specialized skills. Hence, to address the requirement of IT industry. The B.Voc program in Software Development is introduced to provide skills and qualifications to students to participate in development teams of IT companies.	Modular curriculum of this course is available with sector skill council. Minor changes in course material are made by University according to local needs. This course is implemented with credit based semester pattern. The course content teaches you to design and program software.
3	Advanced certificate course in Power Plant Chemistry	In the area recently many thermal power plants are introduced. The industry is in need of trained local man power with background of power point chemistry. Hence to fulfill their demand, the course is introduced.	The course material was designed involving partner industries. Further it was approved by UGC and with prior permission from BCUD, it was launched. This course is implemented with annual pattern. This course include the steam/water aspects of the thermal power cycle.



4	Diploma Course in Information and Web Technology	A web presence is a key component of any modern business strategy and is therefore at the center of almost all major organizations. Hence, There is a demand for skilled graduates who are able to develop and innovate in these new areas. In this course, student will acquire a deep knowledge of web technologies. Hence, the course is introduced to fulfill demand of companies.	The course material was designed involving partner industries. Further it was approved by UGC and with prior permission from BCUD, it was launched. This course includes web page design, HTML, CSS, Javascript, PHP and web design for a range of devices, including desktop browsers, smart phones and tablets.
5	Career Oriented programme: Tissue Culture	The students admitted to this course have bio-tech. Background. As a part of social commitment to the field of biotechnology, we introduced this course to provide students the jobs available in tissue culture laboratories and Biotech. Parks.	The course material was designed involving partner industries. Further it was approved by BOS and Academic Council. With prior permission from BCUD, it was launched. This course is designed to give intensive practical training in Tissue Culture.
6	Career Oriented programme Biofertilizers & Biopesticides Technology	Most students who enroll in courses reside in rural areas. Their parents are farmers, with an average household income; hence these students are more in need of jobs. There is enormous market potential as well as scope of higher profitability in biofertilizers and bio-pesticides business. But, there is requirement of updated knowledge and skills of bio fertilizers/bio pesticides business. Hence to impart skills required in important aspects of bio fertilizers /Bio pesticide business, the college has launched the course.	The course material was designed involving partner industries. Further it was approved by BOS and Academic Council. With prior permission from BCUD, it was launched. This course is designed to give intensive practical training in production of biofertilizers and biopesticides.
7	Career Oriented programme E-Commerce	The application of e-commerce fuses into the operation of every industry, therefore, industry has great job potential. But IT industries are facing a huge demand for manpower resources that possess sound knowledge of basic IT skills. Hence to satisfy industry demand, college has established e-commerce course.	The course material was designed involving partner industries. Further it was approved by UGC and with prior permission from BCUD, it was launched.



Career Oriented Programs are offered under the annual system. Evaluation is done at college level. At the end of course certificates were issued to the students by BCUD of RTMNU, Nagpur. Evaluation of B.Voc. students is done by RTMNU, Nagpur and respective Sector Skill Council. Evaluation of Community College students is done at college level and respective Sector Skill Council of Central Government.

1.1.8 How does institution analyze / ensure that the stated objectives of curriculum are achieved in the course of implementation?

Learning objective, as stated in the curriculum for each course and as mentioned in the vision and mission of the college, are achieved through the rigorous efforts of staff. The institution ensures the achievement of the objectives of curriculum through teaching process and results of the students.

Through teaching process:

To ensure whether the stated objectives of curriculum are achieved or not, analysis of:

- Written Feedback collected from students about how each teacher taught them in that year is taken on teaching-learning process for every subject taught, so that improvements can be made. Problems, if any, are discussed with the concerned teacher and principal.
- At the beginning of each academic session, all the teachers ensure that the students have a hard copy of their syllabus. Various aspects of syllabus are planned, discussed and conveyed to students. Presentations/assignments and test schedule are given to students. Unit test is conducted to ensure understanding of subject by students. Students feedback is taken in middle of semester by HOD of respective department and problems are discussed with principal and concerned teacher.

Through results of the students:

- Examination results to reveal the level of assimilation of the students.
- Performance in unit test is used to collect feedback on the process of learning.

1.2 Academic Flexibility

1.2.1 Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc., offered by the institution.

1. The College has been selected as one of the few colleges in Maharashtra to start the UGC sponsored B.Voc Degree program with effect from session 2014-15.
2. The college is one of the few colleges in Maharashtra to start the Community College Scheme has been introduced by the Ministry of HRD, Government of India. As a pilot case under this scheme the college offers academic programs at certificate, diploma and Associate degree (AD) level.

These courses are introduced keeping in mind the national policy to grow the skilled manpower. The college has taken initiative to start various in house and UGC funded courses that lay major emphasis on skill development of students. Many of these courses are interdisciplinary in nature and are introduced with following goals and objective:

Goals:

To offer flexibility and nurture skill based practical knowledge to the students; it will help them to become employable in global market and entrepreneur in present complex scenarios.

**Objectives:**

- To avail program of choice for students professional achievements.
- To stimulate interest through integration of basics with contemporary advances in the subject.

The structured course wise goals and objectives are given below.

Table No.13 : Showing course wise goals and objectives

Degree Course		
S. No.	Name of the course	Goals and Objectives
1	B.Voc. (Food Processing and Engineering)	To provide opportunities of self-employment for students. This course is aimed at inculcating vocational and entrepreneurial skills to widen employment opportunities as food technologist in food processing industries.
2	B.Voc. (Software Development)	This course is practically hands on, providing plenty of practical experience in programming, soft ware engineering and web development. In addition, students will gain valuable exposure to variety of interactive media techniques and multimedia skills that are useful in IT based role .
Courses under Community College Scheme		
1	Advanced Certificate Course in Power Plant Chemistry	This course is meant to raise awareness about significance of chemistry in power plant. The course focuses on three main topics : Chemistry of water steam cycle Cooling water circuits Production of de-mineralized water. The aim of this course is to provide requisite skilled manpower to thermal power plants.
2	Diploma Course in Information and Web Technology	The aim of this course is to provide requisite skills to apply it in a work environment. Trains students in application software required for web development, programming, computing, etc., which are in great demand in industry
Career Oriented programmes (Certificate/Diploma/Advanced Diploma)		
1	Tissue Culture	To provide opportunities of self-employment for students Skilled knowledge gained in this course may lead to a career as plant propagator, horticulture laboratory technician and plant nursery assistant in Government/Co-operative/private sector etc.



2	Biofertilizers and Biopesticides technology	To promote organic farming To provide opportunities of self-employment for students. To provide human resource to Biofertilizer and Biopesticides production units of Government /Cooperative/private sector etc.
3	E commerce	To create network security professionals to meet industry demand. To get the job in banking, education and health.

1.2.2 Does the institution offer programmes that facilitate twinning/dual degree? If 'yes', give details

Yes, the college offers some programmes that facilitates sort of twinning programmes.

- The college runs the Career Oriented Programmes in Tissue culture, Biofertilizers and Biopesticides technology and E-commerce. Students pursuing their degree B.Sc. can parallelly take admission in above courses. Hence, the students can pursue these courses along with UG and PG programs.
- The students failed while pursuing B.Sc. take admission for skill based 'Advance certificate course in Power Plant Chemistry' or 'Diploma in Information and Web Technology' approved by UGC.

1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond:

Range of Core / Elective options offered by the University and those opted by the college, Choice Based Credit System and range of subject options, Courses offered in modular form Credit transfer and accumulation facility, Lateral and vertical mobility within and across programs and courses, Enrichment courses

Range of Core / Elective options

The college offers a fair amount of flexibility within the limitations of an affiliated college. The college offers a wide range of undergraduate programs, postgraduate programs, Certificate Course, diploma course etc. in dual modes of education- the Formal and the Non-formal mode.

Formal Mode:

College is affiliated to RTM Nagpur University and as a result, we have Under Graduate Degree Course and Post Graduate Degree Courses of this university.

Following core subject combinations are available in the college.

Table No.14: Showing Regular Courses (Formal Mode) of Studies

Core Options:

Sr. No	Programmes
1	Bachelor of Science (B.Sc.)
2	Bachelor of Computer Applications (B.C.A.)
3	Bachelor of Vocation (B.Voc.)
4	Master of Science (M.Sc.)
5	Doctor of Philosophy (Ph.D.)

**Elective options offered by the University and those opted by the college-**

Core Option: Bachelor of Science (B.Sc.)	
Elective options: 09	
Biology Group	Mathematics Group
Microbiology, Chemistry, Biotechnology	Physics, Chemistry, Mathematics
Chemistry, Biotechnology, Botany	Physics, Mathematics, C/S
Microbiology, Chemistry, Zoology	Physics, Mathematics, Electronics
Microbiology, Chemistry, Botany	Mathematics, Electronics, C/S
Chemistry, Zoology, Botany	
Core Option: Bachelor of Vocation (B.Voc.)	
Elective option: 1. B.Voc. (Food Processing and Engineering) 2. B.Voc. (Software Development)	
Core Option: Master of Science (M.Sc.)	
Elective option: 1. M.Sc. (Physics) 2. M.Sc. (Chemistry) 3. M.Sc. (Botany) 4. M.Sc. (Microbiology) 5. M.Sc. (Computer Science)	
Core option : Doctor of Philosophy (Ph.D.)	
Elective option: 1. Physics 2. Chemistry 3. Botany	

Besides these, we are also running some job oriented certificate, diploma and advanced diploma courses.

Programme	Courses Offered
Community College Scheme Programme	■ Certificate Course in Power Plant Chemistry. ■ Diploma in Information technology and web Technology. (Approved and funded by University Grant Commission, New Delhi).
Career Oriented Programmes	■ Certificate/Diploma/Advanced Diploma courses. ■ Bio-pesticides and Bio-fertilizer Production. ■ Tissue Culture. ■ E-Commerce.



Non-formal Mode: IGNOU study centre at Dhote Bandhu Science College is established which run following courses

- Certificate course in Food and Nutrition (CFN)
- Diploma Course in Nutrition and Health Education (DNHE)

Lateral and vertical mobility:

All UG and PG courses are developed in such a way that students **can move to higher studies**. To provide the **horizontal mobility** at U.G. level, the IGNOU Study Centre provides Diploma in nutrition and health education as well as Certificate Course in Food and Nutrition. Students can pursue these courses along with UG and PG programmes.

Choice Based Credit System:

The affiliating University is planning to introduce a Choice Based Credit System at PG level to facilitate horizontal and vertical mobility within and across programs and courses. In a Choice Based Credit System, the students have freedom to choose the optional subjects (Allied Optional in the third semester and Major optional in the forth semester). This paves the way for a student to choose a subject offered by other departments and by doing so, he/she gains knowledge in the field other than her/his own and becomes broad-based in his/her approach. Policies regarding the range of subject options and facilities of credit transfer in Choice based credit system will be declared by university in near future and college will follows the university norms in this regard.

Progression to higher studies:

Availability of a wide range of combinations in UG programs offers greater flexibility in terms of progression to higher studies.

Skill development and employability:

The college offers a number of career oriented programmes, B.Voc. and courses under community college scheme to help the students to seek gainful employment.

Enrichment of course:

Enrichment of courses is done taking into consideration suggestions from subject experts, alumni from industries, and feedback from students. Teachers help the Board of Studies to review the syllabus and make it relevant to present day requirements. Faculty regularly attends workshops related to their subjects which are organized by the affiliating university and different colleges. Teachers get opportunities to put forward various new ideas thrown up from the feedback in workshops on the syllabus. The suggestions from teachers are often noted and incorporated into the syllabus by the Board of Studies.

Courses are in modular form:

All the courses are in modular form. The subjects are divided into papers, papers are divided into units, and each subject is taught in a fixed duration. Assignments, seminars, unit wise quizzes, viva-voce, and case studies are the methods used to reinforce the teaching-learning process.



1.2.4 Does the institution offer self-financed programs? If 'yes', list them and indicate how they differ from other programs, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

The college offers self-financed programs, both at UG and PG level. These are as follows:

- B.Sc. with subject option Biotechnology.
- B.C.A.
- M.Sc. in Microbiology, Chemistry, Botany, Computer Science and Physics.

Admission: Admission to all the UG and PG courses are conducted based on government and university norms on the merit basis.

Curriculum: For UG and PG (semester system), the curriculum prescribed by the University is followed.

Fee Structure: For UG and PG the fee structure is fixed by the affiliating university.

Teacher Qualification: Well qualified and meritorious candidates with a good research potential are appointed on ad-hoc basis as per UGC/State Government norms to teach these specialized courses.

Salary: A consolidated salary of career oriented program faculty members are fixed by the Management according to their qualifications and experience.

Teachers appointed on ad-hoc basis to teach UG and PG courses were paid salary as per UGC / State Government norms

1.2.5. Does the college provide additional skill oriented programs, relevant to regional and global employment markets? If 'yes' provide details of such program and the beneficiaries.

Yes, the college runs skill based programs (B.Voc. Courses, Certificate courses under community College scheme and Career Oriented Programmes funded by UGC)

The students and industry partner are benefited from these programmes.

Table 15: skill oriented programs

Bachelor of vocation (Diploma/Advanced Diploma/Degree).		
S.No.	Name of the course	Target Group
1	Food Processing and Engineering.	12 th from any stream.
2	Software Development.	12 th from any stream.
Courses under community college scheme		
1	Six months Advanced Certificate Course in Power Plant Chemistry.	UG
2	One year Diploma Course in Information and Web Technology.	
Career oriented programmes (Certificate/Diploma/Advanced Diploma)		
1	Tissue culture.	UG
2	Biofertilizers and Biopesticides technology.	UG
3	E commerce security through cryptography.	UG



1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice? If 'yes', how does the institution take advantage of such provision for the benefit of students?

Yes, the University has the provision to provide flexibility of combining the conventional face to face and distance mode of education for students. A department named 'Adult, Continuing Education and Extension' has been established at RTM Nagpur University which extends adult education through students in affiliated colleges and university departments. It utilizes the resources for upliftment of society and the experiences while working in the field enriches education. The department organizes numerous events/programme such as education programs related to population, National Conference on Continuing Education: Nature and Status, Short term courses for different targeted groups, etc. The college takes advantage by motivating the students for participation and also for organization of the popularization programme based on the theme.

1.3 Curriculum Enrichment

1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programs and Institution's goals and objectives are integrated?

The College has made positive efforts to supplement the curriculum that ensures personality development and overall academic growth of students, which is the basic aim of college through the following measures:

- Offering Add- on courses to enrich the content of the curriculum.
- Organizing regular lectures of eminent professors from advanced research institutions and reputed industries for students on topics of the curriculum.
- Encouraging students to participate in events like quiz competitions, lecture contests, exhibitions, etc in their subjects both at college and intercollegiate level, to increase their comprehension of curricular aspects.
- Encouraging students to execute research projects and attend training programmes.
- Organized regular field trips, educational tours, industrial visits, subject related movie screenings, etc for students to supplement the syllabus.

1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?

To increase the employability of students, following effort are made by the institution:

- Enriching the curriculum through value added programs, on the basis of institution's interaction with industry partner, feedback from students and experts from other universities.
- Deploying participative strategies to make learning more interesting through class-room quiz, group presentations, etc.
- Organizing various study tours, visits, industrial placements, field surveys, personality grooming sessions/workshops, panel discussions, hands on training, workshops and PG seminars, etc. that offer them an integration of theoretical and practical knowledge with a focus on the need of industry and society.



- Conducting activities like case studies, training programmes, industrial visits, training programs, guest lectures, competitions for students, exhibitions, short films, field trips, etc. to enrich curriculum and making learning more interesting.

1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum.

The college gives importance to conduct various activities each year that address the cross cutting issues such as gender, climate change, environmental education, human rights and ICT.

These issues also form an integral part of curriculum at UG and PG.

Table 16: Efforts made by the institution for cross cutting issues

Cross cutting issue	Efforts made by the institution
Gender	<p>As per Government Resolution No.2012/296/12/9 dated 23/10/2012, the college launched "Jagar Janivancha Abhiyan". The college implemented various programmes for the empowerment of women. The college always seeks the gender equality.</p> <p>By working under various channels like Anti-Ragging, Prohibition of Sexual Harassment, and Jagar Janivancha Abhiyan reached at its absolute destination of women empowerment.</p> <p>The Women Development Cell (WDC) of the college acted as the apex body to manage the campaign (Jagar Janivancha Abhiyan). Activities are organized under the Jagar Janivancha Programme to cultivate "Gender Equality" among students.</p> <ul style="list-style-type: none">■ Rally: To spread awareness about the ill-effects of female foeticide. (2012).■ Slogan Competition: To create social awareness about the problems of women and in particular regarding gender discrimination. (2012).■ Guest lecture: To create awareness programme about laws protecting women.(2013).■ Essay Competition: To increase awareness regarding 'Female Foeticide' among students.(2012).■ Quotation Competition (2016).■ International Women's Day: Celebrated by organizing various programmes for the empowerment of women. These programmes were focused on evaluating overall efforts of the institution to sustain "Gender Equality" and cultivate "Gender Equality" among students. (8th March 2016).■ Exhibition of handmade articles (2016).■ Driving Guidance & Training. (2013).■ Entrepreneurship Development Programme (Art of Agarbatti Making, Art of Booming , Art of cloth stitching).■ Workshops (2016).■ Training program for women on self- defense. (2013).■ Police officials installed complaint box & displayed emergency phone numbers in campus for women (29th Jan2016).



Climate change	<ul style="list-style-type: none"> Organised a National seminar on "Climatic Change on biodiversity". Celebrated Ozone day. Organized Workshop on construction of ecofriendly gift articles. Celebrated World wild life week. Installed bins for disposal of degradable and biodegradable wastes. Celebrated Eco-friendly Ganesh idol competition.
Environmental Education	<ul style="list-style-type: none"> Introduced environmental science on receipt of the university curriculum. Installed Vermi-composting unit (making organic manure by using dry grass). Operated "Wealth out of Waste" program. Made campus plastic free for example, college cafeteria is using paper cups.
ICT	<ul style="list-style-type: none"> Taught ICT related certificate courses. Provided internet facility and Wi-Fi enabled campus. Provided Smart classrooms with multimedia support for teaching. Provided conference Hall with multimedia facilities. Provided a computerized open access library with a collection of CDs, DVDs, Internet connections and Copier. Provided access to e-resources (For students). Organised guest lectures on ICT.
Human Rights	<ul style="list-style-type: none"> Organized UGC sponsored foundation course in Human Right Education from 10th Dec to 10th Feb 2012 to create an awareness among students regarding human rights. Established Anti-ragging Committee, Grievance Redressal Cell, and Women's Cell, Committee for Prevention of Sexual Harassment, etc. according to University guidelines. Organized Guest lectures on Human Rights issues.

1.3.4 What are the various value-added courses/enrichment programs offered to ensure holistic development of students?

- moral and ethical values
- employable and life skills
- better career options
- community orientation

The institution is aware of the importance of holistic development of students and therefore has taken many initiatives and a few of these initiatives are:

**To instill moral and ethical values in students, efforts made by the institution are-**

- Offered certificate course on 'Fundamentals of Human Rights Education'.
- Organized National symposium on "Movements promoting human rights and duties".
- Conduct National anthem every day.
- Organized special lectures.
- Supporting services like NSS, NCC, eco club, etc, are provided. help improve the moral and ethical consciousness of students through their activities.
- Established Cells for Prevention of sexual Harassment and the Health Centre.
- Organized guest lectures.
- Organized workshops on personality development.

To make students more employable and to impart life skills, efforts made by the institution are-

- Offered the career oriented programmes, courses under community college and B.Voc programme to make students more employable.
- Organised NAAC sponsored national seminar on "Quality skill development initiatives in higher education institutions" to impart life skills.
- Made available reference books in the library to equip the students to face competitive exams.

To showcase better career options for students, efforts made by the institution are-

- Formed a career guidance and placement cell. It is functioning in the college creates awareness among the students about the various career options and opportunities available to them in the global market by organizing various seminars on career growth and opportunities.

To inculcate spirit of the community orientation among the students, efforts made by the institution are-

- Organized routine activities like Blood Donation Camps, Eye Examination Camps, Visits to Old Age Homes, Health survey, etc through NSS wing of the college.
- Organized teachers visit to the village schools along with their students to familiarize them with recent trends in science.
- Organized the employee health check up camp involving students.

1.3.5 Citing a few examples enumerate on the extent of use of the feedback from Stakeholders in enriching the curriculum?

The college gets feedback from various stakeholders for enriching the existing syllabus. Mostly, feedbacks is taken during college level meets involving management, students, parents, alumni, industrialists etc.

Modes of Feed Back Collection:

Online feedback: Feedback is retrieved from web portal from the education stakeholder from national and international level.

Consultation meet: Under the guidance of Union Ministry of Human Resources Development, GOI district level meeting of stakeholders for seeking consultations on New Higher Education Policy was organized on 28.10.2015.

Departmental meeting: Most of the departments regularly take inputs from stakeholders which are communicated through staff of the department during University Board of Studies meets;

Example: Most of the departments get inputs on syllabus every year. The departments like Botany, Chemistry, and Biotechnology have successfully incorporated such suggestions in consultation with University Board of Studies.



Parent teacher meets / Alumni meets / IQAC Meets: - Suggestions on curriculum are also obtained and discussed during Principal meet with parents, students, alumni and IQAC members. Many of these discussions have fruitfully led to the steps leading to initiate UGC sanctioned certificate courses, B.Voc., Certificate course under Community College Scheme etc. Example: The feedback on curriculum taken during meets with industrial experts have led to initiate courses in the areas such as certificate course in Power Plant Chemistry, certificate programme in Web Technology, that provide ample job opportunities in power plants and software industry respectively.

1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

The IQAC of college monitor and evaluate the quality of its enrichment programmes in following ways-

- Necessary academic and experimental infrastructure is made available as a utmost need.
- Regular and frequent feedback on enrichment programmes is sought from students and teachers.
- It take initiative to enhance the quality of enrichment programmes throug participative learning, involving projects, visits, seminars, workshops etc..

1.4 Feedback System

1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

Staff from almost each department is involved in syllabus drafting and restructuring in various capacities. The staff takes proactive steps in design and development of syllabus of courses taught at various levels.

- Staff members have contributed in University appointed Board of Studies as Members of the Board of Studies for drafting of new syllabus and restructuring of syllabi for UG/PG Programmes.
- The college takes initiatives in organizing and as well as deputing our staff to participate and contribute as Resource Persons in Workshops on 'Revised Syllabus'.
- The college has taken lead in preparation of New Curricula implemented first time in University in courses such as B.Voc.

1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

Yes, The college has a formal mechanism to obtain feedback from students and other stakeholders. The following gives the pictorial representation to obtain feedback from students and other stake-holders,

Step-I : Collection of Feedback by Principal, Head and Feedback Committee from different stakeholders.

Step-II: Meeting of College Principal with Heads and Feedback Committee for discussion on collected feedbacks.



Step-III : IQAC meeting involves members, faculty, feedback committee, student representatives and other concerned stakeholders where the suggestions received for curriculum enrichment and introducing changes/new programmes were discussed.

Step-IV : The output of meeting is systematically recorded and communicated to concerned Board of Studies formed by RTMNU through Principal.

Step-V : Staff members who are in the Board of Studies follow-up on the necessary action taken by respective boards.

Two years back, there was strong demand from different stakeholders to the college to insert skill development courses which have the potential to provide trained students employment in industries. On receipt of this feedback, college sent proposal to UGC for sanction of B.Voc. Programmes. We are happy to say that, college is among a few colleges selected by UGC to initiate B.Voc. degree course.

1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes? Any other relevant information regarding curricular aspects which the college would like to include.

The following courses have been introduced during the last four years.

Table 17 : Courses introduced during the last four years

S. No.	Name of the Course	Year	Rationale
1	B.Voc (Food Processing and Engineering)	2014-15	To provide opportunities of self-employment for students This course is aimed at inculcating vocational and entrepreneurial skills to widen employment opportunities as food technologist in food processing industries.
2	B.Voc.(Software Development)	2014-15	This course is practically hands on, providing plenty of practical experience in programming, soft-ware engineering and web development. In addition, students will gain valuable exposure to variety of interactive media techniques and multimedia skills that are useful in IT based role.
Courses under Community College scheme of UGC			
1	Six months Advanced Certificate Course in Power Plant Chemistry	2013-14	This course is meant to raise awareness about significance of chemistry in power plant. The course focuses on three main topics : Chemistry of water steam cycle Cooling water circuits Production of demineralized water. The aim of this course is to provide requisite skilled manpower to thermal power plants.
2	One year Diploma Course in Information and Web Technology	2013-14	The aim of this course is to provide requisite skills to apply it in a work environment. Trains students in application software required for web development, programming, computing, etc., which are in great demand in industry

CRITERION - II TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

2.1.1 How the College ensures publicity and transparency in the admission process.

Publicity in the conduct of admission process.

- Prospectus
- Website: www.dbscience.org
- Flex Banners and Black Boards
- Newspaper
- Electronic media
- Popularization Programs
- Pamphlets
- Canvassing: At remote places in Gondia district.

Transparency in the Admission process :

The admission process is done using the software 'ShikshanKranti'.

To ensure transparency in the admission process:

- A Committee for admission and counseling has been constituted.
- All admissions are processed through the Admission Committee only after proper scrutiny of documents pertaining to credentials and eligibility of individual students.
- The appointed committee is always available for the counseling of short-listed and admitted students.
- The complete list of applicants, who are admitted solely on the basis of merit as per the laid out criterion, is displayed on the college notice boards.
- Selected candidate's lists are also displayed on the notice boards indicating the total marks secured by the student in the qualifying examination and reservation category that the student belongs to.
- A single window for form submission is made available for the benefit of applicants across streams to help them to avoid long queues and to ensure quick submission of applications.
- A detailed and attractive prospectus ensures that adequate and comprehensive information is available for the benefit of every applicant.
- 'ShikshanKranti' is software that enables cash handling during the admission process, and it also facilitates efficient data gathering of the admitted students.
- Admission Registers of all the classes in which students are admitted are prepared. These registers contain details of each student including student's name, father's name, class, percentage, year of passing etc.
- This record is made available to any candidate for scrutiny, in case of any clarification that the candidate may seek.
- Feedback from all stakeholders is taken into consideration and incorporated time to time.



Publicity of Programmes

**2.1.2 Explanation in detail regarding the criteria adopted and process of admission**

(Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

Process of admission to various programmes of the Institution:

1. **For General UG courses (B. Sc., B. C. A.)-**
 - The admission is based on merit at the 10 + 2 qualifying examination and eligibility for reservation, as per the order of Government of Maharashtra and the affiliating University i.e. RTM Nagpur University and UGC norms.
2. **For Vocational UG course (B.Voc.)-**
 - The students qualifying 10+2 level and or wanted to have horizontal mobility can get admission to the B.Voc. programme subject to the affiliating University i.e. RTM Nagpur University and UGC norms.
3. **For PG courses (M. Sc. courses)-**
 - The admission is based on merit at the graduate examination and reservation, as per the order of Government of Maharashtra and the affiliating University i.e. RTMNU.
4. **For Research program-**
 - Ph.D. students are admitted on the basis of an oral test conducted by the concerned department.
 - Every research department has a departmental admission committee to supervise the process of admission into research courses.
 - The lists of applied, interviewed and selected candidates are recommended to the University for registration of Ph. D. programme.
5. **For Courses under Community college scheme of UGC-**
 - Admission is based on the guidelines of the UGC Community College.
 - Failure or discontinued from regular courses may be admitted.
6. **For Add on Courses under Career Oriented Program of UGC-**
 - Admission is based on the guidelines of the UGC.
7. **For Courses under IGNOU Study Centre-**
 - Admission is based on the guidelines of IGNOU.

2.1.3 Giving minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the College and providing a comparison with other colleges of the affiliating university within the city/district.

Minimum and maximum percentage of marks for admission at the entry level for each of the programmes offered by the college in the academic year 2015-16 as per Merit List based on criteria laid down by the RTMNU University are as given below:

Courses	Percentage at entry level	
	Max. %	Min. %
B. Sc.	92	55
B.C.A.	78	42
M. Sc.	65	48
B. Voc.	73	36



For all UG programme: A pass in HSC (+2) (35% Marks)

- For all PG programme: UG degree in the Subject concerned or equivalent, as prescribed by the University with 40% Marks
- For Ph.D. Programme: PG degree or M.Phil in the subject concerned or equivalent, as prescribed by the University with 50% Marks.

On analysis it is found that the minimum and maximum percentage of students at entry level of any course offered by the college is comparatively higher than that those colleges in the district.

2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?

Yes, the admission process and students profile is reviewed and following improvements are made by the institution -

- Introduction of SHIKHAN KRANTI software
 - It facilitates the admission process hassle-free.
 - The transparency in the process is observed.
- HELPDESK to give information regarding financial assistance options such as educational loans, scholarship, and scheme like EARN AND LEARN.
- Online SBI portal for financial assistance.
- Additional sections are created as growing demand is observed.

Outcome:

- Admission process becomes hassle-free, transparent and prompt.
- A rapid growth in the number of students is observed as the process becomes student friendly by means of HELPDESK.
- It helps in the choice of subject combination and balancing the enrolment of students in different subjects.
- It helps in developing a clear understanding of the potential of students in various activities.
- It helps to accommodate most of the aspiring students.

2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profile demonstrate/reflect the National commitment to diversity and inclusion.

SC/ST

OBC

Women

Differently abled

Economically weaker sections

Minority community

Any other

- The college is committed to the National Policy of diversity and inclusion.
- The reservation roster prescribed by the Government of Maharashtra with respect to SC/ST, OBC, Women, Differently abled, Economically weaker sections and Minority community is followed.
- The admission policy of the institution and its student profile demonstrates /reflects the national commitment to diversity and inclusion, because it adopts the following strategies to increase/improve access for the following categories of students:

**a) Students from disadvantaged community—SC/ST/OBC:**

- Seats are reserved for SC, ST, & OBC candidates according to norms laid down in notifications made by the RTMNU and the Higher Education Department, Maharashtra Government.
- Access is ensured to these marginalized groups through the total implementation of reservation-cum merit as per the orders of the Government of Maharashtra. Year-wise students enrolled at Dhote Bandhu Science College, is given below.

Year	S. C.		S. T.		O. B. C.		V.J. / N. T		S. B.C.		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
2011-12	45	62	08	13	188	334	00	01	10	13	299	566
2012-13	46	68	16	19	168	382	02	02	12	31	402	665
2013-14	30	45	17	44	104	242	05	13	20	45	299	703
2014-15	56	99	11	16	251	554	10	22	08	18	400	862
2015-16	57	131	23	32	330	497	09	25	11	20	579	858

b) Women:

- As per the norms of the Government of Maharashtra and the affiliating University i.e. RTMNU University, (33% reservation for women candidates) the present trend is that the number of admitted women students far exceeds the number of the admitted male students.
- One of the objectives of the institution is to spread women education.

This clearly indicates that the College is playing an important role in the education of women.

c) Differently-abled:

- Provides special facilities to cater to the needs of differently-abled students.
- A special area is earmarked for parking the vehicles of the differently-abled students.
- The college library staff members take care, extend help and cooperation to such students.
- Special instructions are also given to the security staff to help the differently-abled to reach the respective classes safely and in time.

d) Economically-weaker sections:

- A number of students belong to the economically-weaker sections.
- Freeships and other concessions offered by the Government of Maharashtra are made available to this section of students.

e) Outstanding Achievers in Sports and Extracurricular Activities:

- Admission on a priority basis.
- Encouraged to achieve more and more Due care is taken to ensure that their studies are not neglected.

f) Any other: Overall, the numbers of students seeking admission to our college is increasing rapidly because of the

- availability of qualified teachers,
- superior infrastructural facilities,
- student-centric teaching-learning process, and
- Transparent and good governance.

2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends i.e. reasons for increase/decrease and actions initiated for improvement.

Acad. Year	Number of Applications					Number of Students Admitted					Demand Ratio				
	2011-12	2012-13	2013-14	2014-15	2015-16	2011-12	2012-13	2013-14	2014-15	2015-16	2011-12	2012-13	2013-14	2014-15	2015-16
Course	2011-12	2012-13	2013-14	2014-15	2015-16	2011-12	2012-13	2013-14	2014-15	2015-16	2011-12	2012-13	2013-14	2014-15	2015-16
B.Sc.	318	767	1002	1450	1650	318	368	418	473	504	1:1	1:2	1:2.4	1:3.1	1:3.28
BCA	79	47	46	43	93	79	47	46	43	93	-	-	-	-	-
B.Voc.	-	-	-	89	97	-	-	-	89	97	-	-	-	-	-
M.Sc. (Bot.)	16	22	11	12	27	16	22	11	12	19	-	1:1	-	-	1:1.4
M.Sc.(CS)	11	17	18	08		11	17	18	08	-	-	-	-	-	-
M.Sc. (Chem.)	21	22	20	21	46	21	22	20	21	23	1:1	1:1	1:1	1:1	1:2
M.Sc. (MB.)	15	11	15	00	07	15	11	15	00	07	-	-	-	-	-
M.Sc. (Phy.)	10	18	21	21	49	10	18	21	21	23	1:1	1:1	1:1	1:1	1:2.1

The demand is found to increase for the admission in B.Sc. programme. It is due to the demand of Basic Science education. Further, enhancement in campus placement of the students of Dhote Bandhu Science College attracts the students of nearby town. To accommodate the students following action are taken –



- Vocational Degree course B.Voc. has been initiated
- Vocational skill based certificate courses introduced in collaboration with the local industries
- Additional section approval for larger intake is sought from the State Government and RTM Nagpur University.
- Started to give admission on merit basis.

2.2 Catering to Student Diversity

2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

- The differently-abled candidates are admitted in various courses as per the Government reservation policies.
- Scholarships are provided to the differently-abled candidates, and special coaching is also offered to them as per the instructions of the Government and University.
- Special arrangements are made for examinees who appear at our College centre for University and other examinations.
- The College provides all sections of administrative activities, library, canteen and toilets on the ground floor, and there is a proposal to have some classrooms at the ground floor to facilitate the differently-abled students.
- Fellow students are encouraged to assist the differently-abled.

2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

Yes, the process is as under-

- A pre-admission seminar is organised for aspiring students to make them aware about the available subject choices, opportunities and admission process.
- Students admitted to the college, select the subjects after receiving counselling from the admission committee.
- Committee members interact with admission seekers to know their previous knowledge and expectations, and explain to them the scope of various subject groups available in the college.
- After the admission process is over students, are assessed by a diagnostic assessment.
- Students are permitted, if they so desire, to change or re-order their subjects, prior to the completion of their University Enrolment.

2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

Following strategies are adopted :

■ Orientation program for students

Before the actual syllabus begins, a special Orientation-cum Participation Program is held every year to fill the knowledge gap of students and to introduce them to the various facilities rules and regulations of the college. It is conducted for newly enrolled students, to make them aware about procedure related to university examination, scholarship and different mechanisms of college and university administration.

■ Informal Interactions

Teachers of our college participate in informal interactions with the students in order to assess their knowledge and learning needs. Introductory Lectures are conducted by the college teachers to explain basic concepts of their subjects so that the students can recall and relate it to their previous subject knowledge.



Faculty Interacting Informally

- Extra coaching classes for late admitted students.

- Guest lecturers

- Industrial visits and field trips

- Mentoring system (for monitoring of student's progress)

- Summer and Winter School Program (For Advance Learner)

Encouraging the participation of advanced learners in program at Institutions of National Repute.

- Bilingual teaching

- **Bridge Course:** Department of Electronics, Computer Science, Biotechnology and Microbiology organise Introductory Bridge Course for newly admitted students, as these subjects are not in the curriculum of 10+2 standard.

- **Subject Choice Flexibility:** Students are permitted, if they so desire, to change or re-order their subjects, delete earlier subjects and add new subjects until their University Enrolment.

2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

Gender equality-

- Nearly 20% of the staff are women.

- A Women Empowerment Cell & Gender Champion club is in place that ensures the welfare of female students & staff.

- Activities under Gender equality, inclusive development and environmental conservation are as follows:

- Women Empowerment Cell conducts various programmes like awareness in women related laws and Save Girl Child etc. every year to sensitize the women students.

- Health and hygiene related sessions are organized by various companies.

- Skit and Dramas were arranged by the NSS students on "Stree Brun Hatya" the problems faced by women in the society especially, female foeticide.

- Gender Champion Club organises World Women's Day Celebrations

- Regular Guest lectures on legal issues about women safety like

Guest lecture on Gender sensitization by Ku. Radhika Kokate, Police Sub Inspector, Maharashtra Police, Police station Gondia.

- The College organizes regular Self Defence training for girl students under Women Empowerment Cell.

- Regular Guest lectures are arranged on human rights.



Students in the Sensitizing Programme

**Inclusion -**

To promote overall development of students from various reserved Categories and economically backward class students, the following activities are arranged:

- Various remedial courses for English, Mathematics, & Science.
- College has common uniform for all students.

Environment -

- College Staff is encouraged to participate in UGC sponsored refresher courses and various other workshops in Environmental Studies.

Environmental Studies is included in the curriculum of Semester III & IV as one paper.



Women Empowerment Seminar



Self Defence Training Programme

- Special Eco-club that sensitizes students about Environmental issues.
 - Under Eco-club students are motivated to keep a clean and litter-free environment in their class rooms, laboratories (in particular), and around the campus in general.
 - Specially made Dustbins/Litter-bins are kept at strategically located places within the college campus with the slogan, 'Clean and Green Campus'.
 - In order to make students conscious about their responsibility towards the environment, they are advised to switch off lights and fans while leaving their classrooms and laboratories.
 - Under Eco-club various programs like "Eco-friendly Ganesh Idol Competition", guest lectures on "Rainwater Harvesting", and "Wildlife Week", are organized regularly.
 - The college students are also sensitized by organizing campus visits, field trips etc.
 - Tree Plantation programs and Environmental studies are organized by students of NSS.
 - Tobacco free / Smoke free display boards are placed in the entire campus.
 - Important days such as International Women's Day, World Environment Day, Anti-tobacco Day, National Youth Day are observed every year.
 - In January 2013, the College organized a one-day national seminar on "Effect of Climate change and Biodiversity Conservation"
 - The college has been conducting Green Audits since 2015.
 - The college teachers, in the conduct of their regular classroom teaching, sensitize students about all the above-mentioned issues by holding talks/discussions on current affairs.
- 2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?**
- On the basis of marks scored in qualifying exams, term exams, classroom test, activities, group discussions etc. the advanced learners are identified.
- Faculty members motivate all students and provide opportunities for advanced learners to convert their abilities into performance by setting the bar higher for them based on their abilities
 - Apart from classroom teaching, assignments are given to advanced group learners.



- All students, particularly the advanced learners, are encouraged to participate in co-curricular and extracurricular activities to ensure their holistic development.
- Many departments conduct events which provide a platform for students, in particular the advanced students, to showcase their knowledge and utilize their skills.
- These events also provide them with an area for independent study and make them more responsible.
- Reference books of a more advanced level are recommended for their benefit.
- Advanced learners are also encouraged to participate in students seminars conducted by various departments.
- Study projects are being conducted by the students with the guidance of the respective faculty.
- Advanced learners are awarded with prizes in different competitions.
- Advanced learners are assigned the job of assisting slow learners in each subject.
- Updated and regular details of relevant and important websites are given for students to refer and benefit.
- Guidance with regard to reference books, tutorial classes, interactive sessions and class tests is provided for the benefit of students
- Intra-departmental seminars, wall magazines on selected reference topics are also organized /published.
- Students are motivated to participate in Summer and Winter School Program at institutes of National Repute.

2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?

- **Data Collection** - Academic performance of the students from the disadvantaged sections of society, the physically challenged, the slow learners, the economically weaker sections etc, is identified by teachers during their lectures.
- **Analysis** - Counseling sessions done by teachers which help bifurcate students based on the specific attention that they need
- **Measures Taken** -Marks as well as participation in overall class activities etc. is used as index for identifying slow learners.
 - The students who do not cope with the pace of learning are advised and counseled by the teachers.
 - To ensure equity among the disadvantaged communities like SC,ST and OBC, scholarships, fee reimbursements, students' aid from UGC grants, separate book banks in the library are provided.
 - Remedial coaching classes are conducted to get all students on par
 - Parent – Teacher meetings are a regular feature of our activity to ensure all stake-holders are informed and involved.



- Scholarships to the deserving economically weaker students are provided so that they can compete and complete their courses with the rest of the students
- Study material and remedial assignments are also a regular feature in the college plans
- Earn while you Learn helps the proactive students earn crucial experience and exposure
- Economically Backward student data – Helps identify and provide Scholarships and ensure

2.3 Teaching Learning Process

2.3.1 How does the college plan and organize the teaching, learning and evaluation schedule?

Every year, the college comes up with plans that are followed-up for effective implementation. Different committees are formed at the beginning of the session which include:

- Academic Committee
 - Admission Committee,
 - Time table Committee,
 - Evaluation Committee,
 - Cultural Committee,
 - Feedback Committee,
 - Daily monitoring Committee
 - Grievance Committee, etc.
- The chairperson and members of the committees are selected with the consent of the principal, heads of all departments, IQAC Coordinator and as per their personal interest and requirements.
- These committees look after the activities and plans throughout the academic session.

Academic Calendar

- The University provide the stipulated period and the teaching hours for every paper and subject.
- The subject teacher with the help of Head of the respective department plans the teaching within the University teaching schedule.
- The calendar includes the detail information of allotment of the workload for teaching, co curricular, extra-curricular activities, examination schedule etc.

The semester-wise annual calendar of events is based on the following criterion:

- UGC guidelines on academic working days.
- Schedule of Internal Assessment Tests and End Semester Examinations for all courses.
- The evaluation process.

This Academic calendar helps in planning of teaching and various activities at Departmental levels.



Teaching Plan

Each department plans for the completion of the syllabus in the academic session.

- To prepare teaching plans departmental meetings are held.
- The total workload is divided with the number of faculty available in the department, including Permanent and ad-hoc lecturers.
- Teaching-plans include unit-wise distribution of lectures and list of recommended text-books.
- These plans are displayed on the notice- board.
- Each faculty plans the session-wise student-centric teaching methods using ICT, group discussion, quiz competitions etc. for effective teaching and results.
- A review meeting is held at the end of every month to monitor the implementation of teaching plans.
- Extra classes, if necessary, are conducted to cover the back log of the syllabus. Students are given Assignments, which are assessed periodically.
- Efforts are made, and if necessary, guest lectures are conducted to ensure timely completion of syllabus.
- The understanding of the unit by the students is checked by conducting regular tests and assignments.
- Teaching diaries are maintained by faculty.

Evaluation Schedule

- The schedule of Internal Examination and University Examinations is notified to the students and teachers at the beginning of the academic year.
- College tests are conducted in the scheduled time and the marks obtained by the student are sent through SMS and also displayed on the respective notice boards.
- The results of the internal exams are declared and sent to the University.
- The assessment marks are allotted on the basis of performance in the submitted assignment copies.
- The performance of students is discussed in the respective classes, especially for the sake of students whose performance is unsatisfactory and requires improvement.

2.3.2 How does IQAC contribute to improve teaching-learning process?

The following contributions are made by IQAC in teaching learning process :

- Being a body of experienced experts, it guides faculty on quality aspects.
- Conducts meetings with faculty and gives feedback to the college regarding possible improvements and enhancements in teaching-learning process.
- Suggests relevant seminars, guest lectures, and soft-skills development programs for faculty to be held by the college, university and other bodies in consonance with the research field.
- Use of ICT in teaching-learning in order to improve the quality of teaching.
- Ensure the use of Interactive Smart Board which are installed in all class rooms.



- Ensure that the college library is upgraded with online research Journals and connected to INFLIBNET.
- Introduction of the Open Access System in the library and providing books to advanced learners.
- Ensure the maximum use of college infrastructure in the benefit of the student and the Teachers.
- It encourages various Departments for organizing International and National level Conference, Seminars, workshops etc.
- Promote research and consultancy endeavours.
- The IQAC also looks into the feedback obtained from the students on faculty, curriculum, infrastructure etc. and suggests suitable steps for improvement.
- Enables feedback to be discussed with the faculty for the betterment of teaching quality.
- Plays a crucial role in arranging Placement Drives of different Government and Non Government Organization (Adani Power Maharashtra Ltd, Infosys, L & T info, SMS infrastructure).
- It also regulates the process of placement and Promotion of faculty members as per due dates.
- It is in tune with the goals and objectives of the college, and plays a vital role in the quality enhancement and sustenance of the teaching learning process by giving timely directions and encouragement to the faculty, staff and students in the following ways:
 - Contributions to the preparation of Time tables, Academic Calendar, etc.
 - Planning and execution of the conduct of Extension lectures.
 - Monitoring the syllabus coverage of all the departments and suggestion of steps to be taken to cover backlog syllabus.
 - Taking steps to create conducive atmosphere in the campus for effective teaching learning process.
 - Encouraging teachers to undertake Minor Research Projects to enhance their research abilities
 - Encouraging teachers to Participate in Seminars / Conferences / Workshops for updating their domain knowledge.
 - Encouraging students to Participate in field trips, study tours, visits to nearby organisations, etc.

2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

The college has provided various facilities for student-centric learning.

Support Structures :

- The College provides Internet Access to each department, a well equipped computer lab, and a surplus collection of Reference Books to reduce the hurdles of efficient learning in the library.
- The college has Interactive Digital Boards and is updated with the latest knowledge, energizing Faculty members through Orientation and Refresher programs.
- Each department is provided with sufficient number of practical setups.
- Departments have departmental libraries for the easy access of students.



- The college has gained recognition as the best location of Research for Ph.D. aspirants. This helps in bringing research to the grass-root levels of rural area. Gondia and Bhandara Districts are in close proximity to rural and semi-urban areas.
- Work at Home - Faculties who cannot attend college due to unavoidable reasons (maternity leave, medical leave) engage their classes from home using online tools such as Spontania, Skype, etc.

Interactive learning :

The teaching-learning process is made more student-centric by using Innovative and interactive practices by the Teachers. Some of the methods are as under

- ICT based classroom teaching through Interactive Boards
- Guest lectures and sessions by Subject Experts
- Inter-collegiate Research festival (Avishkar), Science Exhibitions etc.
- Group discussions, seminars, quiz competition, Power-Point Presentations
- Departmental Poster competition, Quiz Competition
- Educational Tours, Industrial and Field visits
- Active application of Problem-solving Methodologies
- Field visits by students

All above mention methods are used to encourage the students to take active part in the teaching-learning process. Our teachers use these methods for making learning enjoyable and to ensure percolation of better knowledge.

Collaborative learning :

- To inculcate leadership skills among students and for their overall personality development, students are encouraged to organize and participate in various events such as
 - intercollegiate events,
 - Research festivals,
 - Cultural events,
 - Sports
- Guest lectures and workshops are conducted for the students.
- Experts and proven resources persons from respective fields are invited for the Guest Lectures.
- Projects are allotted to students

Independent Learning :

- The students of all abilities, particularly the ones who require specific attention are identified and helped by the invited Guest Lecturers with the assistance of the resident teachers.
- Guidance is provided through Teacher-ward systems.
- The difficulties in the learning of such students who require greater or specific attention are addressed by providing extra lectures for them.
- The students who require greater attention are encouraged to focus on their studies and are provided with reference books, question sets, etc.



- A reading room is provided for self-study which helps students to develop independent learning.
- Project are assigned to advanced learners.

Participative learning :

- Students are encouraged to practise new roles and skills.
- Students are encouraged to think creatively and come up with innovative ideas.
- Students are encouraged to discuss real and imaginary situations.
- Students are encouraged to acquire individual views or opinions in their community on topics of social and national importance. This creates awareness and makes students responsible social citizens.

2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

The college plans different activities which are conducted at the departmental and college level to nurture critical thinking, creativity and scientific tempers follows:

To develop their Critical thinking abilities -

- National seminars, National and International conferences, and Educational surveys that are conducted by the Government of India to develop critical thinking.
- Students are exposed to high levels of thinking by exposing them to different sectors of education, industry, environment and lifestyle.
- Guest Lectures on a variety of topic sare organized at departmental levels.
- Projects are mandatory in Environmental Studies for each and every Part-II student.
- Projects/field survey are also included in the syllabus of the Science stream so that students understand the importance of such activity.
- Lectures are followed by invited experts' interaction with students.
- Students are encouraged to develop their creativity through extracurricular activities like cultural programs, which are also organized to bring together students from different regions of India.
- Participation in Debate Competitions and Compeering is encouraged during programs because it nurtures creativity of students.
- Various cultural programmes are organized round the year for students to not only participate but for them to get actively involved in organizing and handling programmes such as Fresher's Welcome, Teachers' Day celebration, Saraswati Puja, Drama etc.

The college publishes an annual magazine entitled 'Udaan', through which students can express their creativity and explore their writing skills. The College provides the following general study support for all students:

- The faculty members engage both in academic and personal counseling regarding choice of subjects during admission, to address low attendance, as well as poor marks in internal and final examinations etc.



Student presentation on working appliance



- Slow learners are identified through classroom interactions and personal counseling in the classroom by the teachers.
- Tutorial/remedial classes are undertaken for the benefit of students, especially for those who need personal attention.
- Students are encouraged to interact with their teachers for their individual needs and problems that they face during classes.
- The College provides financial support services through scholarships to most of the students, namely G.O.I., Free-ship, E.B.C., P.T.C., Girls concession, etc.

Scientific Temper :

- Scientific Temper is developed by conducting co- curricular activities like Research festivals, Science exhibition, etc.
- The college celebrates “**National Science Day**” (28th February), and “**National Students Day**” each year.
- Students are encouraged to display their scientific skills and presentation skills by making live models and charts.
- Departmental level science quizzes and poster competition on different scientific themes are also conducted to help students know different facets of science.
- Students are encouraged to understand and apply the various uses of scientific methods for writing their projects, dissertations and theses; which nurtures the scientific temper in them.
- Research scholars are encouraged to write papers in National and reputed Journals, which helps them to develop their research skills.
- Furthermore, the college has subscribed to various Magazines, Journals, Periodicals related to science in order to enrich the college library but also to help the college students to develop a scientific temper that is vital for their career prospects today.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? E.g.: Virtual laboratories, e- learning-resources from National Program on Technology Enhanced Learning (NPTEL) & National Mission on Education through Information and Communication Technology (NME- ICT), open educational resources, mobile education, etc.

The College makes available technological teaching and research aids to its faculty to facilitate the process of student learning. It has well developed infrastructure in the form of Internet and a digital laboratory. The following are the main facilities available with the college:

- Fully ICT enabled classrooms with high speed internet
- Simulation laboratory
- SPONTANIA online tool
- Accessibility of Internet to each department
- An attractive and modern computer lab
- Digitized library accessible throughout the day



- Fully ICT enabled classrooms with high speed internet
- Simulation Laboratory
- SPONTANIA online tool
- Accessibility of Internet to each department
- An attractive and modern computer lab
- Digitized library accessible throughout the day
- NKN
- NPTEL
- GyanKatta
- Subscription of e-journals
- In-house e-journal, e-books and online database
- SMS alerts to students
- MoU with TCS, Lighthouse Infosystem Pvt. Limited Nagpur, e-PHP solutions (which is located in Gondia) for training and solutions.
- Membership of British Council Library for online access.



Faculty fully ICT enabled Classrooms

2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.) ?

Exposure to faculty and students to advanced levels of knowledge is done through various activities like -

- Guest Lectures,
- National level Seminars, Conferences, and Workshops.
- Autonomy is given to all the in the college departments to arrange conferences, seminars, guest lecture by eminent faculties who have extensive research and field experience.
- The college organizes different national conferences to discuss and share their expertise

[The details of the Seminar, Conference, Workshop organised is provided in ANNEXURE - 3.5]

- Students and faculty are provided every opportunity to interact with eminent scientists, industrialists, and high achievers from different fields.
- Knowledge up-gradation of students and faculties is ensured through regular presentations of research papers
- Teachers participate in courses conducted by eminent and experienced Academic Staff College of different Universities across India.
- e-library facility is available at the College and accessible to all
- Project-Based learning is an important methodology followed by us at the college
- In-house magazines articles are available in all languages on interesting topics of Artistic excellence.



- Language skills and communication skills of students are developed by arranging technical sessions by professional motivators, verbal/writing trainers.
- Teachers adopt innovative methods in Teaching, Learning and Evaluation as under :

Teaching :

- Fully ICT enabled classrooms as well as laboratories
- Establishment of Virtual Laboratories.
- Online resources – NPTEL, NKN, INFLIBNET, NMEICT, Circuit Maker, Lab view, etc.
- Online Tools- SPONTANEAIA, DLP system, PHET simulations, Chemoffice, e-Herbarium, etc.
- Regular and Structured Feedback on teaching-learning process.
- Monitoring or teaching mechanism through a teaching diary as well a schedule monitoring system

Learning:

- Availability of e-resources, print resources, lecture CDs,
- Innovative project-based learning, field visits, seminars, subjective hands on training, e-poster presentation, action research,
- Students are benefitted through various forms of training programmes like Campus Recruitment Training, Entrepreneurship Development Programs, Invited talks by experts, and Motivational Talks

Evaluation:

- Continuous compressive evaluation through Diagnostic, Formative, and Summative evaluation
- An in-house designed online evaluation platform
- Result alert through SMS
- Regular structured feedback post evaluation

2.3.7 Detail (process and the number of students\benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/ mentoring/ Academic advice provided to students

The following activity are devised to help students on a personal level, academic level, psycho social basis.

■ **Mentor-mentee System**

- Mentoring system to provide psycho-social support and guidance
- The role of a Mentor is like that of a father in guidance and like that of a mother in the nurturing of students.
- Mentors constantly meet their students, share and record their difficulties and assist with horizontal mobility with regard to solution of and eradicating such difficulties.
- Periodically, Mentors collect student feedback and report such feedback to the respective HODs.
- Feedback is analyzed through IQAC, and suggestions taken from such feedback are implemented promptly. The Mentoring System strives for the satisfaction of every stakeholder.



- Extra classes for slow learners
- Students' Grievance Redressal Cell
- Woman cell
- Students' placement and Career Guidance Cell

2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

- The faculty members frequently download subject related data from the internet and use it in their presentation in the digital classes (ICT based learning).
- The proposals for the seminars are prepared and sent for the approval to the UGC. This is helpful in providing a high level of knowledge to the students.
- Industrial tours and field visits are arranged by faculty to facilitate 'Hands on' experience to students.
- Student seminars are held to improve the presentation skills of students.
- Workshops are arranged to provide practical and experiential learning to students.
- The college encourages the above-mentioned activities and provides all infrastructure and support for all such activity.
- The college has the following infrastructure for easy access of faculty.
 1. Auditorium
 2. ICT enabled digital classes.
 3. Seminar hall
 4. Internet facility in each department and Library



Workshop on TCS Ignite registration

2.3.9 How are library resources used to augment teaching learning process?

The library plays an important role in an education system :

- It has numerous books on a wide variety of subjects including Science, technology, Information technology, communication, magazines, Journals, competitive books, literature, etc.
- It is fully computerized with OPAC and bar coding facility for easy access.
- A Library Committee is formed every year at the beginning of the academic year which discusses library issues including the proper selection of books, and seeks the approval of the respective Heads of the Department.
- A central computerized library caters to the needs of different academic departments.
- In an orientation program that is held at the beginning of the academic year, the Assistant Librarian of the library addresses the students and gives comprehensive details about the Library, different facilities to the students provided by the library, timings, etc.
- Indexing of books is done subject wise to facilitate the smooth functioning of the Library
- Reading Hall Facility is provided and separate sections are set up for professional courses such as UG, PG, BCA and PG Diplomas.
- There is a provision for students to recommend books every year.
- The question papers of previous exams are made available.

**Special Services provided by the Library**

- Manuscript: Some manuscripts are available for reference.
- References: Library has provided Reference services to readers by maintaining a separate Reference Section.
- Encyclopaedia and dictionaries are easily available in the library.
- Newspaper clippings are made available on a display board and are maintained in separate files.
- Competitive Exam Section: library provides books related to various competitive examinations like NET/SET, Banking, MPSC/UPSC and CA and CPT examinations. A large section of books covers the books require for the preparation of Medical and Engineering Exams.
- Reprography: Photocopy Section has following equipment-
 - 2 Canon Photocopier
 - 4 Assembled computer,
 - 3 HP LaserJet printer.

The Library has a provision of photocopying of library reading materials. The facility is provided on subsidized basis in the library.

- Information deployment and notification:
 - Display of New Arrivals
 - Newspaper clipping Facility.
 - Displaying various notices regarding library services and facilities.
 - Providing College magazines and books written by College teachers
- Download:

Through UGC Network Resource Centre library provides access and downloads facility to all students and teachers.
- Printing:
 - The Library Provides printing facility to students and teachers.
 - The Library has provided terminals with separate printer to print important files and documents
 - The Library also provides online print information like syllabus, forms, e-journal articles, e-books, etc.
- Reading List/Bibliography Compilation:
 - List of Bibliographies.
- Remote Accesses to E-resources:
 - OPAC and e-journals can be accessed both in-house and from any corner of the World.
- INFLIBNET/IUIC Facilities:
 - The Library provides learning facilities to all students and faculty members.



2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on challenges encountered and the institutional approaches to overcome these.

No, the institution has always completed the curriculum within the planned time frame & calendar.

- The Teachers prepare Lecture Plans well in advance and syllabus is always completed in time.
- There is a provision to make up for contingencies like Extended Exam schedule of university, Overlapping Days, Camps and Late Results, and other such unplanned and sudden exigencies
- Syllabus that remains uncovered, for any reason that is not accounted for and for unavoidable reasons, is completed by the respective faculty by taking extra classes during vacation and holidays.

2.3.11 How does the institute monitor and evaluate the quality of teaching learning?

Feed-back System-

- A well-established feed-back system.
- Students fill up the designed evaluation forms without disclosing their identity.
- Feedback form is given to students in the classrooms.
- At the end of the year every student submits this form to the College by putting it in a drop box that is provided for this purpose.
- The feedback is analyzed and the performance of teachers is evaluated
- Feedback forms are shown to teachers to help them introspect and re-evaluate their approach, methods, and competencies and for them to improve their teaching methods, if necessary.

Result Analysis-

- In house online system of evaluation
- The institution monitors and evaluates the quality of teaching learning through result analysis.
- It compiles and analyses the results of the students on a regular basis and takes remedial steps.

2.4 Teacher Quality

2.4.1 Provide the following details and deliberate on the strategies adopted by the College in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum.

Details of Faculty

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
Ph.D	-	-	06	-	06	03	15
M.Phil	-	-	-	-	02	01	03
PG	-	-	04	-	02	03	09
Temporary Teachers							
M.Phil	-	-	-	-	01	-	01
PG	-	-	-	-	10	33	40

Strategies for Recruitment :

- The University Statutes, rules, and regulations of Directorate of Higher Education govern appointment by the college.
- The selection process is carried out by the selection committee constituted according to the affiliating University rules and norms.
- The requirement of faculty is assessed by considering the teaching load as per the university curriculum.
- Fair practices are followed for recruiting faculty.
- Positions are advertised and persons are interviewed.
- The Institute encourages the faculty to aspire for higher studies and qualifications.

Strategies for Retention:

- Teacher-managed Society
- Healthy atmosphere with 100% retention
- Work culture to grow
- The Board of Life Members consists of teacher administrators in the Society's of various institutions.
- This Board assists in keeping teachers' morale at a high level.

Encouragement for Academic Pursuits –

- The College makes it a point to maintain an academic atmosphere.
- The teachers are encouraged in every way to engage in academic pursuits like attending conferences, writing research papers, books and inviting experts to address the students.
- Teachers are encouraged to avail themselves of faculty development programme of UGC for pursuing Ph.D.
- Faculty members are given leave and permissions for attending seminars.
- Presently 07 faculties working in the college are registered for Ph.D.



Faculty motivation through felicitation



Yoga for fitness of faculty

**Conducive Atmosphere-**

- Classroom teaching and projects based learning.
- The College is very keen on encouraging its teachers to adopt innovative practices & use of ICT classrooms.

Syllabus Revision Seminars-

- Organized to help its teachers update themselves and adjust to the contents of the revised curriculum.

Adequate Facilities like

- excellent library,
- free internet facilities and
- Availability of modern teaching aids.

2.4.2 How does the institution cope with the growing demand/scarcity of qualified senior faculty to teach new programs/modern areas(emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during last three years.

In order to enable teachers to teach the modified advanced part of their syllabus effectively, the College makes following efforts:

- **Refresher Courses** - College recurrently deputed teachers for UGC or other approved refresher courses.
- **Workshops for Faculty:** The institution copes with the scarcity of senior faculty by introducing workshops for faculty, to make suggestions and learn regarding new concepts and ideas that are incorporated in the syllabus.
- **Industrial Visits** are organized every year, which helps in improving the knowledge of faculty.
- **Recommend Purchase** of Books, Journals and Reports for Library.
- **Stress management:** College also incorporate holistic approach by organising various programs on spirituality, yoga, etc
- 8 days yoga camp in association with Rikhiya Peeth.
- Spiritual lecture by Tarun Sagaraji Maharaj
- Spiritual lecture by Ganeshan Diwakar, ISKON, Mumbai.
- Spiritual lecture by Chinmay Pandya, VC, Dev Sanskruti Vishwavidyalaya, Haridwar.
- Guest lecture for faculty of eminent faculties, scientists and Industry Expert.
- **Faculty exchange program**
- **Faculty Induction program at Partner Industry**



Yog-guru during Yoga Camp

OUTCOME :

- Up-gradation of knowledge of faculties.
- Establishment of MoUs with Partner Industries
- Inculcation of the skill based courses such as



- B. Voc. (Food Processing & Engineering)
- B. Voc. (Software Development)
- Advanced Certificate course in Power Plant Chemistry
- Diploma course in Information and Web Technology

2.4.3 Provided below are details of staff development programs during the last four years (data for last four years required) elaborate on the strategies adopted by the institution in enhancing the teacher quality:

a) Faculty nominated for staff development programmes

Academic Staff Development Programs	Number of faculty nominated				
	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Refresher Courses	-	03	01	05	01
HRD Programs	-	-	-	-	-
Orientation Programs	02	06	02	02	-
Staff training conducted by the university	-	-	-	-	-
Staff training conducted by other institutions	-	-	-	-	-
Summer/winter schools, workshops, etc.	-	-	02	-	-

Faculty training programmes organized by the institution to empower and enable the use of various tools and technology to improve teaching- learning.

Sr. No.	Type of Training	No. of Programms	Details of Programs
1.	Teaching learning methods/approaches / Audio Visual Aids/multimedia	10	<ul style="list-style-type: none"> ▪ Hands on training on DLP ▪ Hands on training on Interactive Board
2.	Handling new curriculum/ Teaching learning material development,	04	<ul style="list-style-type: none"> ▪ B. Voc. (Food Processing & Engineering) ▪ B. Voc. (Software Development) ▪ Advanced Certificate course in Power Plant Chemistry ▪ Diploma course in Information and Web Technology
3.	Content/knowledge management	02	<ul style="list-style-type: none"> ▪ MITCON Entrepreneurship Program (Govt. of Maharashtra) ▪ Campus recruitment training ▪ Workshop on e-resources
5.	Assessment	05	<ul style="list-style-type: none"> ▪ In-house training on online Internal assesment



b) Percentage of faculty-

No.	Faculty	2011-12	2012-13	2013-14	2014-15	2015-16
1.	Invited as resource persons in Workshops/Seminars/Conferences organized by external professional agencies	5%	10%	25%	25%	15%
2.	Participated in external Workshops/Seminars/Conferences recognized by national/international professional bodies	95%	98%	96%	100%	100%
3.	Presented papers in Workshops/Seminars/Conferences conducted or recognized by Professional agencies	76%	80%	77%	80%	75%

2.4.4 What policies/systems are in place to recharge teachers? (eg. providing research grants, study leave, support for research and academic publications teaching experience in other national institutions & specialized programs industrial engagement etc.)

Following policies/systems are in place to recharge teachers:

- **Infrastructure Facilities** are provided and support in the form of learning resources is provided to the faculty to encourage them to engage in research.
- **Applying for Fellowships** - The faculty is encouraged to pursue their Ph.D. and apply for the fellowships for the same.
- **Minor Research Projects** - Faculty is encouraged to take up minor and major research projects funded by the University and UGC.
- **Papers at National and International level** - Faculty are also encouraged to present papers at national and international level in India and abroad and apply for funding for the same.
- **Duty Leave** is sanctioned for faculty as per their requirements of attending research related events.
- **Interdisciplinary research** is encouraged and teachers are provided all support to write for journals of repute and also industry publications.
- Recognised Research Laboratories in Physics, Chemistry & Botany
- Engagement with Industry
- Felicitation of Faculties in recognition of their achievements.
- Workshops for non-teaching staff to upgrade their knowledge and skill

2.4.5 Give the number of faculty who received awards/recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.**Received Awards/Recognition**

Level	Number of Faculty
National	01
State	01
Local	20
Recognition by other educational Inst.	10

2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes, teachers are evaluated by the students and external peers.

- Student feedback on different parameters is taken every year and analysed.
- The teachers are also required to fill up a self-appraisal report based on API at the end of the year which is submitted to IQAC.
- Thus, teacher's progress in his/her career is monitored by the IQAC and may be said to be acting as internal peers.
- Online feedback system is in place and access is provided to all stakeholders as per their wishes and need.

Action on Feedback

- The parameters of concern are addressed by the Head of Institutions and recommendations for improvements are suggested.
- The faculties with outstanding performance are appreciated and marked for special attention and rewards

The feedback report on teachers by students is given in **ANNEXURE – 2.1**

2.5 Evaluation Process and Reforms

2.5.1 How does the institution ensure that the stakeholders of the institution, especially students and faculty are aware of the evaluation processes?

As Evaluation is an integral part of the teaching learning process, it is important for all stakeholders (students, parents and faculty members) to have knowledge about the evaluation process of the institution.

The institution makes sure that the rules about the evaluation process should be known to and understood by all the stake holders. Thus,

- Detailed information about the evaluation methods is given in the Prospectus.
- Details of the evaluation process are communicated to faculty members during the staff meeting by the examination committee of the college.
- First year students are informed about the process of evaluation of the institute by the Examination Committee during the orientation programme.
- The notifications and circulars issued by the University regarding evaluation schemes are communicated to students by the concerned faculty in the class room.
- The faculty members read the relevant instructions in the classrooms and a copy of the same is also displayed on notice-boards.
- Individual subject teacher informs the students about the criteria and method of internal evaluation in their respective theory and practical subjects.
- The dates of internal assessment are decided by the Examination Committee and conveyed to the student with due care.
- The test results are displayed on the notice board for the information of the students and also informed to the parents by SMS.



- The schedule for university examinations is displayed on notice boards in advance so as to help the students in their exam preparation.

2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

Major evaluation reforms of the university:

- From the academic session 2013-14, the University has introduced the semester pattern for UG Science stream.
- From the academic session 2015-16, the University has introduced the Choice Based Credit System for PG Science stream.
- All the reforms suggested by the University like new question paper pattern, marking pattern, Internal Assessment, etc. are implemented.
- These reforms are also communicated to the students and parents in the orientation programs from last two years.
- The reforms initiated by the Institution like Unit Tests and Prelims are effectively implemented since past several years.
- In addition, the College has introduced strict measures on its own so as to further strengthen those introduced by the university.
- Following are the major evaluation reforms introduced by the University and the contribution of the College to these reforms:
- Chief Examination In-charge - RTMNU has introduced the post of CEO and the College appoints a teacher for the post every year.

Reassessment of Answer Sheets:

- After declaration of results, in case of doubts the students may apply for depositing the prescribed fee for verification and revaluation of answer sheets within ten days from the date of declaration of results.
- The applications are forwarded to the University through the College.
- The University communicates to the College about change or no-change in the results.
- The same is conveyed by the College to concerned students.
- In case of change in the marks the respective students are entitled for reimbursement of fees for the same. All teachers of the College are oriented in order to adopt the reforms.

Online Submission of Marks:

This is another reform by the university & the College ensured secrecy & authenticity of the same by protecting the information by a password which is known only to the concerned authority of the College. Teachers were informed to follow the schedule of uploading of the marks.

Faculty involvement in university evaluation reforms:

Our faculties' contribution is significant in bringing about changes in the method of evaluation

- Dr. Anjan Naidu is as Dean, Science faculty, RTMNU, Nagpur. He suggested ONLINE / ONSCREEN answer paper evaluation process, MCQ based question paper, 60:40 proportion of wattage for assessment.



- Dr. Anjan Naidu and Prof. R. K. Dhuware, member of ad-hoc committee constituted by Honourable Vice-chancellor for preparing syllabus, draft direction, scheme of examination on Credit Based Semester pattern for B. Voc. Programme.
- Preparation of academic calendar, panel of examiners for conducting theory and practical exams, panel of paper setters, moderation of question papers is done by STC. About 30% staff members are the members of STC/BOS.
- Monitoring, Evaluation and updating of curriculum is done periodically in consultation with all stakeholders particularly partner industry and sector skill council.

College level reform :

- Question Banks- At institutional level, the College develops Question Banks for its various courses.
- Internal assessment

Reforms for teachers :

- The major reform at University level is an implementation of the system of Academic Performance Indicator.
- University has published the reforms for teachers in the form of academic performance indicator and this indicator is used for career advancement and promotions.

The key issues in evaluation are as follows:

- 1) Teaching, Learning and evaluation related activities
- 2) Co-Curricular extension and professional development related activities
- 3) Research and academic contribution.

The recommended university reforms are considered in the self-appraisal form of the institute. In addition to the criteria mentioned in University reforms, due credit is given for- teacher's involvement in preparation of course materials, effective laboratory sessions, documentation as per NAAC, maintenance of students discipline and proficiency in English.

2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

- Any reforms or changes brought out by the university are available on the website of the university and they are also informed to the college through circulars.
- At the beginning of semester the intended activity is informed to all the teachers.
- At regular intervals the implementation is ensured by the Principal in meetings with Heads of Department.
- In addition to that student's feedback is also considered to review the effective implementation.
- Students who participate in co-curricular and extracurricular activities through NSS/NCC and those who participate in sports, games and cultural activities are awarded incentive marks at University examination as per Ordinance No. 2 of Nagpur University 1996.

From the academic session 2013-14 onwards the provision continuous evaluation by way of internal marks in theory has been introduced by RTM Nagpur University.



While evaluating the students for internal assessment, due weight-age is given for:

- Students' attendance.
- Performance during Unit test exam.
- Field work / Seminar / Home assignments.

The above criteria are rigorously followed and students are informed about all aspects from time to time.

- Since the parameters chosen for Internal Assessment are such that they involve maintenance of meticulous record, transparency is achieved at every stage.
- This system appears to be helpful in the overall development of the students' performance and participation. However, long term effects are yet to be analyzed by the College and the University.
- The online mark submission process is strictly followed and required facilities are provided by the college to the concerned authority to ensure the purpose is met.

2.5.4 Provide details on the formative and summative evaluation approaches adopted to measure Student achievement. Cite a few examples which have positively impacted the system.

The college has adopted both formative and summative approaches to evaluate student achievements in the learning process.

- **Formative evaluation:** Formative evaluation is done to monitor students learning and for gathering feedback which can be used by the teachers to improve their teaching, as also to enhance the learning process. Formative evaluation is done based on the following parameters

Assignments-

- Presentations
- Excursion tour.
- Class interactions
- Group discussions
- Open book system
- Projects
- Class tests
- Practical tests
- Organizing functions
- Social activities
- Overall attendance and conduct in the class room.

- **Summative evaluation:** The purpose of summative evaluation is to monitor students learning at the end of an instructional unit, and is conducted by the University. The evaluation of third year students is done by the University. Summative evaluation is done in the following ways:

- Setting of question papers by one group of students for the other group and vice versa
- Self-evaluation

- Written exams- Internal and external.
- Practical exams.
- Some departments conduct preliminary exams for the students.
- Viva voce.

■ Formative evaluation along with summative evaluation has had a positive impact on the learning quality of the students and has helped in improving their overall personality. Students have started taking a keen interest in the assignments like Unit Tests, Field Visits, Prelims. They are attending the theory and practical classes regularly.

2.5.6 What are the graduates' attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?

The Graduate Attributes specified by the college are:

- A responsible attitude
- Good knowledge of their subjects
- The zeal to acquire global competencies
- Applied Knowledge
- Environment sustainability
- Ethics and Values
- Leadership / Team Work
- Cross Cultural Patriotism

Attainment of Graduate Attributes :

1. Placements

Our students have been placed at Students during plantation companies of international repute like TCS, ITC, Wipro, etc.

2. Adaptability

Adaptability is the unique ability to be learned by the student to face challenges in reality. To enhance this ability we try to create situations through role-play, observe students conduct and responses. Feedback and suggestions are provided after the given activity is concluded. This method is a proven approach and has benefitted students immensely.

3. Active participation in Events/Seminars/Conferences

In the college, all events are chiefly managed by students so that they can develop their Leadership Skills and Team Working skills. Students are also encouraged to participate in various intercollegiate events and seminars so that they can keep themselves abreast with various developments and trends in their fields.

4. Student Achievements

The success stories of our alumni and senior students motivate their batch-mates and junior students. For Example some of our alumni are who are well established and excelling in their professional career, regularly visit the campus for guiding and sharing their experiences with the students.



Students during plantation



Students placed in TCS



5. Recruiter's Feedback

Since we provide quality employees to the employers they always have a demand for such student throughout. We also take feedback from them regarding their required skill set and try to develop those skills set among our students.

- On the suggestion of Adani Power Ltd., special course 'Certificate Course in Power Plant Chemistry' is designed and approved from UGC and is in vogue from 2014-15.
- On the suggestion of TCS, Chennai special course 'Diploma Course in Information & Web Technology' is designed and approved by the UGC and is in vogue from 2014-15.

2.5.7. What are the mechanisms for redressal of grievances with reference to evaluation, both at the College and University level?

At the College Level:

- College conducts unit tests and prelims.
- The valued papers are shown to the students.
- The discrepancies in evaluation are rectified on the spot.

Because of this system there are no grievances regarding evaluation recorded till date.

At the University Level:

- University has its own grievance redressal mechanism.
- The students are made aware of this & guided in this respect.
- Students having grievances regarding evaluation in any subject may opt for challenge to valuation.

2.6 Students performance and learning outcomes

2.6.1 Does the college have clearly stated learning outcomes? If 'yes', give details on how the students and staff are made aware of these.

Yes, Learning outcomes form an integral part of college Vision, Mission & Objectives. Learning objectives are stated in the syllabus and prospectus of the college. Students are made aware of these objectives during first week of academic year when they are given necessary orientation for new course/class.

The learning objectives are communicated through various means such as college prospectus, Principal's address to students and parents, Alumni meets and dissemination in classroom by concerned staff. These are also prominently featured on college boards, college magazine and other publications brought during conferences and seminar.

2.6.2 Enumerate on how the institution monitors & communicates the progress & performance of students through the duration of the course/programme. Provide an analysis of the students' results/achievements (Programme/ course wise for last four years) & explain the differences if any & patterns of achievement across the programmes/courses offered.

Result Analysis Committee collects the results from each department and they are -

- Displayed on college notice board.
- Based on student performance, the mentor teacher calls respective students
- Provides necessary suggestions and guidance.

Programme-wise result for last four years:

Academic Year	Course	Passing %
2011 - 12	B.Sc.	48
	B.C.A.	76
	M.Sc.	46
2012 - 13	B.Sc.	40
	B.C.A.	63
	M.Sc.	59
2013 - 14	B.Sc.	58
	B.C.A.	63
	M.Sc.	57
2014 - 15	B.Sc.	62
	B.C.A.	82
	M.Sc.	58


Felicitation of Meritorious Students

Rank holder students shined in RTM Nagpur University (**Meritorious students**) as under -

- Miss. Neha Agrawal - 7th merit in RTM Nagpur University Examination B.Sc. Final Summer 2014.
- Mr. Videsh Ramteke - 5th merit in RTM Nagpur University Examination B.Sc. Final Summer 2014.
- Miss. Ashwini Meshram - 7th merit in RTM Nagpur University Examination B.Sc. Final Summer-2013.
- Miss. Rinki Panjwani - 1st merit in RTM Nagpur University Examination B.C.A. Final of Summer-2011.
- Miss. Pratibha Hotachandani - 2nd merit in RTM Nagpur University Examination B.C.A. Final of Summer-2011.

The observed facts are-


Felicitation of Meritorious Students

- The result of college is of progressive nature.
- The overall result of the college is almost double as compared to that of nearby colleges.
- The overall result of the college is almost double as compared to that of University result.
- Almost every year our students secure position in University Merit List.
- In each intermediate semester examination about thirty five students secured distinction in RTM Nagpur University Examination.



- The trend of securing marks in distinction is rapidly growing.

2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

The college aims to provide a supportive, vibrant and challenging learning environment in order to help the students to attain their potential.

The teaching, learning and assessment strategies of the institution are structured to facilitate the achievement of the intended learning outcomes through the following:

Teaching Strategies: The faculty uses diverse strategies like use of

- ICT tools,
- models, charts,
- smart classroom technology, and
- video-conferencing facility in addition to traditional methods of classroom teaching.



Students during poster presentation

Learning Strategies: To develop effective learning and to make it more student centric focus is given to increase involvement of students in

- Seminars,
- Field based surveys,
- Report writing,
- Field placements,
- Group discussions,
- Viva-voce,
- Use of online tools,
- Orientation visits etc.



Students during online examination

Assessment Strategies: Assessment of student is based on both

Summative -

For eg. University and internal theory and practical examinations, home assignments and

Formative -

For eg. Viva-voce, report writing, orientation and field visits etc.

With the introduction of CBCS system there is more scope for continuous evaluation of students.

2.6.3. What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality jobs, entrepreneurship, innovation and research aptitude) of the courses offered?

The college enhances the social and economic relevance of the courses offered in the following ways:

- The syllabus of some subjects (for example, B. Voc., UGC Community College) has a component of entrepreneurship which helps in developing entrepreneurial attitude in the students.
- The same are evaluated by sector skill council.
- The college organizes industrial visits which helps the students in getting practical insight into how industries function



The college enhances the social and economic relevance of the courses offered in the following ways:

- The well-stocked library and access to e-resources helps develop an interest in students about the social and economic relevance of their respective courses.
- The college has training and placement cell which trains and guides students to apply and appear for jobs. It also organizes campus interviews.
- Through NSS activities, issues of social values are emphasized and the responsibilities of a good citizen are conveyed.
- Some of the college faculty members are on University Boards of Studies. As members, they offer suggestions in order to strengthen the elements of social and economic relevance in the courses.
- For innovation in research aptitude, students are encouraged to undertake and participate in research projects, workshops and seminars.
- Several students actively participate and present research papers in college and intercollegiate competitions.
- To enhance entrepreneurship among the students, special training program was organised in collaboration with MITCON, Govt. of Maharashtra.
- Guest lecture from Industry Experts are organised for students to make them aware about the skill requirement of industry.
- Gift article making Workshop was organised in collaboration with Eco-club.

2.6.4 How does the institution collect and analyses data on student learning outcomes and use it for planning and overcoming barriers of learning?

- The college collects and makes an overall analysis of the data on the learning outcomes of students through University examination results and internal examinations.
- Teachers analyse the results of their particular subjects after the declaration of the results.
- The college uses this data to recognize advanced and slow learners and plan separate strategies for them.
- Class teachers are appointed and students may approach them for help in overcoming barriers of learning.
- The college takes appropriate steps to overcome the barriers in the learning out come.
- Some of these include emphasizing on regularity of students, addressing their grievances, need-based extra classes, counseling for students, etc.

2.6.5 How does the institution monitor and ensure the achievement of learning outcomes?

The college monitor and ensure the achievement of learning outcomes in following ways –

- Staff members often review the learning process via tests that are taken at the completion of each unit. Such tests enable assurance of learning.
- Internal examinations also achieve the above-mentioned objectives.
- The college effectively executes several co-curricular activities. These help the students to learn beyond the text books.



- The IQAC of the college has a set mechanism to monitor the students learning outcomes based on academic performance and ensured as under -
 - Academic milestone is observed as every year at least one or two students sparkle in merit list of RTM Nagpur University examination.
 - Two students crack IIT-JAM examination
 - Five students selected for summer school programme at TIFR, IUCAA, etc. to work with the scientist of International repute in the National Reputed research organisations.
 - Eight students qualified NET/SET and GATE
 - Good number of students have been placed in renowned firms Infosys, Wipro, TCS, Adani Power etc.
 - Some students prove themselves the good entrepreneur
- The achievements of learning outcomes are monitored by keeping a record of internal evaluation and university/college examination results of the students.
- Moreover, department wise and subject wise analysis of performance and assessment is done.
- The students participation in the class and the marks scored in tutorials, assignments help to judge students by the staff members.
- The college monitors and ensures the achievements of the learning outcomes by identifying slow and advanced learners and taking steps to improve their learning outcomes.
- Interactive sessions are held to understand the student's problems regarding methods of study of the particular subject and the learning outcomes.

2.6.6 What are the graduate attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?

The college continually makes efforts in honing the skills of the students to adapt themselves to the recent trends. It imparts professional attributes and skills throughout the course. The faculty works hard to impart not only academic but also cultural, moral and social knowledge among the students.

The college aims at

- Providing value based education.
- Providing students with advanced knowledge and latest skills in their chosen discipline.
- Tapping the potential of students.
- Nurturing a spirit of scientific inquiry among the students.

The college has defined the following as graduate attributes

- Sound knowledge of the subject studied.
- Communication skills.
- Leadership and team building qualities Substantial knowledge of the recent trends
- All-round personality development of the students through necessary soft skills, self-reliance, valuable academic excellence with social attitude and creative and positive thinking.
- Research culture, scientific outlook and critical thinking.



- Sound knowledge of the subject studied
- The college strives to make the students responsible citizens.
- The activities of the college bear social, moral, cultural or national relevance.

Such efforts of the college have yielded positive results which are reflected in the quality of the alumni and their achievements.

The fulfilment of graduate attributes are supplemented by

- Innovative practices
- Best Practises



Self Study Report



CRITERION -III RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

3.1.1. Does the institution have recognized research center/sof the affiliating University or any other agency/organization?

Yes, the institution has recognized as "Centre for Higher Learning and Research" form April 2014 in the subjects Chemistry, Botany and Physics affiliated to RTM Nagpur University.

3.1.2. Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Yes, this institution has a Research Advisory Committee (RAC) to monitor and address the issues of research.

Its regular activities are-

- Creating awareness about various funding agencies, their schemes, proformas and thrust areas by circulating notification received by various funding agencies time to time.
- Synchronizing and Encouraging faculty to participate in research activates.
- Updating records of publication and awards.
- Administrate the research centre in admission for Ph.D. Students.

The composition

The composition of Research Advisory Committee (RAC) is

1. Dr. J. G. Mahakhode - Convener.
2. Dr. K. M. Hatzade - Co-Convener
3. Dr. D. S. Choudhary - Member
4. Prof. D. A. Chouhan - Member.
5. Prof. Y. S. Bopche - Member

Recommendation -

Following recommendations are made by RAC for enhancement of research in College.

- Identify potential researchers who are eligible for undertaking research.
- Compel every staff member to open the account in "Google-Scholar".
- Submission of reports of publications listed in International Database – Scopus & Google Scholar.
- Host and participate University research festival like "AVISHKAR" for students.
- Organize Academic program like work-shop/hands on training/ Guest lecture/Conference for students and staff.
- To honor by felicitation for publication of their research work in peer reviewed journal.
- To grant leave for field work, visit to Research institute, attending training program/ Seminar/work shop/Conference

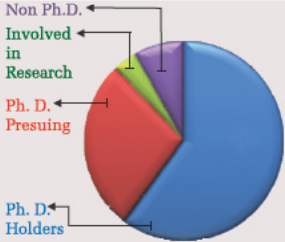


- To make available e-resources.
- Promotion to carry out Minor/Major Research project.

Impact of recommendations:-

These recommendations results in:-

Table No.3.1: Showing details of impact of recommendations.

Sr. No.	Recommendation	Impact
1.	Identification of potential researchers	 <ul style="list-style-type: none"> ■ Substantial increase in research participation of staff ■ Ph. D. holders-faculty :- 15 ■ Ph. D. Supervisors :- 10 ■ Ph. D. Awarded :- 01 ■ Ph. D. Pursuing :- 07
2.	Account in Google Scholar	<ul style="list-style-type: none"> ■ Ease of making International Database publication
3.	Organisation of Research Festival 'Avishkar'	<ul style="list-style-type: none"> ■ Overwhelming response of students for participation in University research festival "AVISHKAR".
4.	Academic program	College organized <ul style="list-style-type: none"> ■ National Conference / Seminar Workshop / Symposia - 15/ ■ DST Inspir Camp - 01 ■ Hands on training - 03 ■ Guest Lectures in Various Departments
5.	Honor by felicitation	<ul style="list-style-type: none"> ■ Increase in international database publication ■ Increase in peer reviewed national journal publication. ■ Increase of publication in Conference proceeding
6.	Grant Leave	<ul style="list-style-type: none"> ■ Enhancing research activity in the institute.
7.	e-resource	<ul style="list-style-type: none"> ■ LAN as well as Wi-Fi facility provided in the college campus which helps in promoting research resources ■ Good number of terminal available in campus.
8.	Minor research project	<ul style="list-style-type: none"> ■ 11 MRP sanctioned by UGC (from 2011-2015). Out which 10 - Completed and 01 - On going



3.1.3. What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/ projects?

a) Autonomy to the principal investigator

- Autonomy to the principal investigator is given in deciding line of action of his/her problem of research, time line for completing project, methodology used in project, final submission of the report.
- Freedom is given to the principal investigator to purchase equipment and instrument as per his/her needs.

b) Timely availability or release of resources

- College provides all the facility asked by principal investigator

c) Adequate infrastructure and human resources

- 82 KVA Generator set available for 24X7 electric power supply.
- College provide space for research, consumable materials if available and Instruments available in college to the principal investigator
- The office staff/laboratory attendant is made available to the principal investigator for assistance needed in research.

d) Time-off, reduced teaching load, special leave etc. to teachers

- The college permitted teachers to undergo short term training course/programme like Orientation programme/ Refresher course etc.
- Study leave is also granted (subject to the permission from management and norms prescribed by the State Government) to carry out field work and research at out station.
- Duty leave is sanctioned to present their finding in seminars and conferences.

e) Support in terms of technology and information needs

- The college campus is equipped with LAN as well as Wi-Fi internet facility.
- ICT facility is available along with reprography, printing, scanning, INFLIBNET and video conferencing.
- All departments having sufficient number of computers and Peripherals
- College subscribes national and International journals.
- The college is registered for INFLIBNET N-LIST programme and Online Library of British Council through which various e-journals, e-books are accessible.

f) Facilitate timely auditing and submission of utilization certificate to the funding authorities

- The services of chartered accountants and technical support are provided to facilitate timely auditing and submission of utilization certificate to the funding agency.

3.1.4. What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

The institution promotes participation of students in research activity through-

- In-house software development (Department of Computer Science).
- Banana Tissue culture program -3 week (Department Microbiology and Biotechnology)



- Homemade experimental boards (Department of Electronics)
- Training programme on “Pharmaceutical sterility testing” for U.G. & B.Voc. students (Department of Microbiology and Biotechnology)
- Wild life week celebration (Department of Zoology)
- Excursion tour and collection of medicinal plants (Department of Botany)
- Intra collegiate science exhibition. (Conducted by Department Electronics)
- Poster/E-presentation program. (Department of Microbiology, Biotechnology, Electronics)
- Hands on training on “Simulation programme on circuit maker” by Dr. V. M. Pendsy (Department of Electronics)
- Hands on training on “aptitude and numerical ability- Maths –e-magician” by Mr. Anil Naire, Hyderabad (Department of Computer Science)
- Hands on training on “ Micro-controller 8051” by Prof. Abhey Deshpande, Associate Prof. Rajeev Gandhi Institute of Engineering and Research Center, Nagpur. (Department of Electronics)
- Releasing Conference proceeding (Department of Electronics- 01, Department of Microbiology 02, IQAC-02)
- Releasing In-house research based News letter-Bio horizon (Department of Microbiology)
- Waving off registration fees and travel expenses for attending scientific programmes.
- Student Seminar.
- Educational tours.
- Visit to research institute and industries.
- Guest lectures
- Achievements highlighted through college web-site, college prospectus and display board.
- Research based projects is assigned to PG Students as a part of curriculum.
- The college organizes the skill development conference & work-shop.
- Hosted and participated university research festival – Avishkar. The college encourages the participation of students by organizing interactive session and provide Teacher mentor.
- Two times University Research festival “AVISHKAR” hosted by the College.



Research Festival Avishkar-2015

Table No.3.2 : Showing details of Research festival “AVISHKAR” hosted

Sr. No.	Name of Research program	Date	Total no. of participants
1.	Inter collegiate research festival AVISHKAR	23-24 December, 2011	93
2.	Inter collegiate research festival AVISHKAR	10-11 January, 2015	89

The list of Students Selected in University Research Festival “AVISHKAR” from Dhote Bandhu Science College during 2011-2016 is provided in **ANNEXURE : 3.1**



3.1.5. Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity)

- For Guiding research Students–See **ANNEXURE : 3.2**
- For Details of Minor Research Project funded by UGC–See **ANNEXURE : 3.3**
- List of permanent Staff Member pursuing Ph.D. degree–See **ANNEXURE: 3.4**
- Collaborative Research – See **ANNEXURE : 3.5**

3.1.6. Give details of workshops/training programmes/sensitization programmes conducted /organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

- Details of Seminar / Conferences – See **ANNEXURE :3.6**
- Details of Sensitization programmes



Inauguration of Camp

Table No.3.3 : Showing details of Sensitization programmes.

Sr. No.	Activity	Organized by	Sanctioning Agency	Duration
1	INSPIRE Science Camp 2013-14	D. B. Science College, Gondia	DST, New Delhi	15-19 Feb. 2014
2	Research poster exhibition on "e-waste Management, Challenges and Opportunities"	Department of Microbiology and Computer Science	UGC,Pune	3 rd Jan.2012

- Details of Work shop/Symposia/ Hands on training

Table No.3.4: Showing details of Work shop/Symposia/ Hands on training.

Sr. No.	Department	Title	Funding Agency	Event Date
1.	Electronics	Workshop on Curriculum Design for semester pattern	College Fund	30 Jun-2012
2.	Electronics	Hands on training on "Simulation programme on circuit maker" by Dr. V. M. Pendsy	College Fund	10 September 2014
3.	Electronics	Hands on training on "Microcontroller 80 51" by Prof. Abhey Deshpande.	College Fund	31 st March 2016
4.	Computer Science	Hands on training on "aptitude and numerical ability- Maths- e-magician" by Mr. Anil Naire, Hyderabad	College Fund	2012
5.	Microbiology	Workshop on Sugarcane Tissue Culture	College Fund	16 th December, 2014 to 1 st January, 2015
6.	Microbiology	Hands on training on Sterility testing of pharmaceutical products	College Fund	20 th January, 2015



7.	Botany	Science Exhibition	College Fund	Every year
8.	Physics	Sensitization programme on the eve of Science Day, Lectures by eminent Scientists	College Fund	28 th Feb, 2014, 2015
9.	Mathematics	Ramanurjam Quiz	College Fund	Every year
10	Zoology	Poster presentation on Wild-Life	College Fund	Every year
11.	Chemistry	Research paper presentation competition	College Fund	Every year

3.1.7. Provide details of prioritized research areas and the expertise available with the institution.

- For list of prioritized research areas & expertise- See **ANNEXURE:3.7**

3.1.8. Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

The College offers hospitality to visiting scholars by providing boarding and lodging, internet facilities, access to library and computing centre and drawing up schedules for departments to invite the scholars to deliver guest lecturers in their respective areas of specialization.

Guest lecture & interactive sessions with eminent persons organized by the college-

See **ANNEXURE : 3.8**

3.1.9. What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

Faculty members avail duty leave/study leave to participate in Conference/Seminar/Work shop/Field-work/ Training program etc. Most of the faculty member execute their research work in winter & summer vacation.

This provision enhances the teachers Participation in research activities which helps the College in the following way

- Selecting research based project as a part of curriculum by the PG students. Expertise of the teaching faculty in research has helped them in guiding the same.
- Understanding contemporary trend in research methodology.
- Establishing linkage.
- Designing research supportive curriculum like
 - Power Plant Chemistry- Department of Chemistry
 - Software Development – Department of Computer Science
 - Information and Web Technology– Department of Computer Science
 - E-commerce– Department of Computer Science
 - Biofertilizers and Biopesticides Production-Department Of Microbiology
 - Tissue Culture Technology - Department Of Microbiology



3.1.10. Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land)

The institution all the way tries to involve students & community in creating awareness of the research activity of the college. Some of the initiatives taken up by the college is listed below-

- People from Gondia Municipal Council was invited to attend the National Conference organized by Department of Microbiology on "Technological options for sustainable solid waste management"
- Conference proceeding and College magazine are kept in departmental library for free accessing to everyone including students.
- Project Reports are kept in departmental library.
- Faculty members and PG students are encouraged to publish their finding in reputed journal

List of Student-teacher Research Publications is given in **ANNEXURE : 3.9**

3.2 Resource Mobilization for Research

3.2.1. What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

About 20% of Annual budget is allocated for research activity which includes budget like Course work, Affiliation charges, Guest lecture, Work-shop, Visit, Consumable and non-consumable items, Fuel in Generator set, repair and maintenance of instruments and other expenditure.

The staff members are motivated to apply for Minor and Major Research Project to funding agency like DST/UGC/DAE etc. The expenditure over and above the sanctioned grant is borne by college from its own resources. Details of the major heads of expenditure and amount utilized from 2011-12 to 2015-16.

Table No.3.5: Showing details of Expenditure for research.

Sr.No.	Heads of Expenditure	2011-12	2012-13	2013-14	2014-15	Total
1	Equipment	38700	151840	435582	7054	633176
2	Books & Journals	0	0	55616	15048	70664
3	Contingencies	0	7841	48385	27100	83326
4	Travel/Field work	0	2060	62012	36287	100359
5	Chemicals/Glasswares	0	0	161375	40246	201621
		38700	161741	762970	125735	1089146

3.2.2. Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

Yes, out 20% of Annual budget which is allocated to research activity, some amount is utilized on seed money to members as advance to complete the formalities of research projects. The seed money refunded to the College, once the project is granted by funding agency.

**3.2.3. What are the financial provisions made available to support student research projects by students?**

- Financial assistance is providing by the college to the students to carry out research activity.
- Seed money is provided to the PG student to carry out their project as a part of curriculum.
- Seed money and travel assistance is providing to the students to participate university research festival "AVISHKAR".
- Infrastructure and facilities available in the research centre of the college are made available to the Teachers who are pursuing Ph.D. and Ph.D. students.

3.2.4. How does the various departments/units/staff of the institute interact in undertaking interdisciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

Various department of the institution undertaking interdisciplinary research in following way:

- Sharing of instrument and infrastructure in various departments like,
 - Department of Botany, microbiology and Chemistry.
 - Department of Electronics, Physics and Chemistry
 - Department of Computer science and Electronics
 - Department of Botany and Zoology.
 - Department of Microbiology and Biotechnology
- Some faculty members carry out interdisciplinary research in collaboration with faculty members of other colleges different subject to meet the challenges of interdisciplinary research.

Challenges faced in organizing inter disciplinary research:-

- Research Advisory committee recommends "Central Research Lab" to enhance interdisciplinary research and optimum utilization instruments and infrastructure. But some of these instruments are needed for PG-students to carry out their research based project. Hence, central lab was not possible.

3.2.5. How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

- All heads of Department permitted to use various instruments available in their laboratories & infrastructure to all the researchers & faculty members of other departments.
- E-books (INFLIB-NET), Reference Book, Periodicals, Journals and study materials in the library, internet facility with Wi-Fi 24x7 Power supply are made available to faculty members and researches.

3.2.6. Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

UGC provides the financial assistance for the purpose of enhancing research activity under following two heads:-

- Minor Research Project contributed Rs.1089146/-
- National Conference contributed Rs. 12,06,500/-

3.2.7. Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

- Details of Minor Research Project is provided in **Annexure : 3.3**

3.3 Research Facilities

3.3.1. What are the research facilities available to the students and research scholars within the campus?

- Three subjects namely Chemistry, Botany and Physics are recognized as a “Centre of Higher Learning and Research” by RTM Nagpur university Nagpur.
- Well-equipped research laboratories.
- Subscription of National and International journals in College library (21 journals in printed form)
- Additional resources like “INFLIBNET” made available, 24x7 Power supply. Unlimited data access.
- Campus equip with Wi-Fi facility.
- Every department has got ICT facility.
- 10 Faculty members are recognized as a Ph.D. supervisor
- Facility of video conferencing is available in the institution.

3.3.2. What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

- RAC of the college has decided to make this research centre available, for Ph.D. supervisors who are not belonging to this institution. **(See ANNEXURE : 3.11)**
- RAC time to time inform about the various funding agency, their schemes, their criteria etc. to staff members and provide resources as well as seed money.
- RAC looks into the requirements and routine affairs like Submission of proposals, application to Ph.D. cell of RTM Nagpur University Nagpur.
- RAC conducts on-site visit and discusses requirement with the head of the department.
- RAC motivates for the National conference, work-shop, Guest lecture etc.
- Depending on the funds available, College purchased some Special instruments recommended by head of the department.
- Grants received from various funding agencies helped to update the laboratories with sophisticated instruments.

3.3.3. Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments / facilities created during the last four years.

No, the college has not received any grant from industry. However the grants of minor research projects are used for developing research facilities.

- List of instruments are listed in **ANNEXURE : 3.10**

**3.3.4. What are the research facilities made available to the students and research scholars outside the campus/other research laboratories?**

- The college teachers take all necessary efforts and ensure that facilities needed for student project, research scholars are fulfilled. Some part of their dissertation may be carried out at University laboratories as well as other National laboratories.
- The College has decided to make this research centre available, for Ph.D. supervisors who are not belonging to this institution. This will enhance the research attitude & facility available for the research scholars outside the campus and nearby area of Gondia city.

Ph. D. Supervisors outside the Institution who are permitted to carry out research work in this research Centre is depicted in **ANNEXURE : 3. 11**

3.3.5. Provide details on the library/ information resource center or any other facilities available specifically for the researchers?

- Wi-Fi/ broad-band facilities is available in college campus.
- The college is a member "N-LIST-INFLIBNET"
- E-Journal/Open-access journal are utilized by researchers.
- Video- conferencing facility is available.
- A total of 21 journals are subscribed by various department and are made available in the main library.
- Reprographic facilities: -(a) Photocopier (b) Computer (c) Printer (d) Scanner.
- All departments equipped with ICT. Faculty members have their account in Google Scholar.

3.3.6. What are the collaborative research facilities developed/ created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.

- Facilities available the departments which are recognized as center for higher learning and research is extended to other colleges with the permission of head of the institution.
- The Wi-Fi, Video-Conferencing, special instrument, ICT facilities, 24X7 power supply are further added in the available research resources

3.4 Research Publications and Awards**3.4.1. Highlight the major research achievements of the staff and students in terms of Patents obtained and filed (process and product)**

One patent filed by Dr. Ajay Ghatole, Department of Chemistry at Technology Information Forecasting and Assessment Council (TIFAC), New Delhi, India.
Letter No. T.1 (6)/TIFA/2009, Dt. 1st DEC 2009(filing date)
Entitled "Novel smart conducting Biomaterials based on poly(thiazole) functionalized anionic biopolymer for eco friendly electronic sensor."

Research studies or surveys benefitting the community or improving the services

- Quality of rivers of Bhandara district was studied by Department of Microbiology.
- Bio-technology utilization of dairy waste to solve environmental problem was above studied by Department of Microbiology
- Study of some medicinal plant is carried out by Department of Botany.

3.4.2. Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

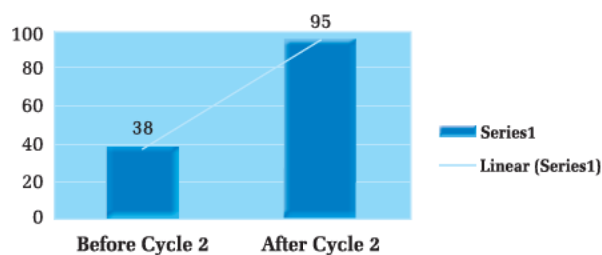
No, but the conference proceedings are released (Department Of Electronics- 01, Department of Microbiology -02 and IQAC-02)

3.4.3. Give details of publications by the faculty and students:

Publication per faculty

The details of publication per faculty is tabulated in **ANNEXURE : 3.13**

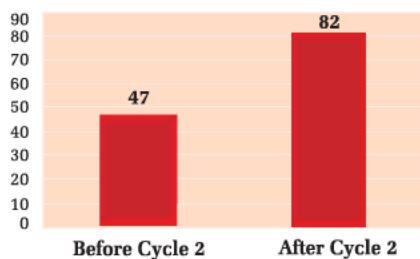
Research paper publications in peer reviewed journal is being enhanced as compared to earlier phase of accreditation. It is depicted below.



Publication in National and International Journals

3.4.2. Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate

- Research paper publications in Conference Proceedings (National/International) is represented below. It also shows substantial growth in publications.



Publication in National & International Conference Proceedings



Research paper publications per faculty in peer reviewed journals from 2011 onwards listed in international data base Scopus /Google Scholar having citation index, SNIP, SJR, impact factor, h-index in **ANNEXURE : 3.12 and ANNEXURE : 3.13**

Research paper publications per faculty in Conference proceedings from 2011 onwards is tabulated in **ANNEXURE : 3.14**

- There are 23 books published by 11 faculty members of the college. For Details of Books written/chapters in book/Books edited with ISBN/ISSN numbers with details of publishers is given in **ANNEXURE : 3.15**

3.4.4. Provide details (if any) of Research awards received by the faculty

- On 18th October, 2011, **Prof. S. P. Timande** has been awarded with consolation prize for presentation of poster entitled Biotechnological utilization of cheese whey in UGC sponsored National Seminar on recent advances in medical microbiology and Immunology.
- **Prof. R. K. Dhuware** received BEST PAPER PRESENTATION AWARD in NAAC Sponsored National Conference on “Quality Sustenance in Higher Education Institutions” Organized by Dhote Bandhu Science College, Gondia on 16th – 17th Oct.2012.
- On 17th August, 2012 in NAAC sponsored National Conference on Quality sustenance in higher education at D. B. Science College, Gondia **Prof. S. P. Timande** was awarded with first prize for presentation of best practice in teaching and learning.
- **Dr. S. B. Banarjee**, Department of Zoology awarded with Ph.D. degree by RTM Nagpur University, Nagpur on 20th Feb.2015.
- **Prof. D. A. Chouhan**, Department of Microbiology awarded with IInd prize for presentation research paper in UGC sponsored two day National Conference on Pharmacogenomics: Revolutionizing Personalized medicine, organized by Department of Biotechnology and Microbiology, Nabira Mahavidhyalaya, Katol. (21th -22th September, 2012).
- Following staff member participated in International Conference held at abroad.

Table No.3.6: Showing details of staff member participated in international conference held abroad.

Sr. No.	Name of faculty and department	Nature of participation	Venue	Name of conference	Date
1.	Dr. J. G. Mahakhode Department of Electronics	Oral presentation	Jinan university Shan dong china	1st international Conference on Advance Material	23-16 may 2011
2.	Dr. D. S. Choudhary Department of Physics	Chairman for technical session	Columbo Srilanka	International Conference on Science and Technology for Society	May, 2015
3.	Shri Y. S. Bopche Department of Physics	Oral presentation			
4.	Dr. S. D. Tambekar Department of Microbiology				



5.	Dr. D. S. Choudhary Department of Physics	Co-ordinator/ Chairperson	Kualalumpur Malaysia	International Conference on Sustainable Development	24-26 May, 2016
6.	Shri Y. S. Bopche Department of Physics	Oral presentation			
7.	Dr. G. P. Gadekar Department of Zoology				
8.	Dr. K. M. Hatzade Department of Chemistry				

Research paper publications per faculty in peer reviewed journals from 2011 onwards listed in international data base Scopus /Google Scholar having citation index, SNIP, SJR, impact factor, h-index in **ANNEXURE : 3.12 and ANNEXURE : 3.13**

Research paper publications per faculty in Conference proceedings from 2011 onwards is tabulated in **ANNEXURE : 3.14**

3.5 Consultancy

3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

Dhote Bandhu Science College translates its vision by working on the potential of the student for their employability. Generating future workforce of the nation, the institution has devised a strategy which addresses these issues at various levels and has adopted a number of measures to interact with the industry, as follows:

As per the need of Industries, frame some skill based courses with involvement of Industry partners. This leads to cumulative impact of learning towards the students employability in areas directly related to the courses being taught.

Add-On Career Oriented Courses have been introduced which include courses on Biofertilizers and Biopesticides Production, Tissue culture -Technology, e-commerce etc.

Throughout the academic year, various seminars related to Resume Writing skills, Communication Skills & Employability checks have also been organized by the Placement Cell especially for the final year and pre-final year students to help them prepare themselves better and to be in sync with the recruiters' demand.

An ancillary of the very successful Placement Cell that exemplifies the institution's constant efforts at innovation. Founded with the objective of nurturing creative entrepreneurial spirit amongst the youth, we invite successful entrepreneurs to have talks, discussions and workshops that may lead to some fledgling ideas in the field of entrepreneurship to understand the various challenges and provide means of successfully overcoming them so that students may benefit at the completion of their formal studies.

We have active interface with government organization, NGOs, institutions, industries as well as to farmers etc.

Communication between industry and institute made by.

- Display consultancy services available in Institution on website



- Prospectus
- College Magazine
- News letters
- Through-communication with alumni
- By involving industry persons in syllabi designing.
- Through display on website
- Mail to target industry

3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

There is no specific and stated policy of the Institution to promote consultancy. It has yet to formulate and then to publicize the available expertise of the faculty members.

The proper profile of all the faculty members is uploaded on the college website and some of the faculty members have their personal web pages also.

But, consultancies given to outer agencies are most of the time honorary or simple token honorarium/ Travel Allowance is paid to them.

The proposed consultant fee is shared in the ratio 2:1 between the consultant and institution respectively. The amount received from consultation is spent for further development of the research. Enough publicity is obtained for these activities through students. The college website, Prospectus, College magazine and Departmental Newsletter also used for promotion of expertise and consultation services.

3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

The college promotes teaching, research and consultancy. Many faculty members are involved in writing books, preparing course material, guiding Ph.D. Students along with their primary duties of teaching. Our institution has a distinguished faculty whose expertise in their respective fields have brought laurels not only for themselves but has also won for the institution unparalleled recognition. Our faculty members are invited to various institutions of repute for scholarly guidance and support.

The College provides space and time for the faculty for consultancy services. In order to have an undisrupted class schedule the Research Advisory Committee guides and promotes the faculty to engage in consultancy in their respective areas in the afternoon hours and holidays. 2 out of 3 parts amount given to consultant. For these assignments, college adjusts the time table of that respective teacher or many times leave is granted to fulfill that work.

3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

- Provide consultancy to Government of Maharashtra for conducting District level workshop on New Education Policy.
- Testing effectiveness of water purifier
- Soil Testing



- Biofertilizers and Biopesticides Production
- Vermi-Composting
- Computer centre

Some of the Consultancy works are intended for the weaker sections of the society and are usually done as a service.

Detail of consultancy services provided-

Department of Computer Science

- Online Exam Conducted By MKCL For Appointment of Assistant Post in MIDC Class A,B,C Recruitment 2014 on 30 November 2014
- Provide a computer centre for online Gramsevak-Assistant Examinations.
- Online filling of Examination Forms of SSC Board for Secondary School Teachers of Gondia District (7th July 2014 To, 16 July 2014)
- Registered Centre for Conducting Online Examination of Maharashtra State Board of Secondary and Higher Secondary Education, Pune in Information Technology Subject
- Workshop on E-Scholarship System of Maharashtra Government Was Organized for High Schools of Gondia District
- Training Programme For Secondary School Teachers Conducted by Department of School Education, Mantralaya, Mumbai Using A-VIEW Virtual Classroom e-Learning Software On 25 Oct.2013

Department of Microbiology

Department of Microbiology provided consultancy services to Divya Marketing for testing effectiveness of water purifier

3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

- The proposed consultant fee is shared in the ratio 2:1 between the consultant and institution respectively.
- The amount received from consultation is spent for further development of the institution.
- Facilities available in the College are given for the consultancy.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 How does the institution promote institution-neighbourhood- community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

The college encourages the faculty and students to participate in various extension programs to promote institution-neighborhood community network and inspires student engagement that contribute to good citizenship and their holistic development as well. A concrete and practical blueprint has been duly charted by the college and measures undertaken to meet the commitments professed.



The Institution promotes Institution neighborhood community network through various methods as under -

1. Academic Societies: Different Academic Societies, Cells and each department of the college organizes activities throughout the year. Some activities are now annual features of the departments and became very popular. In the organization of the function, students interaction within college and outside college, with peer group learn them how to encounter problems and negotiate them.



Superstition Eradication Programme



Village Camp on Electricity Saving

2. Village Camp: The NSS has also successfully organizing student camp to rural areas in states. Bridging the gaps through such concrete steps provide a great boost to both ends of the spectrum. While the faculty and the students are made aware of the huge gulf between and can be inspired to ameliorate the equation the participants from the rural areas are exposed to the opportunities that lie ahead for them.

3. Activities for Rural School: College has carry out motivational, skill based, scientific temperament enhancing activities for students of Government Secondary School, Higher Secondary Schools of Village-Shaharwani, Village-Murdala, and Village-Nagara. To inculcate a spirit of scientific temper in the students. Students and teachers actively participate in the interactions with rural children and our aim is to introduce a spark of scientific temperament in them. Further the academicians and students from the college can get an insight as to how to adapt their ideas and teaching to cater to the requirements and the limitations of this rural classroom.

4. Awareness Programs:



Road Safety Abhiyaan



Dengue awareness Programme



Gender Sensitization Programmes



Awareness About human rights and Duties.



Fostering Scientific Temper in Rural Mob



Environmental awareness Programme



Traffic rules awareness programme

All the above activities ensure that the students are exposed to the world around them with a realistic and a practical empathizing attitude. Their zealous engagement not only ensures that strong ties are built with the local communities around but also help them evolve into global citizens, in turn contributing to their own holistic development.

5 Donation for education of Downtrodden class:

Prof. D. G. Nalamwar faculty of our college regularly annually Rs. 5000 to Vidyarthi Sahayyak Samiti, Warora.



3.6.2 What is the Institutional mechanism to 'track students' involvement in various social movements/ activities which promote citizenship roles?

Institution measures for constant assessment of the progress and the functioning of different committee constituted for any particular purpose are ensured through a transparent mechanism to enable maximum utilization of factors involved including human resources as in the case of students' involvement.

- In the beginning of the year or semester (as it depends on the nature of work and its outcome), a coordinator for that purpose is selected/ nominated by Principal.
- The coordinator notifies the detail of the society, its purpose etc. for students on college notice board, as well as on college website and a team of students and teachers have been formed.
- Coordinator can also form a students' team for the purpose.
- The college believes in involving the students in such projects which not only makes them equal partners in these social missions but in the process also ensures that values of good citizenship are instilled in them.

The college has a number of such committees and cells which serve the need of the immediate neighborhood by motivating students. Which are

- NSS unit
- Science forum
- SC-ST cell
- NCC unit
- Equal Opportunity cell
- Student Welfare Committee

- Eco-club: It is run by the students and teachers of Biological Sciences where the student participants divided into groups of five sensitized the community around about environmental issues.



Eco-Club Inauguration

Student involvement in the programs /events organized by above units are further encouraged and recognized by awarding credits in the students Internal Assessment and certification of their efforts towards such ends. By these measures it is ensured that there is a genuine translation of classroom learning into sincere noticeable efforts aimed at the society around. Comprehensive evaluation report prepared helps in tracking the students about their involvement in social

movements.

The participation seen in the various programmes also give a concrete idea about the involvement of the students and thereby molding the student to be a good citizen.



Literacy Camp for Law



3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

Our college believes that a structured feedback system from the primary stakeholders including students forms an essential component of the development process. This exercise not only acts as an evaluative check on the courses, programs and projects conducted by the college but helps in gauging ways by which these can be improved upon or modified.

The College has parallel formal and informal feedback systems which complement each other.

- At the formal level the students are asked to give their feedback on course curriculum and teaching practices.
- Further the final year students are also required to give in their constructive suggestions and opinions on the overall experience in the college.
- In an informal manner, through engagement with the students in the course of the activities by agencies such as the departmental societies their opinion is regularly taken into account and their concerns addressed to.
- Individual teachers also often undertake the exercise of interacting with the students at their own levels to take a note of their perspective and the issues at hand.
- To add to the effectiveness of the exercise the institution has also broadened the scope of the same.
- Parents are also invited to participate in the process and enrich us with their advice. Links for feedback from parents and alumni are posted on the home page of college website.
- The alumni of the college are also made a party to it as their feedback enriched by their association with the field that they have chosen to work in, helps the college to get an insight into the current industry practices. Their suggestions with regard to the overall improvement and development plans of the college have proved to be invaluable.
- The stakeholders highly appreciate this initiative by the college and both ends of the spectrum benefit by these reciprocal gestures.

3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

College believes in bridging the gap between theoretical approaches to education and providing a firm grid whereby the same can be translated into something concretely positively for the society.

A) The Institution plans and organizes its extension and outreach activities in the following manner:

- Road map of each committee is framed at the starting of session
- Extension and outreach programmes are conducted according to road map.

B) Budgetary Details for the last four years: Provided in **ANNEXURE : 3.17**

C) Major extension and Outreach program and its impact on the-development of the students:

Numerous extension and outreach programmes are conducted. Refer **ANNEXURE:3.18**
Inculcation of the values through activities conducted throughout the year without hampering the academics helped in the holistic development of the students.



3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?

The institution promotes the participation of students and faculty in extension activities in several ways:

- Social initiatives spearheaded by with the help of various agencies.
- To ensure maximum participation notices and circulars are sent to all the Departments about the events and are also displayed on the Notice Boards across the campus.
- In the very beginning of every academic session efforts are made to make the students aware of the societies and they are asked to register themselves with same to ensure their association with these societies.
- A faculty-in-charge of coordinating the extension activities is chosen who works along with a team of dedicated teachers and student representatives.
- To encourage the initiative of the students involved and cultivate their interest suggestions are invited from them to collectively plan out activities which can be organized under the aegis of the respective societies. Seminars are organized where eminent citizens working in specialized areas are invited.
- Awareness Programmes are also organized in association with various NGOs and Govt. Bodies. Health Camps, Blood Donation Camps etc have now almost become an annual feature of the college academic calendar. Successful, dynamic and active participation is awarded in Internal Assessment marks, in attendance and by honoring the student with prize.

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

College has always tried to ensure continuous and intensive student engagement with social issues through extensive community out-reach programs. To ensure social justice and empower students from under-privileged and vulnerable section of society, the institution has duly constituted bodies such as:

- | | |
|--------------------------------------|----------------------------------|
| ■ Women's Grievances Redressal Cells | ■ National Social service Scheme |
| ■ Science Forum | ■ The Equal Opportunity Cell |
| ■ SC-ST Cell | |

These Cells work to address various social concerns of the neighbourhood around the campus. Besides this, College provides Financial Aid to the students of weaker section (economically or socially) by giving them scholarships, book bank facility including total fee concession.

Work undertaken by the College:

Sadbhavana Divas is celebrated. This celebration aims at promoting secularism and tries to inculcate the same in our students, staff, karamcharis by bringing alive to them the diversity of our nation and instilling in them tolerance towards all religions. By this, which has been a huge success,

fulfills its objectives of showcasing the secular Indian society and in inculcating practical measures by which any threat to this unique characteristic of our nation like can be avoided.

Our under-graduate students and under privileged children in an educational environment within the college premises. Such efforts not only help to bridge the socioeconomic gulf but also motivate our students to take up such social activities with zeal and enthusiasm. Further it also ensures that the benefits of the educational system which we enjoy also percolate to the grass-root level in the society.



Cleaningness Drive

Foot printing professed intentions towards the society get highlighted by these areas of study as the first works on the direct effect of polluted water bodies on the human and plant world around and the second devises practical everyday ways by which seemingly insignificant steps can add up to significantly change our attitude to the environment around and reduce the harm that we do to it. The issues taken up for the extension activities deal with the lives of the underprivileged sections of society. Also students belonging to vulnerable sections of society are involved in all the activities. Some of the initiatives in this regard are as follows:

The department of microbiology in collaboration with science forum organized outreach programme “Fostering scientific temper in young minds” on 5th January, 2015 at Vishwakarma High School, Murdara involving 50 students.

The department of Microbiology in collaboration with science forum organized outreach programme “Rain water harvesting” on 28th January, 2015 at



Out reach activity- Scientific Temper



Out reach activity- Rain Water Harvesting

Grampanchayat Hall, Shaharwani and Vishwakarma High School, Murdara involving about 50 participants (students, teachers and villagers). Dr. Asati, associate professor of civil engineering of MIET, Gondia was guest speaker on this occasion.



Event on T.B. Awareness

Rawanwadi Teachers and high school students participated in programme.

■ **Guest Lectures on anti superstition act:** On 27th December, 2014, the department organized a speech of Dr. Prakash Dhote, Associate Professor and Head of Department of chemistry from MIET, Gondia on "Anti Superstition act".



Health Camping



Demonstrating anti superstition act

■ **Health camp:** Department, in collaboration with Madhavbag, Ayurvedic Cardiac Hospital, Khopoli, Nagpur has organized cardiac care camp on 2nd August, for faculty and staff.

3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

By effectively ensuring feasible extension activities with clearly charted objectives and evaluating the actual outcome of the same science achieves two goals.

- While on the first hand it fulfills its social responsibility yet on the other hand it successfully orients the students to a lifelong sense of responsibility towards the society to which they belong.
- The exercise not only broadens the perspective of the students and their world view but also infuses values of leadership and accountability in them as the college encourages them to chart out new plans for courses of action to be undertaken.
- It inculcates in them a sense of belonging to the immediate society around and the global village at large also acquainting them with issues which may rise from local levels but transmute into something else at a larger global context. Thus these activities also inspire them to become the global citizens of tomorrow.
- The institution has been making several attempts to blend these pursuits of academics and social responsibility with student participation by encouraging active research in innovative fields which blend both the objectives at hand.

- Students are motivated to come up with suggestions which can be worked upon. Such efforts percolate to everyday practice as continuous efforts are made to make those in the campus and others in the immediate neighborhood sensitive to environmental concerns. Posters and write ups on the issue are put up across the campus.
- Further to encourage participation in such research, data was collected on the contribution of carbon of people around through a questionnaire and effective measures suggested to reduce the same. Such initiatives help to lessen the gulf between the society at large and the work in the research laboratory within the campus.
- Here in the college, we fulfill the nutritional requirements of our plants by vermicomposting of the waste generated from our own garden. We refrain from using any chemical based fertilizer. Students and staff are also sensitized and made aware of simple yet pertinent concepts like waste segregation. Different colored and duly labeled dust bins for bio degradable and non-biodegradable waste are placed appropriately in the campus.
- A green campus with a special zone of undisturbed native vegetation proves that our commitment towards the environment is not only in our words but is clearly reflected in our actions as well.
- Actively participating in such programs our students have zealously joined the Swachh Bharat Abhiyan whereby they have organized many drives to clean the adjoining area of Kudwa. Such efforts have certainly gained much appreciation from the neighborhood around and have thus been translated into meaningful exercises.

Values and Skills inculcated:

- Changing the mind set of students from Luxuries to necessities.
- Sensitivity to nature and environment.
- Less dependence on others and voluntariness for self- service.
- Importance of team work and more tolerant to each other.
- Change in lifestyle and respect for under-privileged.
- Skill for leadership and better communication skills.
- Dignity of labour
- Awareness about rural India
- Living, sharing and caring.
- Helping attitude
- Standing up to subjugation
- Spiritual development



Students in cleanliness Drive



- Personality development
- Development of problem solving skills
- Understanding social responsibility
- Using available resources for innovative solutions

3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

The institution understands that for any out-reach activity to be a success it has to have an inclusive blueprint which is sensitive to the peculiar socio-economic make-up of the community and must also have practical suggestions to ensure their active participation. These concerns act as the guiding principal whenever any such program is planned and steps are also taken to assess the response from these communities during the actual execution so that immediate measures can be taken to rise up to their expectations or avoid any misunderstanding. The challenges are great when an academic community in its capacity aspires to communicate with the society around and so along with all precautions such plans strongly advocate to ensure their involvement by envisaging tangible benefits to them. The institution ensures the involvement of community in its outreach activities and to contribute to the community development on its own with the support of various NGOs (Rotary Club), Government Institutes (Police), Parent Organization etc.

3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

The college has constructive relationship with the following for working on various outreach and extension activities in the area of cleanliness drive, literacy and health awareness:

- Andhashraddha-Nirmulan-Samiti, Gondia
- Rotary Club, Gondia
- Lions Club, Gondia
- Vishwakarma High School, Murdara
- Grampanchayat, Shaharwani.
- Brijlal Katre Highschool, Shaharwani.
- Varishtha Prathamik Shala Shaharwani
- District tuberculosis Centre, Gondia
- Varishtha Prathamik Shala Dhakani Villages
- Grampanchayat, Dhakani
- Varishtha Prathamik Shala Kudawa
- Woman's Right Commissions
- Madhavbaug, Ayurvedic Cardiac Hospital, Khopoli, Nagpur

Interaction with these institutes has culminated into a strong bond between college and various strata of the society. There is better understanding of difficulties and requirements of needy sections of the society. The college has been able to inculcate values- humanity, unity, fraternity & equality



amongst students. At the same time the recipients of the services also got to know the importance of their existence and role in the society.

3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

The college does not received award for extension activities and contributions to the social or community development during. But teaching faculty of our college awarded for their contribution in social work.

Table 3.7: Award/ felicitation of faculty

Sr. No.	Name of Faculty	Awards received
1	Dr. P.A.S. Naidu	State level SHIV-PUTRA Maharashtra Gaurav Purashkar
2	Shri. D. A. Chouhan	Samaj Bhushan Purashkar by Lahuji Salve Samaj Praodhan Manch, Nagpur
3	Dr. D. S. Choudhary	Feliciatation by Kshatriy Powar Samaj Sanghatana, Amgaon.

3.7 Collaboration

3.7.1. How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

Institutions have developed linkages with national level institutes and industries. Over a period of years these efforts have helped in:

- Student internship-training programme
- Assessment of skill component of learners especially for community college students.
- Students get an opportunity to work with industries and work on 'field work' in subjects like coal, water and fuel analysis.
- Students of food processing & engineering; software development and information and web technology get benefit from respective sector skill councils like food sector skill council and IT & ITes Sector Skill Council (NASCOM) in regard to assessment and evaluation of students under NSQF levels.

Besides this every department have collaborative research activity like research paper publication, organization of conference with research laboratories, reputed Institutes & Scientific organization. See **Annexure : 3.5** for research collaboration. Some of the research collaborations are listed below-

International Collaboration

- Department of Chemistry, FSA, Adiyaman University, Adiyaman 02040, Turkey.
- Department of Chemistry, Science College, King Saud University, Riyadh, Kingdom of Saudi Arabia.



- Department of Pharmacognosy, Faculty of Pharmacy, Umm Al-Qura University, Mecca 21955, Saudi Arabia.
- Laboratoire Chimie Matériaux, FSO, Université Mohammed 1ER, Oujda 60000, Morocco.
- Actelion Pharmaceuticals Ltd., Gewerbestrasse 16, 4123 Allschwil, Switzerland.

National Collaboration

- The Central Tuber Crops Research Institute (CTCRI), ICAR, Tirunanthapuram, Kerala, India (Botany)
- Directorate of Medicinal and Aromatic Plants Research, ICAR, Boriavi, Anand, Gujarat India (Botany)
- NEERI, Nagpur (Chemistry)

State level Collaboration

- PGTD, RTM Nagpur University, Nagpur
- Sant Gadgebaba Amravati University, Amravati.
- Institute of Science, Nagpur
- LIT, Nagpur
- Department of Chemistry, Mohsinbhai Zawari College, Wadsa (Desaiganj) (MS), India
- Department of Chemistry, Lemdeo Patil Mahavidhyalaya, Mandhal, Kuhi (MS), India
- Department of Applied Chemistry, YCCE, Nagpur

Collaboration for staff exchange/ Guest Lecture

- Adani Power Maharashtra Ltd., Tirora
- IGNOU, New Delhi
- CIIMS, Nagpur (Microbiology)
- NEERI, Nagpur (Microbiology)
- CICR, Nagpur (Microbiology)
- VNIT, Nagpur (Electronics) - Invited speaker in Conference
- Material Research Center, Coimbatore (Electronics) - Guest lecture
- NPTI Nagpur (Physics)
- CSIR Bhopal (Electronics) - Key note address in Conference
- PGTD of Chemistry, RTM Nagpur University, Nagpur

3.7.2. Provide details on the MoUs / collaborative arrangements (if any) with institutions of national importance /other universities / industries / Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

The efforts taken by the college in establishing linkages with International, national, state and local level organizations have been positively supported by the Management of the college. This has resulted in establishing of collaborative arrangements with 10 organizations and college has signed formal MoUs with five. A summary of MoUs established and their contribution in the development of college in last five years is given below.

**Table No.3.8: Showing details of collaborative arrangements / MoUs**

Sr. No.	Department	Name of Institutes / Sector Skill Councils / Industry	Contribution /nature of Linkage
1.	Computer Science, Software Development, Information & Web Technology	E-PhP Solution Pvt. Ltd., Gondia	Curriculum Design and Updation; Assessment, evaluation and certification of learners and placements.
		Lighthouse Info Systems Pvt. Ltd., Nagpur	Internship Training to the learners and providing the industry experts for lecturers and placements.
		Tata Consultancy Services (TCS)	Placement and training
		IT & ITeS sector skill council, NASCOM	Assessment and evaluation of skill education component of learners as per NSQF level
2.	Microbiology, Biotechnology, Food Processing & Engineering	G.V. Beverages L.L.P., Gondia (MS);	Curriculum Design and Updation; Assessment, evaluation and certification of learners and placements.
		S.V.K. Milk & Milk Product, Pauni, Dist: Bhandara	Internship Training to the learners and providing the industry experts for lecturers and placements.
		Agricultural Sector Skill Council (Food sector)	Assessment and evaluation of skill education component of learners
3.	Chemistry, Power Plant Chemistry	Adani Power Maharashtra Limited (APML); Tirora	Curriculum Design and Updation; Assessment & evaluation; Internship training; certification of learners; providing guest faculty and placements.
		Vidarbha Power Maharashtra Ltd. (VPML), Butibory, Nagpur	Curriculum Design; Internship Training and Placement.
		Maharashtra Enviro Power Ltd. (MEPL); Butibory, Nagpur	Placements

3.7.3. Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology/placement services etc.

The institutes have a well-established 'Industry-Institute-Community' Interaction body i. e. 'Community College'. This entity acts as a facilitator between the students from neighboring community and local industries. It also provides a platform for student-industry interaction to identify the requirements of industry, placements and varying needs of the industry.

- Community College surveys the need of local industries and identified the required curriculum as per their need.



- Developed and started different curriculum for the neighboring community students which help the students to know and understand their prospectus in various industries.
- Community College reduces the flow or migration of students from rural area to urban by providing the skill based and job oriented courses at their home place.

3.7.4. Highlighting the names of eminent scientists /participants, who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

Names of eminent scientists are provided in **ANNEXURE: 3.16**

3.7.5. How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated –

- a) Curriculum development/enrichment b) Internship/ On-the-job training c) Summer placement d) Faculty exchange and professional development e) Research f) Consultancy g) Extension h) Publication i) Student Placement j) Twinning programmes k) Introduction of new courses l) Student exchange m) Any other

College has made efforts to establish linkages MoUs with Sector Skill Councils, National Institute and industries for curriculum design, internship – training, assessment and evaluation, certification of students and academic exchange. This has resulted in establishing MoUs with industries. The parameters facilitated due to linkage of partner industry elaborated as follows:

Table No.3.9: Showing details of facilitated parameters

S. No.	Collaborative parameters	Impact on development of institution
1.	Curriculum Identification	The experience gained through interaction and feedback from academic and industry peoples helped in identifying the new emerging skill based and job oriented areas.
2.	Curriculum Development	Curriculum is designed and developed by the Board of Studies and Advisory Committee at college level which includes the representatives from respective partner industries, sector skill council, affiliating universities, state governments and local bodies.
3.	Approval of Curriculum	Curriculum is approved and authorized by the Board of Management and Advisory Committee at institute level which includes the representatives from respective partner industries, sector skill council affiliating universities, state governments and local bodies
4.	Internship Training	Students of advanced certificate course in power plant chemistry and of diploma course in information and web technology gain hands-on-experience of real life situations through internship in various organizations / industrial establishments.
5.	On-the-job training	Students of vocational courses in software development and food processing and engineering undergo on job training in industries related to respective subjects. This provides an opportunity for the students to know more about advanced laboratory techniques.



6.	Faculty induction programme	Through linkages, the industry and other institutes have helped in arranging faculty induction and academic development programme.
7.	Consultancy	The collaborations with local industries, organizations and other institutes have helped us in identifying our strengths in various areas. These are instrumental in enhancing competency and expertise in faculty and students.
8.	Extension	Associations with various industries and institutions helped in strengthening our network with the community and also fulfilling our social responsibilities.
9.	Assessment and Evaluation	By signing the MoUs with partner industries and respective sector skill councils helped us in the assessment and evaluation of skill education component of learners under community college scheme and B. Voc. programme.
10.	Certification	Respective partner industries and sector skill councils through NSDC playing leading role for the certification of students along with the college under community college scheme.
11.	Student Placement	The number of industries visiting the college for campus interviews has increased due to linkages with industries. Large number of students has benefitted in getting placement offers through On-the-job training and Internship programmes.

3.7.6. Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages / collaborations. Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.

The college organizes programmes to facilitate interactions with academicians/scientists and experts from the industry in formal as well as informal ways. Formal meetings are organized especially in case of community college scheme and B. Voc. programme. Visits are organized in tentative areas/subjects for collaborations are discussed.

- Member is nominated in Board of Studies as a representative from partner industry for effective design and development of course curriculum.
- Member is nominated in Board of Management and in Advisory Committee as a representative from partner industry for effective governance and monitoring the processing and implementations of the course.
- Inviting the industry representatives as a speaker in national conference/ seminars/workshops etc.
- Membership of industry representatives in IQAC.



Self Study Report

CRITERION- IV INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 What is the policy of the institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

Policy of the institution for creation and enhancement of infrastructure:

- LMC collects the information from major stakeholders for enhancement/ creations.
- LMC prioritizes enhancements as per the budgetary provisions.
- Principal as an ex-officio member takes the financial node from the Governing Council of Gondia Education Society.
- The policy of the college is to enhance the existing infrastructure and add new amenities to facilitate effective teaching and learning, which are - digital class rooms, well equipped computer laboratories, renovation of auditorium, establishment of rest rooms, guest room, canteen, research instruments, health center, girls' common room etc.

4.1.2 Detail the facilities available for : a) Curricular and Co-Curricular activities- classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, Specialized facilities and equipment for teaching, learning & research etc.

The college has provided the best possible infrastructural facilities to promote curricular and co curricular facilities as well as academic excellence among the students.

Classrooms : Well-furnished digital classrooms with centralized public address system ;

IT Laboratory cum SES processing unit :

To provide technology assistance to the college in terms of student data collection, communication between college and student (through email, message), feedback, alerts etc ;

Computer laboratory: Ultra-modern laboratory with Internet and Licensed Software. Secured Wi-Fi campus ;

Seminar Hall : Two seminar halls with global ambience having capacity of accommodating 100 and 500 people ;

Laboratory : Each department is having well-equippe laboratories and presentation room ;

Botanical garden : Eco friendly lawn and garden with bore well recharging water harvesting unit ;

Digital learning Center; Skill Development Center : B. Voc. and Community College ; **Research presentation center ; Examination control room ; IGNOU Study Center** etc.

The details of the physical infrastructural facilities available with the Institution for Curricular and Co-curricular Activities are provided in **ANNEXURE : 4.1**



Ultra modern Infrastructure with Global Ambience



■ **Specialized facilities for teaching:**

- ICT enabled class-rooms.
- Digital learning center (centralized e-resource facility) for students & staff
- Secured Wi-fi enabled campus
- DLP
- SPONTANIA
- Institutional Digital repository

The major equipment for learning and research are depicted in **ANNEXURE : 4.2**



Equipped Laboratories

b) Extra-curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, public speaking, communication skills development, yoga, health and hygiene etc.

The Physical infrastructure available for Extra-curricular Activities is given in **ANNEXURE: 4.3**

Facilities for other supporting activities is summarised below -

Public Speaking :

- Centralized public address system connected in each class room for general address and national anthem twice in a day.
- Low capacity Portable Public Address system for addressing at the counters.
- High gain Public Address system for institutional mega events.

Health and Hygiene:

- A Health-center which is fully equipped to take care of students and staff of the college.
- Hygienic food is made available in the college canteen, and purified drinking water facility is provided for the benefit of students and staff members.
- On call visiting physician.
- Tie-up with 'AYUSHYA Critical Care'
- Lavatories for students and are maintained with continuous water supply and good sanitary conditions.
- On call Ambulance Services.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / Campus and indicate the existing physical infrastructure and the future planned expansions if any)

The academic growth and optimum utilization of available infrastructure is ensured by following ways -

- The available Physical infrastructure (class rooms as well as laboratory) are used for UG and PG
- Further, the institution or institute procures the essential infrastructural mechanism for curricular, co curricular and extra-curricular activities in the college.



- There is proper co-ordination and communication among the LMC members, principal, IQAC and Building Committee in order to distend the infrastructural facilities as per the needs from time to time.
 - The available infrastructural resource are skillfully and optimally utilized for UG and PG departments as well as vocational/remedial coaching classes.
 - The Time-table Committee looks after the distribution of class-rooms and classes.
 - Further, the infrastructure is also made available for various purposes like IGNOU Study Center, Community college, B. Voc. etc.
 - The physical amenities of institution are consistently used for organizing taluka / district level sports, exhibitions and various healthy practices organized by NGOs.
 - Having proliferate science faculty has led to a number of laboratory development in the institution. There are independent and well-resourced labs for Physics, Chemistry, Botany, Zoology, Computer Science and Microbiology and Biotechnology.
 - Further, these labs are supported with Internet facility. Recently, the institution has installed a separate research laboratory for Chemistry, Physics and Botany department to nurture the research aptitude in the faculty and students.
 - The institution also boasts of infrastructure that includes college canteen, Dhote Bandhu Science College Credit Cooperative Society, Gondia and Guest room.
- In last four years Class Rooms, Corridor, Computer Laboratory, Auditorium, Girl's Common Room etc. are augmented. Other facilities developed and amount spent is tabulated below-

Table No. 4.1: Facilities developed/augmented (during last four years)

Year	Audio Visual Aids	Library Books & Periodicals	Sports Facility	Lab Equipment & up gradation	Total
2011-12	8865.00	79287.00	40332.00	391535.00	520019.00
2012-13	7900.00	126201.00	37870.00	215341.00	387312.00
2013-14	5240.00	133377.00	94034.00	100874.00	333525.00
2014-15	5760.00	105099.00	34000.00	278954.00	423813.00
2015-16	4360.00	62244.00	56200.00	162745.00	285549.00
Total	32125.00	506208.00	262436.00	1149449.00	1950218.00

(The Master Plan of the Institution is enclosed: See **ANNEXURE : 4.4**)

Future expansion:

- New construction of Digitized Library.
- Augmentation of Physics, Botany, Zoology and Electronics laboratories.
- Centralized Sophisticated Research Laboratory.

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

The institution takes utmost care of physically challenged students:-



- During the enrollment of physically disabled students, their classes are arranged in first room of the ground floor.
- A reading section is allotted at the ground floor in the library.

4.1.5 Give Details on the residential facility and various provisions available within them:

Gondia Education Society has centralized hostel facility for Female Students.

Hostel Facility	YES
Accommodation available	YES
Recreational facilities	YES
Computer facility including access to internet in hostel	YES
Facilities for medical emergencies	YES
Library facility in the hostels	YES
Internet and Wi-Fi facility	YES
Recreational facility-common room with audio-visual equipment's	YES
Available residential facility for the staff and occupancy	YES
Constant supply of safe drinking water	YES
Security	YES

- A Government hostel for students from backward end of society.

4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

- Hygienic food is made available in the college canteen.
- Purified drinking water (with RO facility).
- Yoga training for student and staff.
- Periodic Medical checkup camps.
- Health and nutrition awareness camps.
- First-aid box and sanitary napkin, vending machine is available in women's cell.
- Hemoglobin checkup for female students for identification of anemic students.
- The following health awareness programs are conducted by the Department of Microbiology:-
 - Measures of eradication of Dengue.
 - Lectures on emerging trends in AIDS.
 - Joint celebration of World Tuberculosis day.



- Guest lecture on Female Foeticide by the eminent radiologist.
- Guest lecture on importance of Nutrition and Health.
- Health checkup by Gynecologist.
- Guidance on Schizophrenia.

■ Stress management program for staff and students.

■ On call Ambulance Services.

4.1.7 Give details of the Common Facilities available on the Campus Spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

The college has separate spaces for various activities on the campus. There is also a girls' Common Room, which has been renovated recently. Spaces are available for units like IQAC, Grievance Redressal unit, Women's Cell, Counseling and Career Guidance and Placement Unit.

The details are as follows-

Table No. 4.2: Facilities and details

S. N.	Facilities	Details
1.	Internal Quality Assurance Cell	A separate office for IQAC which has basic furniture such as cupboards, conference table, computer tables, chairs and book case. ICT facilities include 01 computer with net connectivity, 01 laptop, 01 printer.
2.	Women's Cell	First-aid box in women cell and sanitary napkin vending machine
3.	Counseling, Career Guidance and Placement Unit	Office has basic furniture such as cupboards, conference tables, computer tables, chairs and book cases. ICT facilities include 01 computer with net connectivity, 01 laptop, 01 printer.
4.	Health Centre	First aid kit, Bed, Stretcher, and related equipment
5.	Canteen	A canteen to provide hygienic food.
6.	Safe drinking water facility	The institution has installed water purifier (with RO water facility) for students
7.	Auditorium and Recreational Spaces	The institution has a well-built auditorium of area 180 sq.mt. which is accessible for various college activities and social activities. As well as cultural program, exhibitions, open forums and student related activities.
8.	NCC	The college has a NCC office provided with tables, chairs and notice board are provided.
9.	NSS	There is a separate space for NSS unit, which is provided with tables, chairs and notice boards.
10.	Guest Room	Well-furnished guest room for visiting guest with all facilities.
11.	Rest Room	Well-furnished rest room.



4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a Committee. What significant initiatives have been implemented by the committee to Render the library, student/ user friendly?

Yes, the college has a Library Advisory Committee it is constituted as under:

- Shri. S. P. Timande - Chairman
- Shri. R. K. Dhuware - Member
- Shri. P. M. Walde - Member Secretary

The college Library, a "Knowledge Centre" for accessibility, has been developed on modern lines as a prominent 'Learning Resource Centre', and follows the first law of Library Science - "Books are for use".

The significant initiatives implemented to render the library, student/user friendly services are as under:

Initiatives	Outcomes
<ul style="list-style-type: none">■ To guide in formulating general library policies and regulation for the efficient utilization the concerned resources.■ To provide proper documentation services, update the library collection, work towards Modernization and improvement.■ To submit the action plan and annual report on the functioning of the library.■ To ensure updating of the library.■ To make sincere efforts to mobilize resources from philanthropists■ To adopt measures to enhance readership.■ To seek feedback on library functions from end users.	<ul style="list-style-type: none">■ Bar coding of library books and user data for easy and quick transactions.■ Reprographic facilities.■ CD and DVD section.■ Book Exhibitions.■ Departmental library.■ Book Bank Scheme.■ INFLIBNET N-LIST Program■ Establishment of Centrallised e-resource Facility (Digital Learning Centre).■ Best Library User Award.■ Institutional Repository.

4.2.2 Provide details of the following:

- Total area of the library (in Sq. Mts.) – 248.22 Sq. Mtr.
- Total seating capacity – 45
- Working hours :
(On working days, on holidays, before examination days, during examination days, during vacation)



Library Reading Room : 7.30 am to 3.00 pm

Library : 10.00 am to 5.30 pm

- Layout of the library (individual reading carrels, lounge area for browsing, relaxed reading and accessing-resources). The area in sq. mtr for different unit of library is given below -

Library Hall	7.30x18.90	137.97
Issue Counter	2.60x5.40	14.04
Open Space (Opac Area)	2.60x3.00	7.80
IT Zone	2.60x6.20	16.12
Reading Room	8.30x8.70	72.21

- An open space for the students in front of the Circulation Counter with a Computer for OPAC.
- Notice Boards to display new book arrival and other information regarding course and career.

4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals & e-resources during the last four years.

The library follows the methods for purchasing new titles or journals.

- Faculty members send recommendation based on current syllabus & latest catalogs for purchasing of books.
- Teachers visit Book Exhibition to select required books.
- The staff is requested to give the list of journals of both print and electronic versions for subscription.
- Library registers the college for N-LIST Program (INFLIBNET Centre, Ahmedabad).
- Subscribed for membership of Online British Council Library for access of digital content.
- Library has subscribed 21 journals, 25 daily Newspapers and 26 periodical: Enlisted in

ANNEXTURE : 4.5, ANNEXTURE : 4.6 and ANNEXTURE : 4.7 respectively.

The amount spent on procuring new books, journals & e-resources during last four years is tabulated below—

Table. No. 4.3 : Amount spent on procuring new books, journals & e-resources

Library Holdings	2011-12		2012-13		2013-14		2014-15		2015-16	
	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost
Ref. Text & Books	1422	610593	1722	432453	1183	401834	456	187168		
Journals	34	39275	23	33050	22	30200	22	35600		
e-resource	N-LIST	5000	N-LIST	5000	N-LIST	5000	N-LIST	5700	N-LIST	5700
British online library										11000



- Layout of the library (individual reading carrels, lounge area for browsing, relaxed reading and accessing e-resources).

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

The library is provided with direct access to e-journals and e-books under N-LIST programme of UGC-INFONET digital library consortium. Every faculty is given a Login ID to access the N-LIST e-resources. To access library collection following ICT and other tools are deployed.

Table. No. 4.4: Details on the ICT and other tools to access library collection

OPAC	Yes, students login OPAC
Electronic Resource management Package for e-journals	more than 6000+ e-journals & 97000+ e-books are available in N-LIST programme
Federated searching tools to search articles in multiple data bases	YES
Library website	Library use the college website www.dbscience.org
In-house/	Available through N-LIST INFLIBNET
Library Automation	ShikshanKranti Library Software Developed by AMYO Technology, Aurangabad.
Total number of computers for public access	11
Total numbers of printers/Photocopier for public access	02 (Xerox) ; 01 Printer
Internet band width/speed	2 mbps (Leased Line)
Institutional Repository	Yes
Content management system for e-learning	Yes
Participation	Access through INFLIBNET's N-LIST program, NKN, National Programme on Technology Enhanced Learning (NPTEL), NME-ICT, open educational resources like MIT courseware, doaj.org , British online Library

4.2.5 Provide details on the following items :

- Average number of walk-ins - 106
- Average number of books issued/returned - 95
- Ratio of library books to students enrolled - 18 : 1
- Average number of books added during last three years - 3361



- Average number of login to OPAC - 40
- Average number of login to e-resources - 25
- Average number of e-resources downloaded/printed - 15
- Number of information literacy trainings organized - Orientation lecture for newly admitted students the beginning of every academic session.
- Details of “weeding out” of books and other materials - Listing of books of old syllabi/torn books etc. approved by concerned faculty, department and Library Advisory Committee are discarded.

4.2.6 Give details of the specialized services provided by the library :

Reference

The Reference queries of the reader and faculty including the research students are effectively handled by the library staff. The library has a separate Reference Section (Reading Room) with collection of Journals, Magazines, Dictionaries, Directories, Encyclopedias, Thesaurus and Year Books. The specialized services provided by library are depicted below-

Table No. 4. 5: specialized services in library

Reprography	<ul style="list-style-type: none"> ■ Reprography service (Photo copy) is provided by the library. ■ 02 Reprographic Machines
IIL (Inter Library Loan Service)	<ul style="list-style-type: none"> ■ When some books are not available in the library, the library staff procures from other libraries through inter-library loan and issues to the borrowers.
Information deployment and notification	<ul style="list-style-type: none"> ■ The notifications and the information about job opportunities, Higher Education admission, professional education, institute admission, entrance/competitive examinations and the notifications current issues are communicated to the students through the notice boards located at the library.
Download	<ul style="list-style-type: none"> ■ YES, through ‘Centralized e-resource Facility’
Printing	<ul style="list-style-type: none"> ■ The staff and students are allowed to print required copies for their study and research purpose.
Reading list/ Bibliography compilation	<ul style="list-style-type: none"> ■ Card-catalogue system for compiling the reading list / bibliography. ■ OPAC for compiling reading list/bibliography.
In-house / remote access to e-resources	<ul style="list-style-type: none"> ■ Access to institutional repository ■ ‘Centralized e-resource Facility’ for students
User Orientation and awareness	<ul style="list-style-type: none"> ■ The user orientation and awareness was given to students in the beginning of the every academic session through Introduction program



Assistance in searching Database	■ The Library staff assists the faculty and students in effectively accessing the e-resources. (OPAC)
INFLIBNET / IUC facilities	■ Library subscribes to INFLIBNET's N-LIST programme. Under this, more than 6000+ e-journals and more than 97,000+ e-books are available for the teaching faculty who makes the best of these e-resources.

4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

The following are details of support services provided by the Library staff to students and teachers of the college:

- Circulation of daily newspapers for the Principal cabin and students at the reading room.
- Books transaction with Bar code Scanner.
- The library displays the new books in a "New Arrivals", along with the book-list of subject-wise new editions. Library sends e-mails about new arrivals to the faculty.
- Online Public Access Catalogue (OPAC).
- The Library has specified the areas for effective learning and knowledge building process like area for browsing, reading & accessing e-resources for students and teachers.
- Provide special mobile library service to the physically challenged students through the concept of "Library at your Doorsteps"
- Communicate promptly to the staff about new arrivals.
- Reprography facility is available in the Library.
- A Suggestion Box is kept at the Library.
- Library provides Book Bank Scheme.
- For better access of the books, an open access facility is provided to students and staff members.
- Post graduate students are issued extra books, reference books for home reading and journals for research.
- The library provides required books in the reference section for the students who are preparing for competitive examinations.
- Multimedia Library offers DVD/CD ROM screening facility to staff and students. It contains computers equipped with headphones and collection on various topics.
- When some books are not available in the library, the library staff procures from other libraries through inter-library loan and issues such books to the borrowers.

4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

The following are the special facilities offered by the library to the visually/physically challenged persons:

- Library located on ground floor for easy accessibility.



- Availability of the Mobile Library Service for physically challenged students.
- Supervision and assistance to the Physically challenged students by library staff in searching and issuance of demanded book.

4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?

Yes, library gets feedback from staff and students. The feedback committee and Library Advisory Committee analyses the feedback and identify scope for improvement and proactive steps are taken accordingly. Suggestions are also obtained through the Suggestion Box and such suggestions are checked periodically, and appropriate remedial actions are taken.

Some of the suggestions that were already implemented include:

- Extending online access of literature through N-LIST-INFLIBNET, OPAC facility.
- Establishment of 'Centralised e-resource Facility', Repository, etc.

4.3 IT Infrastructure

4.3.1 Give details on the computing facility available (hardware and software) at the institution.

Table No. 4.6: Details of computing facility available

Number of computers with Configuration (provide actual number with exact configuration of each available system)	149 (The configuration is provided below)
Computer student ratio	1:10
LAN facility	YES
Wi-fi Facility	YES
Licensed Software	<ul style="list-style-type: none"> ■ Server Elisions windows 2012 ■ CAL Package ■ Quick Heal Admin Console End point security total ■ Quick Heal Antivirus Total Security 10 user ■ Windows 7 starter + upgrade license ■ MS-office 2010 paper linkage academic ■ Media CD ■ MS-Visual studio pro 2010 paper license ■ C compiler RAD studio XL ■ Windows 8 preloaded OS ■ Paper license windows 8.1 OS ■ Windows XP Pro



	<ul style="list-style-type: none">- Windows Svr 2003- Windows Svr Cal 2003- Windows SL 8- Microsoft Office Pro 2003- ShikshanKranti
Number of nodes/ computers with Internet facility	149

Number of nodes/ computers with Internet facility

Total number of computers-Server : 03

Desktop computer : 141

Laptops : 05

	Number	Configuration	Other facilities
Principal Office	04	a) Apple mac OS, all in one desktop PC b) Intel core 2 duo, RAM 2 GB, HDD 500GB c) Intel core 2 duo 2.93 GHz, RAM 2GB, HDD 300GB d) Intel core 2 duo 2.93GHz, RAM 2GB, HDD 500GB	Print/scan/photocopy 02 Laser jet printer 02 Internet connectivity in 04 computer
Supervisor Office	02 Desktop Computer	<u>Two computer with</u> Intel core 2 Duo 2.93GHZ, RAM 2GB, HDD 300GB	Printer 01 Laser Jet printer 01 Fax/Scanner 01 Internet connectivity in 02 computer
Office/Administration	02 Server 09 Desktop Computer	<u>First server</u> ShikshanKranti Intel core 2 duo 2.93 GHz, RAM 2GB, HDD 760GB, <u>Second server</u> CMS server Intel core 2 duo, RAM 2GB, 300GB <u>Details of computer system</u> a) Intel Pentium dual 1.80 GHz, RAM 1GB, HDD 250GB	LaserJet printer 09 Scanner 01 Internet connectivity in 09 computer



		<p>b) Intel core 2 Duo 2.5 GHZ, RAM 1GB, HDD 200 GB</p> <p>c) Intel core 2 duo 2.95 GHz, RAM 2GB, HDD 300 GB</p> <p>d) Intel Pentium duo 1.80 GHz, RAM 1GB, HDD 250GB</p> <p>e) Intel core 2 duo 2.93 GHz, RAM 1GB, HDD 500 GB</p> <p>f) Intel Pentium core 2 duo 2.63GHz, RAM 1GB, HDD 80GB</p> <p>g) Intel core 2 duo 2.93 GHz, RAM 2GB, HDD 300GB</p> <p><u>Two computer with</u> Intel 2 duo 2.53 GHz, RAM 1GB, HDD 250GB</p>	
Central Library (Network Resource Centre 1)	04 Desktop Computer	<p><u>Four computers with</u> Intel core 2 duo 2.53 GHz, RAM 1GB, HDD 500 GB</p>	LaserJet Colour printer 01, Bar code Scanner 01, Bar code Printing machine 01, Photocopier 02, LCD Projector 02, LCD monitor 04, Internet connectivity in 03 computers
Computer Science	01 Server 80 Desktop Computer 05 Laptop	<p><u>Server</u> Intel Xeon server, RAM 8GB, HDD 1 TB, windows 12 OS <u>Eighty HP computers with</u> Intel core i3 processor, RAM 4GB, HDD 500GB</p> <p><u>Five Dell Laptop with</u> Intel core i3 4th gen, RAM 4GB, HDD 500GB</p>	LaserJet Printer 03, Scanner 02, LCD Projector 03, Internet connectivity to each computer Ahuja Amplifier 120 W- 01 Ahuja Speaker- 04 Liberty motorised screen with remote control- 01 Studio master cordless mike with receiver- 01 Multiple VGA switches- 01 Web cam i-ball- 02 Head phone- 02 Bluetooth device- 01 Ahuja Cordless Hand mike- 01



Centralize Computer Centre	02 Desktop Computer	Two computer with Intel core 2 duo 2.93 GHz, RAM 1GB, HDD	Colour Printer- 01 Laser Jet Printer- 01 Scanner- 01
B. Voc. / Community College office	01 Desktop Computer	Intel core i3 3.5GHz, RAM 5 GB, HDD 500GB	LaserJet printer-01 Scanner - 01 Digital Camera - 01 Internet connectivity in 01 computer
IQAC/Placement Cell	02 Desktop Computer	Two computer with Intel core i3 3.5GHz, RAM 4GB, HDD 500 GB	LaserJet printer- 01 Scanner- 01 Internet connectivity in 01 computer
Other Departments :37.....			
Botany	02 Desktop Computer	a) Intel core 2 Duo, 2.93 GHz, RAM 2GB,HDD 300 GB. b) Intel Pentium 4, RAM 500 MB, HDD 4 GB	a) Intel core 2 Duo, 2.93 GHz, RAM 2GB,HDD 300 GB. b) Intel Pentium 4, RAM 500 MB, HDD 4 GB
Chemistry	04 Desktop Computer	Three computer with Intel core 2 Duo 2.9GHz , RAM 2 GB, HDD 160 GB One computer with Intel core i5, RAM 6GB, HDD 750 GB	LaserJet printer-01 LaserJet – Fax, Scan Printer-01 Internet connectivity in 01 computers
Electronics	06 Desktop Computer	a) Intel Pentium 2 Core, RAM 2GB, HDD300 GB b) Intel Pentium 4 1.9 GHz, RAM 1GB, HDD 120 GB c) Intel Pentium core 2.5GHz, RAM 1GB, HDD 40 GB. d) Intel core 2 Duo 2.0 GHz, RAM 1GB, HDD 150 GB Two computer with Intel Pentium 4 CPU 1.9 GHz, RAM 1GB, HDD 40 GB.	LaserJet printer-01 Dot Matrix-01 Internet connectivity in 06 computers
Microbiology	05 Desktop Computer	Five computer with Intel Pentium dual 1.80 GHz, RAM1 GB, HDD 250 GB	LaserJet printer- 01 Camera-01 Projector- 01 Internet connectivity in 01 computers



Physics	01 Desktop Computer	Intel core 2 duo 2.93GHz, RAM 2GB, HDD 250 GB	LaserJet printer- 01 Projector- 01 Internet connectivity in 01 computers
Zoology	01 Desktop Computer	Intel core 2 duo, RAM 2 GB, HDD 300 GB	LaserJet printer- 01 Internet connectivity in 01 computers
IT Laboratory	18 Desktop Computer	Eighteen computers with Intel core 2 duo 2.93 GHz, RAM 2GB, HDD 320GB	Laser Jet printer- 01 Internet connectivity in 18 computer
TOTAL	149		

4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus.

- The Licensed software used by the institution is in SAP with different modules for Accounts, Attendance, Admission, Examination etc. The operating systems Windows XP, Office, Word, Power point are all licensed and genuine.
- All computers are in LAN and are equipped with internet facilities.
- Each department is provided with a computers and internet connection for the use of faculty and students.
- The Library is well equipped with computers for the use of library staff, College faculty and the students.
- Vodafone and Reliance Internet Service are provided with router for Wi Fi connection.
- To meet the UGC recommendations regarding ICT enabled learning smart board has been installed in each one of the classrooms.

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

- The Institution conducts a need based analysis taking into consideration the requirements of the curriculum, administration and inputs from the stake holders while deploying and upgrading IT Infrastructure and associated facilities.
- To ensure a glitch-free functioning of all equipment, the IT department is set up by the management with a team of engineers to look into the hardware and software issues.

4.3.4 Provide details on the provision made in the annual budget for procurement, up-gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)



Table No. 4.7: Annual Budget for computers and their accessories

Sr. No.	Maintenance Particulars	2015-16	2014-15	2013-14	2012-13
1	Budget in Rupees (20% of total fees)	608624.00	507670.40	487222.00	395647.00
2	Procurement	406233.00	0.00	435281.00	237705.00
3	Upgradation	0.00	0.00	0.00	0.00
4	Deployment	0.00	0.00	0.00	0.00
5		254404.00	156086.00	261559.00	190345.00
	Total	660637.00	156086.00	696840.00	428050.00

4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/learning materials by its staff and students?

- Institutional processes are enriched with ERP, MIS, INTRANET and done through specialized software (like ShikshanKranti).
- All the departments are networked through LAN and Wi-Fi facility.
- The staff members make extensive use of ICT in teaching-learning process.
- In house developed MISS package for :
 - Admission process
 - Student's attendance check
 - Periodic assessment
 - Lecture monitoring system
- The Institution has made a provision of ICT in all classrooms, auditorium, seminar halls, and in the administrative wing of the college.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching-earning resources, independent learning, ICT enabled classrooms/ learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

- The institute has started utilizing ICT teaching and learning devices, and is trying its best to deploy it as widely as possible.
- Keeping the students' learning at the centre of everything, the college ensures that the teachers are trained in ICT from time to time. Faculty Development Programs, Computer Department & in-house experts are done to train the staff in uses of ICT enabled teaching, projector, computers and audio-visual facilities.
- Most of the departments are equipped with computers, internet, etc. They are encouraged to make use of the same in teaching learning process. Teachers use library and internet facilities to supplement their teaching.



4.3.7 Does the institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

The process for getting NKN connectivity is in process.

4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

Allocation of Budget: the Governing Body of the Institution decides the final allocation of budget for maintenance and upkeep of campus facilities. Also, the college 'Purchase Committee' look after the demand for purchases of some sorts (self financing and grants received from various agencies) of materials required under maintenance and upkeep within college campus. The detailed budget allocated for the maintenance of campus facility is given below.

Table No. 4.8: Annual Allocation of the Budget for the Upkeep and Maintenance of the Institution (Amount in Rupees)

Sr. No.	Head of Expenditure	2015-16	2014-15	2013-14	2012-13
	Total Amount allocated	5032090.00	4234262.00	4028620.00	2849710.00
1	Building	251604.50	211713.10	201431.00	142485.50
2	Furniture	251604.50	211713.10	201431.00	142485.50
3	Equipment	754813.50	635139.30	604293.00	427456.50
4	Computers	654171.70	550454.06	523720.60	370462.30
5	Botanical Garden	251604.50	211713.10	201431.00	142485.50
6	Water	251604.50	211713.10	201431.00	142485.50
7	Electricity	503209.00	423426.20	402862.00	284971.00
8	Any Other	251604.50	211713.10	201431.00	142485.50
	Total	3170216.70	2667585.06	2538030.60	1795317.30

Table No. 4.9 : Year wise Expenditure for the Upkeep and Maintenance of the Institution (Amount in Rupees)

Sr. No.	Head of Expenditure	2015-16	2014-15	2013-14	2012-13
	Annual Allocation	3170216.70	2667585.06	2538030.60	1795317.30
1	Building	904595.00	900036.00	1771235.00	2997832.00
2	Furniture	135858.00	34967.00	0.00	131852.00
3	Equipment	1183720.00	518831.00	783670.00	617422.00



4	Computers	406233.00	0.00	435281.00	237705.00
5	Botanical Garden	41183.00	183744.00	77456.00	252749.00
6	Water	33870.00	32547.00	15320.00	15250.00
7	Electricity	492508.00	458400.00	462890.00	466990.00
8	Electrical Repair	112661.00	19836.00	189413.00	153374.00
9	Any Other	17115.00	4520.00	18682.00	8473.00
Total		3327743.00	2152881.00	3753947.00	4881647.00

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

- The college has appointed persons on a daily wage basis for cleanliness and upkeep of the in house building and grounds.
- The upkeep of the physical infrastructure and equipment is done by out-sourcing contracts on required basis.
- The maintenance of electrical items is voluntarily carried out by competent non-teaching staff of the respective departments. Any major repair work is carried out by professionals from outside the college.
- Other maintenance and repairs are carried out as per the requirement.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?

The staff of the respective departments take due care of the instruments and equipment. Some instruments require calibration, which is done by the competent staff and assistance from outside experts is taken, if required.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

- Most of the equipment are provided with built-in voltage stabilizers. In some cases, voltage stabilizers are procured.
- Laboratories and Instrumentation Center are served with constant water supply.
- The college and various departments have a generator back-up. A few of the equipment have an inverter back-up.

CRITERION - V STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, the college publishes its prospectus and college magazine as well annually.

Prospectus:

The updated college prospectus is provided to students at the time of admission. This provides the following information to the students-

- Our source of inspiration
- Presidents message
- Vision and Mission of the college
- Principal's message
- List of LMC members
- College profile
- Courses offered
- Admission procedure
- Readmission
- Refusal of admission
- Documents required
- Special Cell
- Placement and Career Guidance
- Anti-ragging Cell
- Cell against Sexual Harassment & Gender Violation
- SC, ST, OBC and minority cell & Uniform and disciplinary cell
- RTI Cell
- IGNOU Cell
- Academic Session
- College Uniform
- Attendance requirement
- Library and reading room
- College office working hours
- Medium of instruction
- Medical examination
- Code of Conduct for Students
- Evaluation



College Prospectus with complete information



College Magazine "Udaan"



- Disciplinary Rules
- Students' Council
- Other programmes like NSS, ACEES, NCC, Sports
- Fees structure for UG
- School of PG Courses offered
- Salient features and fees structure for PG
- Center of Higher Learning and Research
- Member of Teaching Staff
- Administrative Staff
- Moments of Glory (photographs)
- Contact

College Magazine

1. The college magazine “**UDDAN**” is published by the institution and contains the following:
 - Educational and curricular activities
 - Special achievements in the field of academic, cultural, extension and sport activities
 - Social and Science base articles by students, Jokes, Science based short stories, Gazals, Poems, Shayari.
2. College published “**Jagar Janiwacha**” containing
 - Women empowerment programmes
 - Information related to the programmes organized under the head of “Jagar Janiwacha”

Commitment and Accountability

The college is always aware of its commitment, responsibility and accountability towards -

- All its stakeholders, especially Parents Teacher Alumini in which suggestions are incorporated from time to time for academic and curriculum development.
 - Collection of feedback from the stakeholders and timely evaluation process in which areas for improvement are identified and positive action is taken to achieve the objectives.
 - Scholarship concessions are available from time to time, according to the rules and regulations.
 - Monitoring and maintenance of the facilities provide to the students
 - Ensuring Rail and Bus concession are made available to outstation students.
- 5.1.2 Specify the type, number and amount of institutional scholarships / freeships given to the students during the last four years and whether the financial aid was available and disbursed on time?**
- No fees for SC/ST/NT/VJ/OBC as per Government of Maharashtra rules for UG and PG
 - As and when the scholarships are received from the Government, they are immediately distributed to the deserving and pertinent students. The scholarship details provided for SC/ST, OBC and Minority and other scholarship are listed below –

**Table No. 5.1: Scholarship Details**

Sr. No.	Name of Scholarship / Concession	Class	Eligibility / Remark
1.	GOI & Freeship Scholarship	B.Sc. BCA & M.Sc	SC, ST, OBC, VJ, NT & SBC
2.	PTC & STC	Degree	Ward of Primary Teachers
3.	Scholarship for Excellent students in Mathematics and Physics	B.Sc. I	1. Those who secured more than 60% in HSSC Exam 2. Those who obtained Physics & Math Subject
4.	Open Merit Scholarship	B.Sc. I & BCA I	1. Those who doesn't apply for any other Scholarship 2. More than 50% Marks in XII Class
5.	Scholarship for backward class students who are poor in financial condition	E.B.C.	Income below 100000/-
6.	Scholarship for Hindi and non Hindi students	B.Sc. I & BCA I	1. No Hindi mother tongue 2. Secure more than 60% marks or secure more than 65% marks in Hindi 3. Hindi subject is must in appeared class
7.	Minority Scholarship For Muslim / Sikh / Christian / Parsi / Bouddha	B.Sc. BCA	
8.	Eklavya Scholarship	M. Sc. I	1. More than 70% Marks in Graduation 2. Resident of Maharashtra 3. Income below 75000/-
9.	Bidi Scholarship	Any Regular Student's	1. Who does not apply for GOI 2. Whose Guardian is Bidi workers
10.	Research dakshina Scholarship	RTMNU	
11.	N.B. Paranjape Sch./ Morris Memorial Scholarship	M.Sc. I	Residence of Vidharbha
12.	Dhirubhai Ambani Undergraduate Scholar.	Under Graduate	Above 70% Marks
13.	Chief Minister Scholarship	Whole College	For NCC student
14.	Sitaram Jindal Foundation Scholarship	Whole College	More than 60% marks (BPL Card Holder)



15.	Thakur Charitable Endowment Memorial Scholarship		B.Sc. II & B.C.A. II
16.	DST Inspire Scholarship	Under Graduate	B. Sc. I Above 80 % marks in XII th Sci. (Eligibility Notes Cert.)
17.	General Students Scholarship	Under Graduate	
18.	SBI / Reserve Bank Scholarship	Under Graduate	
19.	Manoharbai Scholarship	Economically weaker students	
20.	Life Insurance Scholarship	Under	

The scholarship disbursed is tabulated as below-

Table No. 5.2 : Scholarship disbursed

S. No	Scholarship	2011-12		2012-13		2013-14		2014-15		2015-2016	
		No. of Benefices	Amount disbursed	No. of Benefices	Amount disbursed	No. of Benefices	Amount disbursed	No. of Benefices	Amount disbursed	No. of Benefices	Amount disbursed
1.	SC	147	83,1724	114	835366	65	586980	100	838023	136	In process
2.	ST	14	123043	24	194465	18	136882	28	166943	23	In process
3.	OBC	409	2590017	388	2509557	409	2960415	511	3999585	640	In process
4.	Minority	3	8818	2	5300	3	8225	00	00	07	In process
5.	EBC	21	3570	20	3400	26	4420	25	4250	17	In process
6.	M.P. Sch	1	19901	1	3030	2	10420	2	6140	02	In process

Details of Scholarships :

G.O.I. Scholarship

All Backward class students and the student figuring in the lower income group should apply for Govt. of India Scholarship in the prescribed form through their respective college in the month of June only.

The application form will be made available to such students at the time of their admission. All the students should be vigilant enough to fill in the form complete in all respects, as any omission or incorrect / false information may disqualify them for the above Scholarships. The students having gap(s) in their education should invariably file a court affidavit declaring what they were doing during the intervening period.



The students who were in receipt of Govt. of India Scholarship last year and have passed the annual examination are required to fill no application form. Their cases will be submitted to the Director of Social Welfare by the college for renewal of scholarship. The student of B. Sc. Sem I & M.Sc. Sem I are treated as fresh candidates for purpose of scholarship, and as such they are required to apply for scholarship in the prescribed form.

Kinds of Scholarships -

- National Scholarship
- National Loan Scholarship
- Merit Scholarship to the children of primary and secondary school teacher.

Other Scholarship -

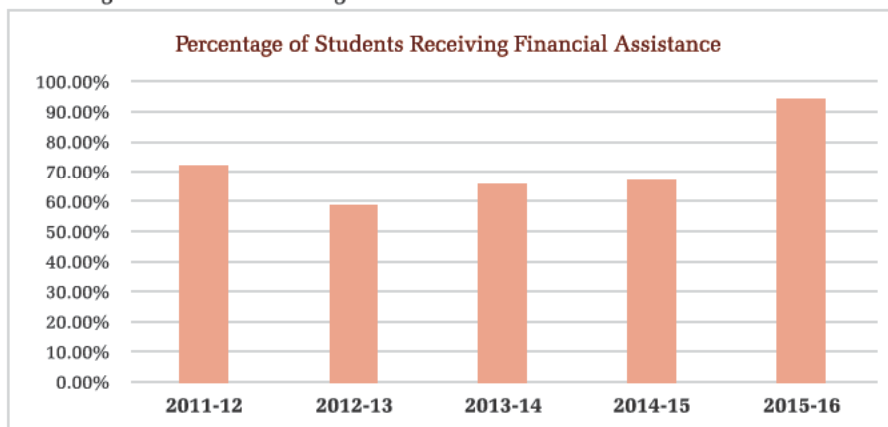
- Political sufferers Scholarship (Freedom Fighters)
- Open merit scholarship
- Scholarship for the orthopedically handicapped
- Application submitted in time will be sent to the respective authorities and award will be subjected to their sanction.

Free - Studentship Education Concession -

- Free – Studentship to E. B. C. Students
- Free - Studentship to children of primary teachers

E.B.C. Concession -

- Free – Studentship to E. B. C. Students
 - The students whose parents and guardians (if parents are not alive) annual income of the previous year is less than Rs. 15 thousand are entitled for this concession
 - Students who have once taken their post graduate degree are not entitled to E.B.C. If they get themselves admitted either for another post graduate degree or Law.
 - Repeaters those who fail in the University exam and study in the same class are not entitled to E.B.C.
 - The students should take note of the fact that if their parents /guardians are private / central Govt. employees , their entitlement depend upon the total salary which should be less than 15 thousand i.e. basic as well as other allowances
 - Students whose ordinary place of residence is within the state of Maharashtra only are entitled for free student ship.

**5.1.3 Percentage of Students Receiving Financial Assistance from State & Central Government:****Table No. 5.3: Percentage of Students Receiving Financial Assistance**

S. No.	Year	Number of Students	Percentage
1.	2011-12	595/827	71.94%
2.	2012-13	549/933	58.84%
3.	2013-14	523/795	65.78%
4.	2014-15	685/1019	67.22%
5.	2015-16	825/881	93.64%

**Recipients of DST-Inspire Scholarship****5.1.4. What are the specific support services/ facilities available for:****(1) Students from SC/ST, OBC and economically weaker sections:**

- No fees for SC/ST/NT/VJ/OBC as per Government of Maharashtra rules for UG and PG
- SC/ST/OBC students are identified at the time of admission and a record of the same is maintained.
- Notices are displayed on the notice boards and announced in the class rooms, urging students to avail of scholarships and freeships instituted by the Government and other agencies.
- Support is provided by the administrative staff in processing such student applications and disbursal of amounts once sanctioned
- Training session for NCC.
- Laboratory instrument provided for Avishkar Competition and science exhibition organized in different colleges

- Literary participate and support by library
- ICT Facility provided to students
- Financial assistance provided for cultural and NSS camp participation

(2) Students with Physical Disabilities:

A class having a student with a physical disability is allotted class rooms on the ground floor.

(3) Overseas Students:

No overseas students are admitted in our college.

(4) Students to Participate in Competitions:

- Students are encouraged to participate in competitions and events at various levels. Training and practice sessions are co-ordinated by the Cultural coordinator with the help of the faculty.
- Facilities such as Traveling Allowance and other expenses are provided.
- Our faculty always accompanies the students for competitions and events outside the campus.



Women Empowerment-Jagar Janiwancha

(5) Medical Assistance to Students:

- Tie-up of college with “ Ayushya Clinic” for medical assistance
- Emergency ambulance facility is available in the college and immediate admission is provided to the “Ayushya Clinic” for further treatment.
- The institution organizes activities and programmes to promote good health among students, and also creates awareness about health related issues like
 - Swine flue - Chicken gunia
 - Depression - Schizophrenia
 - Dengue - Female foeticide



Health Awareness Programme

- Each year, the College holds Medical Examination for the students by game and sports department.
- The institution has appointed doctor who periodically examines students.
- NSS unit conducts medical session by invitee doctors

(6) Organizing coaching classes for competitive examinations

UGC has funded for coaching for entry to administrative services to the students of SC, ST, NT, OBC and minority.

(7) Skill development (Spoken English, Computer literacy, etc.)

At the beginning of every academic session, a week long training module called as “Bridge Course” Introduction programme is organized for the students in which they are groomed to face the challenges.

- Campus recruitment training programme from prominent faculty and national motivators.
- Programs on Personality Development, Group Discussion and Language Skills to enhance the employability of the students.



- Language based programs are done and support is provided for slow learners by teaching them grammar and engaging them in lessons of spoken English.
- Awareness about Computer skill.
- Organized MITCON Consultancy and Engineering Services Ltd, a State Government agency that imparts training in the field of entrepreneurship development and self-employment
- The skilled based courses are initiated in the College to facilitate entrepreneurial skills, among the students.



Dignitaries during Soft Skill Development Programme

(8) Support for 'Slow learners'

- Remedial classes ■ Personal Mentor-ship
- Individual support ■ Open book evaluation test
- Problem solving sessions are conducted for the students at the end of a chapter / session under the guidance of teachers for slow learners.
- Introduction programme is designed by the subject teacher depending on the course content and classes are engaged at the beginning of each session.
- Subject teacher's gives reference material to the students and also provide suitable books to them.
- Every department and Central Library has University question papers of previous exams which are provided to the students which are help them to familiarize with the exam pattern.



Motivation for Rain water Harvesting

(9) Exposures of students to other institution of higher learning/ corporate/business houses etc.

Every department promotes students in higher learning and to participate in various scientific institute like:

1. An Educational visit of B.Sc. final year students of Zoology was arranged to Center for Bee Development, Wardha on 16th January, 2015.
2. An Educational visit to Chota Raipur for Sugarcane and Tissue Culture Workshop on 3rd January' 2015 for B.Voc and B.Sc. final year Microbiology students.
3. An Educational visit to Blood Bank, Gangabai Women's Hospital, Civil Lines, Gondia on 17th December' 2014 for B.Sc. final year Microbiology students.

4. Participation in inter-collegiate Quiz competition related to subject.
5. Participation in Debate competition organized by Pharmacy college, Gondia.
6. Student participation in power point presentation competition conducted by the colleges of other university.
7. Motivating students to participate in Summer School Programme/Workshop. Five students are selected for summer school programme in organization of National repute.

(10) Publication of student magazines.

- College publishes an annual magazine name UDDAN every year in the annual college fest. The magazine symbolizes total student participation in editorial board, article, cover design and other informative details.



- Faculty members work as an advisors and provide the technical support like printing, finance and other miscellaneous to the students.
- Jagar-Janivancha as a programme given by Govt. of Maharashtra as a special initiative for Woman empowerment conducted by college and published magazine in 2012-13 and 2013-14.
- In the session, 2014-15, followed by the inauguration of the college annual day function, Dr. Sajal Mitra, Head, Department of Orthopedics, GMC, Nagpur & Mr. Hemant Bhange, Ex- CEO, Raymond's Textiles, released and uncovered a second issue of departmental magazine "BIOHORIZON" of Department of Biotechnology at Dhote Bandhu Science College, Gondia in 2015. The first issue of "BIOHORIZON" was released by Shri. Kapil Sibal, Hon'ble union minister of human resource development.

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills among the students and the impact of the efforts:

Entrepreneurship Development Programmes are being organized regularly by the institution to nurture the talent of youth and to motivate them towards self-employment through science & technology interventions. Entrepreneurial skills are developed by organizing various workshops, inviting various entrepreneurial to the institution, visits to nearby industries etc.

Two programs of one month duration on entrepreneurship development are organized jointly with MITCON, Pune. MITCON Consultancy and Engineering Services Ltd, a State Government agency that imparts training in the field of entrepreneurship development and self employment.

The college aspires to make its students entrepreneurs and would also like to be a part of the entrepreneurship development process mainstream.

Driven by this thought, the college-

- In collaboration with MITCON, Consultancy and Engineering Services, Pune, organized a month long Entrepreneurship Development Programme in food processing from 03/08/2015 to 1/09/2015 for setting up food processing-based enterprises. This programme was sponsored by State food processing mission directorate, MIDC, Mumbai.
- Entrepreneurship Development programme organized from 6th Jan 2014 to 8th Feb 2014 was aimed to:
 - Create awareness about entrepreneurship in the field of Science
 - Provide knowledge of financial and other resources through the prominent experts.
 - Give practical training and practical sessions in various departments.
 - Provide field visits for actual working knowledge of industrial principles.
- Initiated Skilled Based Courses, Career oriented Programmes of UGC and some courses under IGNOU.

5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.

- Additional academic support, flexibility in examinations
- Special dietary requirements, sports uniform and materials
- Any other

The college targets to make sincere efforts for the all-round development of student personality. College provides various opportunities to cultivate their artistic, academic and athletic talents.

Extracurricular activities:

- Students are motivated to participate in extracurricular activities by providing them



information about incentive marks that they may receive, at the R.T.M. Nagpur University Examinations as per ordinance No.2 of 1996.

- Credit marks are granted to the student on the basis of his / her participation in NSS, NCC, Games & Sports and Cultural activities.
- Students are also promoted to participate in quiz, debates and discussions in various intra and inter-collegiate competitions. Such events are organized annually through various college level forums. Students participate at University, Zonal and National level competitions. Students are trained by staff and are provided necessary guidance to participate in such events. The students are given relaxation in attendance, flexibility in home-evaluation and schedule annual practical dates as per their participation.
- Two students participated at National level Chatra Sansad (Student Parliament) programme (Ku. Sonali Lanjewar at Mumbai, and Mr Abhishek Mohanti at Pune)



Students during Annual Culture Meet



Students Enjoying Sports Events

Cultural Activities:

- Students who are participating in intercollegiate events are permitted to free from classes, college attendance, guidance and any other support if needed.
- The loss of theory and practical classes are compensated by concerned staff.
- If the event falls on the day of college examinations, re examination is conducted at best convenient time for such participating students.
- For cultural events students are provided the necessary requirement for their participation in inter-collegiate, inter-University, State and National level events.

Sports activities:

Students are given administrative and procedural support for participating in various Universities, State and National sports event. Sports students receive sports uniforms (track suits, gloves, sports bags etc.) & traveling allowances as admissible.

5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIRNET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central/State services, Defense, Civil Services, etc.

- The college encourages, guides and trains students who appear for various National and State examinations.
- The faculty coach students who wish to appear for competitive examinations.
- The library subscribes to a wide range of books and magazines which serve as a ready reference material, especially for competitive examinations.
- All PG students appear for UGC-CSIR NET and SLET examination and more than 10 students has qualified UGC NET/SET.

- UG level students appear for CAT and CET (MBA).
- UG and PG level students appear for central and state services examination.
- PG students also appear for PET (Ph.D entrance test).
- Some students are appeared for civil services.

5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc?)

1. Academic Counseling:

- Pre-admission counseling from "HELP DESK".
- Admission cum counseling committee for entry in curricula/courses
- Departmental counseling through Introduction programme regarding the syllabus, paper pattern, mode of conduction of classes, evaluation etc.
- Counseling for participation in various events through Science forum. Students participate in scientific temper activities like AVISHKAR, Science exhibition, Students Exchange programme etc.
- Teachers fulfill the role of mentor by guiding the mentees in academic matters and in making informed choices about their careers.

2. Personal Counseling:

- Teacher-mentor also counsels students in their personal matters and helps them to resolve any emotional or social problems that might adversely affect their studies.
- Personal counseling had done by Women Cell, Student Grievance Cell, Anti-ragging Cell and Anti-Tobacco Cell.

a. Women Cell:

Various programmes had conducted by this cell for personal counseling of girls such as:

- Gender Sensitization Rally
- Safety riding Workshop
- Yoga training Workshop
- Human chain on save girl child
- Self defense Workshop
- Bonsai training Workshop
- Craft training Workshop
- Medical Health checkup Camp
- Various lectures on Female foeticide, Nutrition and Health, Women rights, Interview Skill, Cyber Security



Yoga Training

b. Student Grievance Cell:

The grievances if any are collected by student grievance cell and clarify or settle down the same in stipulated time.



c. Anti-Ragging Cell:

- The committee of anti-ragging cell conveys the direction and guidelines of the anti ragging act to the students at the beginning of the session.
- The in-charge monitor throughout the session mentioning clearly events that are not acceptable in the campus.

d. Anti- Tobacco Cell:

- To create awareness against consumption of tobacco in any form, this cell functions and notifies the various direction for No Tobacco Consumption. Also takes awareness programme in near by villages.

3. Career Counseling:

- Career opportunity leaflet are displayed at library, career and placement cell notice board and prominent display board.
- Students are provided the necessary facility for ICT/Internet from the computer department for on-line application.
- The library provides the competitive magazine and reference encyclopedia are made available for the preparation.
- College try to enter into a MoU with career providers and facilitators.
- Career counselors are invited for preparing students for interview and soft skills enhancement.
- CRT programme and Communication Skill programme are conducted by inviting eminent experts and through video conferencing.

4. Psycho-social Counseling:

- For stressed students, psychiatrist healing sessions are conducted by inviting local/outsider prominent doctors of the field. Dr. Hemant Bakshi and Dr Shibu Acharya, who are alumni of the college and providing their services.
- Our experience is that students approach more frequently those teachers with whom they have a comfort level, and discuss their personal problems which provides psycho-social support.
- Psychiatric from District hospital K. T. S. Gondia has been periodically invited for awareness lecture and psycho-counselling.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

Yes, the college has an active Students' Placement and Career Guidance Cell to train students in employability skills and make them job-ready.

For it, the cell has arranged –

- Communication Skill Development programme.
- Resume Writing Workshop.



- Guest lectures on Interview Skills.
- Personality Development programme.
- Campus Recruitment Training for two Weeks.
- In house Training to identify the job avenues.
- Lectures on preparing for Aptitude etc.
- Motivational talks by Entrepreneur.
- Personal Counseling through mentor-mentee programme.

It also takes efforts to invite the renowned companies on campus to recruit students. Renowned companies which have conducted campus/ off campus interviews are -

- Tata Consultancy Services (TCS)
- Infosys,
- Kirloskar,
- ePHP Solutions
- Kalyani Bharat Forge
- Adani Power Maharashtra Ltd.
- Manpower Group,
- Multiorganics Pvt. Ltd.
- L & T info
- Apex Pharmaceuticals
- SMS Infrastructure
- Sun Flag Steel Pvt. Ltd. Bhandara
- IL & Fs Education and Technology Services Ltd.

Cell conducts regular training programmes for developing career skills among students. Apart from this, the students are also motivated to participate in the campus drives conducted by other institutions and counseled about the value of certificate or diploma courses which they can take up along with their graduation studies for better career options.

Prominent Placement Details:

Table No. 5.4: Placement of students in Companies

Year	Company	No of students appeared	No of students selected	Percentage
2011-12	TCS	56	12	46.66
	Adani Power	42	7	17
2012-13	TCS	60	12	20
	Adani Power	22	5	27
	ePHP	10	06	60
2013-14	TCS	80	12	15
	Adani Power	40	4	10
	IL/FIS	10	06	60



	Multi-organics	10	01	10
	Manpower group	128	06	5
2014-15	INFOSYS	12	09	75
	TCS	30	08	26.66
2015-16	TCS	28	12	43

5.1.10 Does the institution have a student grievance redressal Cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Yes, there is a regular and fair procedure for addressing grievances under the Grievance Redressal Cell of the College. The redressed grievances are given below-

Report of Grievance Redressal Cell : 2011-12

Sr. No.	Grievance	Redressal
1.	Regarding to reschedule of Bus service to Gondia from Tirora, Dhapewada, Amgaon and Rajegaon at 7:30 am.	The matter was reported to Depot Manager Gondia Depot and he reschedule the Bus service as per the convenience of the students.
2.	Regarding the change of timing of practical of some of students from outside.	Note was taken and timing of practical of some students were adjusted accordingly.
3.	Regarding the issue of more books from the Library.	Note was taken. Talked with librarian and the problem was resolved.
4.	Regarding sitting arrangement near the admission counter.	Note was taken and necessary arrangement was made for the sitting of aged guardians coming with the students.

Report of Grievance Redressal Cell : 2012-13

Sr. No.	Grievance	Redressal
1.	Regarding the misplace of bag in the class room.	It was notified that the students themselves have to take care of their belongings in the college premises. The students were convinced.
2.	Regarding the arrangement of chairs and benches in girls common room.	The problem was resolved by making the necessary arrangements.
3.	Regarding the change in locks in the department of microbiology due to loss of keys.	Note was taken and locks in the department were changed.
4.	Regarding canteen facilities in the college premises.	Problem was resolved by talking to students.
5.	Regarding repairing of equipment in departments.	Initiative was taken and most of the equipments in the laboratory were repaired.

**Report of Grievance Redressal Cell: 2013-14**

Sr. No.	Grievance	Redressal
1.	Regarding the theory classes allotment of B.Sc.III in laboratory.	Necessary arrangements were made and students were satisfied.
2.	Regarding indiscipline of the student of B.Sc.I.	Student was given the instruction and he assure to maintain discipline in the college.
3.	Regarding the tap of water in Zoology Department open during the closing time of college.	Warning was given to them and they assure that it will not happen again.
4.	Regarding increase in recess time.	Note was taken and it was adjusted as per convenience of the students.
5.	Regarding use of mobile in reading room.	Note was taken and instructions were given to the students in the reading room and students assure to maintain the discipline in the reading room.
6.	Regarding the irritating sound of the generator which disturbs the lectures.	Students were convinced that usually generator is switch on when there is no power.

Report of Grievance Redressal Cell: 2014-15

Sr. No.	Grievance	Redressal
1.	Regarding the cleaning of washroom.	Note was taken and necessary arrangements were made and students were satisfied.
2.	Regarding the availability of classroom(M.Sc. students)	Note was taken and it was adjusted as per convenience of the students.
3.	Regarding the classes (B.C.A.) students.	Note was taken and necessary CHB staff was appointed by authority accordingly.
4.	Regarding issue of books from library.	Note was taken. Talk with librarian and problem was solved.
5.	Regarding attendance of the students (B.C.A. students).	Note was taken and instructions were given to the concerned staff.

Report of Grievance Redressal Cell: 2015-16

Sr. No.	Grievance	Redressal
1.	Seating arrangement at the students' section	Note was taken and necessary seating arrangements is made.
2.	Providing the canteen facility	Canteen has been started.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

There is a Cell against Sexual Harassment & Gender Violation in the College. The following cells work in coordination to curb harassment of any kind:

- Woman Redressal Cell
- Student Grievance Cell
- Daily Discipline In-Charges

Measures taken by the institute to curb harassment:

1. Identity cards for students.
2. Lady teachers frequently interact with the girl students to know about their problems.
3. Self defense training for girl students.
4. College is under CCTV Surveillance
5. Daily vigilance by discipline committee.

During session 2015-2016, installation of Woman Grievance and Redressal Cell of Police Department, Ram Nagar, Gondia at Dhote Bandhu Science College, Gondia on 29th January' 2016.



Installation of Women Cell



Press Courage



Self Defence Training

5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

- College has Anti Ragging Cell which believes in creating a healthy atmosphere amongst the students.
- No incident on this account has been reported till date.
- Rules and regulations are communicated to all students through the prospectus, display boards and the college web site to prevent ragging.
- As a preventive measure, the students are adequately brief during Introduction programme held each year at the beginning of the session for freshers.



5.1.13 Enumerate the welfare schemes made available to students by the institution.

The institution is committed to the overall welfare and well being of its students. Some of the schemes are listed below:

- Scholarships and Concession.
- Mentor-mentee programme.
- Prizes for outstanding students.
- Free books to meritorious students.
- Flexibility in payment of the fees as per the financial weaker students.
- Mobility to change the course in first year after one month of the admission date.
- As per UGC norm Student Welfare Committee constituted that comprises student welfare officer, members and students.

5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

Yes, the college has alumni association which comprises and office bearer and the members.

- The alumni association organizes meets regularly.
- The alumni provided their support and services to the institution in areas of their expertise.
- Alumni provide feedback and guidance for the development of the institution.
- Provide necessary assistance in infra-structure development and academic development.

5.2 Student Progression

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlights the trends observed.

The student progression is tabulated below-

Table No. 5.5 : Student Progression

Year	Student Progression in %				
	UG to PG	PG to M. Phil.	PG to Ph.D.	Self-employment	Campus selection
2011-12	33	1	1	10	8.10
2012-13	26	1	1	15	32.69
2013-14	39	1	2	18	43.85
2014-15	34	1	2	21	16
2015-16	05	0	3	22	06

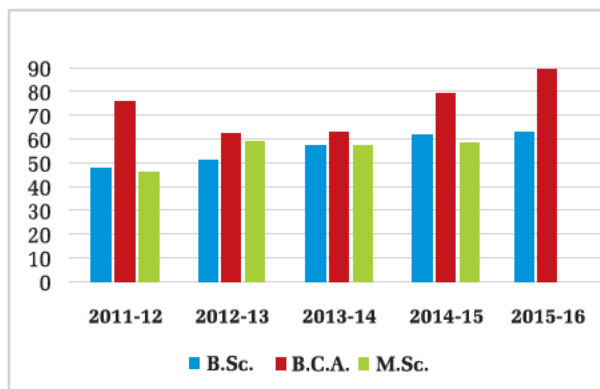
The above statistics shows a trend of students to enrol for traditional courses and research activities in science faculty. A number of students show interest in attempting to apply for private industries and banking sectors jobs.

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (course wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the colleges of the affiliating university within the city/district.



The program-wise percentage result is given below-

Year	Passing percentage in		
	B.Sc.	B.C.A.	M.Sc.
2011-12	48	76	46
2012-13	51	63	59
2013-14	58	63	57
2014-15	62	78	59
2015-16	63	89	---



Passing percent of Students

The passing percentage of the student of the college is growing and always higher than that of the nearby colleges.

5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

- The Placement Cell provides career guidance to the students through lectures, seminars and workshops by experts in the respective fields. The students are advised regarding academic pursuits and career development.
- Library facility is available to the students who wish to appear for competitive examinations and also go for higher studies.
- Faculty members encourage students to appear for competitive examinations.
- Students are given information about the various examinations that are held and their attention is also directed towards the advertisements that appear in newspapers regarding the same.

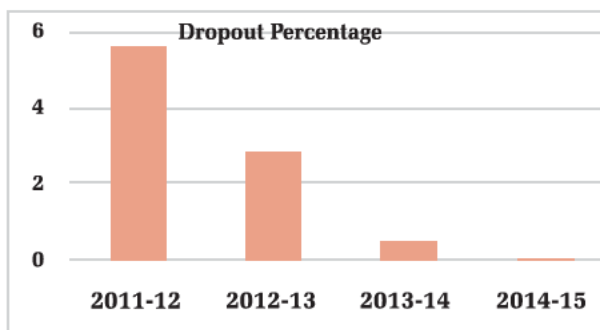
- Alumni and other experts who have made a name for themselves in the field are called to guide and motivate the students.
- College often counsels the final year students on career options and prepares them for higher studies, and arranges career guidance programmes and campus interviews.
- College conducts communication skill development programme often at our college for the development of our students.
- Experts from various fields and teachers from various universities and colleges are invited.
- Weak students are identified and proper coaching and special training is offered for them to increase the passing percentage.
- Besides, all other efforts, toppers are given special teaching and training to make them university rank holders.
- Habit of conducting class seminars and presenting papers inside the class room has been very helpful for students in preparing and presenting papers in National and intercollegiate seminars.
- Every student is allotted a topic and prepared for group discussions.
- In addition, personality development programmes are conducted for shaping the students for their behavioral change.
- H R Managers from reputed companies are invited here for teaching the verbal and nonverbal communications, a practice that has been followed by the students strictly at the time of interviews.

5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

The drop-out is only in B.Sc. I year and very less drop outs in B.Sc. II and B.Sc. III year. Year wise dropout is stipulated below.

Table No. 5.7: Dropout for B.Sc.

Year	Dropout %
2011-12	5.66
2012-13	2.89
2013-14	0.47
2014-15	0.00



The drop out rate was considerable in the beginning of this decade. Partially it was due to the migration of students towards degree / diploma courses in engineering and technology. But as the career oriented and skill based courses are introduced, the drop out is reduced effectively. Further, the rate of getting employment in campus or off campus interviews made the student to opt basic science education.

**Some more reasons of the dropout of students:**

- Economic problems/ Poor financial conditions.
- Better options like professional or other career-oriented courses.
- Employed due to poor economic conditions.

The Institution works hard to reduce the percentage of failures and to decrease the dropout number by taking the following steps:

- Introduction programme at the beginning of each session for the new entrants to introduce them to the working of the college.
- The career guidance and counseling cell provide guidance to the students related to academics and social problems.
- Teachers engage difficulty sessions.
- Teacher-Mentor scheme to guide the students in academics and help solve personal problems, if any.
- Students performance are constantly monitored through regular assessments like unit tests, class tests, assignments etc.
- Students are provided facility to carry out study with job by arranging their class schedule.

5.3 Students Participation and Activities**5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.**

- A wide range of sports, games, cultural, curricular, co-curricular, extra curricular activities are conducted through department of Games and sports, In-charge cultural activity, NSS unit, NCC unit, Students' Council and Science Forum throughout the year.
 - Arts and cultural activities are conducted under the Annual Fest/Social gathering every year under the different titles.
 - The information regarding these activities are conveyed to the students by-
 - Notifying activities at college campus.
 - Notifying inter-collegiate activities.
 - Preparing a schedule for annual social gathering.
 - Circulating the University and Government level programmes schedules.
- The sports events conducted by college are -



Finishing Point in Sports Meet

1. Intra-collegiate level:

- | | | |
|---------------|--------------|-----------------|
| - Shot put | - Long jump | - Table tennis |
| - Chess | - Slow cycle | - Musical chair |
| - Shuttle run | | |

- Table soccer
- Cross country race
- Spoon race

2. Inter-collegiate level:

- Badminton (M/W)
- Chess (M/W)
- Power-lifting (M/W)
- Table Tennis (M/W)
- Ball Badminton (W)
- Yoga (W)
- Cricket (M)
- Baseball (W)
- Handball M/W)
- Football (M)
- Basket ball (M)
- Fencing (M)
- Kabbaddi (M)
- Judo(M)

*M= Men and W=Women



NCC Cadets escorting Dignitaries

Inter-University and Nationals level:

Students are selected to participate at the Inter-University and National level based on their performance at the University level and the level required for entry at National level. The college participates in Inter-collegiate tournaments and Inter-University events organized by concerning authority.

Students' participation session-wise in sports

Table No. 5.8: Students' participation in sports

Year	Team Participation in I. C. tournament	Students Participation in I. C. tournament	State level	University Colour Holder	National level
2011-12	8	41	1	0	0
2012-13	10	86	51	1	2
2013-14	12	111	0	3	0
2014-15	13	134	8	3	1
2015-16	13	116	9	4	4

NSS activities:

NSS unit is the oldest unit in the college and conducts various activities jointly with Govt. organization like Blood bank, Govt. Hospitals, Forest Department, , Non-Govt. organization like



Nagzira foundation (an Eco-friendly club), JCI, etc. Some prominent activities and participation are as follows-

Year	Activity	Number of Participants
2011-2012	Campus Cleaning Programme	75
2011-2012	Tree Plantation	45
2011-2012	Anti-Childlabour Rally	100
2011-2012	Eye Donation Rally	55
2012-2013	AIDS Awareness Rally	75
2012-2013	Medical Health Check Up Camp	80
2013-2014	Women Empowerment	100
2013-2014	Superstition	60
2014-2015	Anti-Dowery lecture	200
2014-2015	A Blood Donation Camp was organized with Blood Bank center Gondia.	60
2014-2015	Yuva Divas	50
2015-2016	Blood Donation Awareness Programme	80
2015-2016	Oath Ceremony on Swach Bharat Abhiyan	150
2015-2016	Jointly with Media group of Danik Bhaskar "Clean Gondia Clean India" programme	200
2015-2016	Traffic Awareness Week	130
2015-2016	University level 7 days Camp	02
2015-2016	State level 7 days Camp	12
2015-2016	Pulse Polio Awareness programme	78
2015-2016	School Dropout Survey	12

NCC Activities

I) Camp Details

A) Camp record of 2011-12

Table No. 5.10: Camping : 2011-12



S. No.	Name of Camp	No. of CDT.	Place	Month-Year
1.	ATC –610	10	Nagpur	July –2011
2	IGC/Pre RDC –IV (Training Camp)	07	Nagpur	Oct. 2011
3	IGC/Pre RDC –IV (Lunch Camp)	08	Nagpur	Oct. -Nov. 2011
4	IGC/RDC -Competition	04	Aurangabad	Nov. 2011

(B) Camp Record of 2012-13**Table No. 5.11: Camping : 2012-13**

Sr. No.	Name of Camp	No. of CDT.	Place	Month Year
1.	TSC –I	15	Nagpur	July –2012
2	TSC –III	03	Nagpur	July –2012
3	TSC –VI	05	Nagpur	Aug. –2012
4	Pre. RDC –III	07	Nagpur	Oct. –2012
5	NIC –III	10	Dombivali	2012
6	ATC -	32	Nagpur	Jan. -2013

(C) Camp Record of 2013 – 14**Table No. 5.12: Camping : 2013-14**

Sr. No.	Name of Camp	No. of CDT.	Place	Month Year
1	(ATC –TSC)	10	Nagpur	Aug. –2013
2	Army Attachment Camp	10	Kamptee (Nagpur)	Nov. -2013

(D) Camp Record of 2014 – 15**Table No. 5.13: Camping : 2014-15**

Sr. No.	Name of Camp	No. of CDT.	Place	Month Year
1	(ATC – 614 (RDC)	10	Wardha	Sept. – 2014
2	(ATC – 615 (RDC)	02	Wardha	Oct. – 2014
3	(ATC – 616 (RDC)	03	Wardha	Oct. – Nov. 2015
4	IGC/RDC Competition Camp	02	Auragabad	Nov. – 2015
5	Army Attachment Camp	10	Pune	Feb. - 2015

**(E) Camp Record of 2015 – 16****Table No. 5.14: Camping : 2015-16**

Sr. No.	Name of Camp	No. of CDT.	Place	Month Year
1.	TSC – II	15	Nagpur	July - 2015
2.	TSC – III	04	Nagpur	July - 2015
3.	IGC/TSC Competition Camp	04	Amravati	Aug - 2015
4.	(ATC – 620)	05	Nagpur	Feb - 2016

II) Results of B – Certificate Examination**Table No. 5.15: B- Certificate**

Year	Total No. of Cdt.	No. of Cdts qualify with A, B, C, Grade		
		A	B	C
2011	30	02	22	06
2012	28	01	13	14
2013	28	13	15	00
2014	No Examination was conducted by NCC			
2015	13	00	04	09

III) Results of C – Certificate Examination**Table No. 5.16: C- Certificate**

Year	Total No. of Cdt.	No. of Cdts qualify with A, B, C, Grade		
		A	B	C
2011	13	01	07	05
2012	15	01	10	04
2013	12	00	04	08
2014	10	00	00	10
2015	No Examination was conducted by NCC			



IV) Other activities by NCC cadets

Table No. 5.17: Activities by NCC cadets

A) Acad. Year: 2011 -12	B) Acad. Year: 2012 -13	C) Acad. Year: 2013 -14
<ul style="list-style-type: none"> ■ Tree plantation conduct by cadets ■ Blood donation conduct by cadets ■ Participate in rock climbing camp 	<ul style="list-style-type: none"> ■ Tree plantation conduct by cadets ■ Blood donation conduct by cadets ■ Participate in Cycling expenditure camp 	<ul style="list-style-type: none"> ■ Tree plantation conduct by cadets ■ Blood donation conduct by cadets
D) Acad. Year 2014 -15	E) Acad. Year 2015 -16	
<ul style="list-style-type: none"> ■ Tree plantation conduct by cadets ■ Blood donation conduct by cadets ■ Participate Swatch -Bharat Abhiyan conduct by college ■ Participate in tracking camp 	<ul style="list-style-type: none"> ■ Tree plantation conduct by cadets ■ Blood donation conduct by cadets ■ Swatch – Bharat Yojna conduct by cadets ■ Cadets participate in International Yoga Day camp conduct by NCC – India ■ Cadets Participate in firing camp Held at Bhandara firing range conduct by 4 - MAH BN NCC ■ Cadets participate in fire-briged training & Disaster Management conduct by fire - briged officer & NDRF Held at fire briged office Gondia 	

V) Special achievement

Acad. Year 2014 -15	Acad. Year 2015 -16
<ul style="list-style-type: none"> ■ Ex. SUO Gajendra Dohare and JUO Rohit Murkute selected for RDC (IGC) gp. Competition which was Held at Aurangabad. ■ 6 Gold Medal & Silver Medal was wire by cadets in different camps ■ Ex SUO Gajendra Dohare <ul style="list-style-type: none"> - Gold Medal :: Camp Senior - Gold Medal :: Best Drill - Gold Medal :: Special quarter guard ■ JUO Rohit Murkute <ul style="list-style-type: none"> - Gold Medal :: Camp Senior - Gold Medal :: Best Drill & Special quarter guard - Gold Medal :: II Best firer ■ Ex. cdt. Parmeshwar Bisen <ul style="list-style-type: none"> - Gold Medal :: Holly ball 	<ul style="list-style-type: none"> ■ Four Cdts selected for TSC (IGC) gp. competition which was Held at- Amravati <ul style="list-style-type: none"> ■ JUO. Dipak Kodape ■ Ex. Sgt. Mangesh Baghele ■ Cadt. Subham Bubhare ■ Cadt. Yashkumar Tembhare ■ Four Memento was wire by cadets in (ATC – 620 held at Nagpur on Feb 2016) <ul style="list-style-type: none"> ■ SUO. Rohit Murkute:: Best Cadet ■ SUO. Rohit Murkute:: Best Drill –I ■ JUO. Bhumeshwari Thakur:: Cross Century –II ■ CPL. Puja Kawale:: Best Drill –II

**Programme Calendar of Cultural activities:**

With the constitution of a cultural committee, an action plan for the session is prepared to notify students regarding the intra-college cultural activities. The inter-college, University level, and various state level activities are notified to the students time to time. The students of the college participate and bring laurels. Every year college organizes an annual Mega Event named '**Annual Cultural and Sports Meet**' in association with the **Students' Council**. The activities are framed by the students themselves. Some regular and prominent innovative activities for all round development are-

- | | |
|---------------------------------|--------------------------|
| ■ Rangoli competition | ■ Quiz competition. |
| ■ Salad competition | ■ Student parliament |
| ■ Mehendi competition | ■ Hair Style competition |
| ■ Folk dance competition | ■ Best from waste |
| ■ Traditional dress competition | ■ Collage preparation |
| ■ Singing competition | ■ My click competition |
| ■ Science exhibition | ■ Add Mad show |
| ■ Essay writing competition | ■ Software exhibition |
| ■ Debate competition | ■ One Act play |
| ■ Elocution competition | |

Extra-curricular Activities:

The College believes in creating opportunities for overall development of the students. Hence the Institution has created facilities like NCC, NSS, Eco club, Science forum.

Eco Club:

The Eco-club is formed to make students environmental friendly measures. The activities conducted under this head are-

- Campaign for no plastic
- Planting of saplings in the college campus.
- Saplings present to the guests.
- Eco-friendly gift article making workshop organized for the students in the college.
- Environmental conservation awareness programme such as eco-friendly Ganesh ideals was taken.
- Guest lecture on Saras conservation in collaboration with Satpura foundation was taken.
- Various competition taken under the edges of eco-club are eco-friendly Ganesh ideal making, dust bin making etc.

5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

- Ms. Deepali D. Sonkusare got second position at district level in elocution competition organized by Zillah Parishad, Gondia on 9th August 2011.



- Ms. Sakshi V. Katre got first rank at state level in elocution competition organized by Zillah Parishad, Gondia on 9th August 2011.
 - Ms. Naina D. Sonwane got first rank at zonal level in all India level essay writing competition organized by Shri. Ramchandra Mission in collaboration with UNIC, Gondia on 20th September 2011.
 - Ms. Rohini S. Khairwar got third rank, trophy and certificate at district level in essay competition organized by Bhartiya Navyuvak Chatrostan Society, Gondia on 20th July' 2014.
 - In Avishkar 2015, in pure science category Ms. Afreen G. Sheikh and Ms. Juhi Hattewar secure second position in pure science category from UG Category.
 - In Avishkar 2015, Mr. Hitesh M. Rakhade secured first position in pure science category from UG Category.
 - In Avishkar 2015, in pure science category Ms. Minakshi B. Bahekar and Ms. Payal Malghate secure first position in pure science category from PG Category.
 - Avishkar event organized by Maharashtra Animal and Fishery Science University (MAFSU) Nagpur as state level Avishkar - 2014. The function was inaugurated by the hand of Honorable Governor of Maharashtra Shree Vidhyasagar Rao on 21st to 23rd January 2014. Only two students of RTM, Nagpur University are short listed for final level. Mr. Manish Ashok Singanjude student of B. Sc III (CBZ) had participated in this event and secure Runner up position. His project title was "Fun with Science".
 - Ms. Kalyani T. Dahare win third prize in debate competition organized by Lokmat Yuva next on 30th September' 2015.
 - Ms. Manisha V. Narsanne won second prize in intercollegiate debate competition on cyber Security organized by Pharmacy department on 23rd Jan, 2016.
- 5.3.3 How does the College seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?**
- The graduates express the satisfaction regarding skills which they acquire during their graduating years, and which hold them in good stead at their work place.
 - The college gets feedback from employers who are invited to the college as speakers for seminars and workshops.
 - The faculty also obtains feedback from faculty who undertake industrial visits along with the students.
 - Feedback is also solicited during alumni meeting. This helps the institution to enhance the quality of education.
 - Feedback received is used to improve the quality of education for present students.
 - Head of the concerned departments seeks students' feedback on teaching-learning through the interaction with the students.
 - Feedback is discussed with the teachers departmentally/ with the academic committee members, and remedial measures are undertaken and implemented for improvement.
 - Feedback from all stakeholders on institutional performance and provisions are collected by Committees in various meetings.



- The obtained data is discussed and measures are taken to improve the performance and quality of the institutional provisions.

5.3.4 How does the College involve and encourage students to publish materials like catalogues wall magazines, College magazine, and other material? List the publications / materials brought out by the students during the previous four academic sessions.

The teachers of the college promote creativity by encouraging the students to write articles, poems etc and put them up on the display boards or include in the college magazine. Students also put posters on display boards on awareness related topics. The college encourages the students to write articles for the college magazine which is published annually. The articles written by the students are published along with their photographs to encourage them. 'UDDAN' magazines have also been selected once as one of the best magazines. College magazine 'UDDAN' is brought out by the Editorial Board comprising of teachers as well as students. The students write articles on various topics, poems, short stories, jokes etc. The students made PPT presentations in the competition taken under the heading of Digital India week celebration. The Department of Zoology encourages the students to collect news on relevant topics and display them in the student corner.

5.3.5 Does the College have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Yes, the College has a Students' Council.

■ **Selection & Constitution:**

The College has a Students' Council. The class topper is nominated as the representative of the class as per university norms. The students' council also constitutes one nominee each from NSS, NCC and Sports. From these nominated members, one student member of the council is the University Representative (UR) who represents the College in the University Student Council meets. The advisor of the council is the Principal or a faculty member nominated by the Principal.

■ **Activities:**

The Students' Council conducts many programs. The council organizes Annual Social Gathering which includes Sports meet, Annual Cultural Event, Science Exhibition, Music, Dance, Quiz, Debate competitions etc. The Council also celebrates important occasions like Independence Day, Teachers' Day, Republic Day, etc. Through these events, the students develop organizational skills, learn leadership and imbibe teamwork qualities.

The Mega Events 'Annual Sports and Cultural Meet' organized every year are –

ULLAS - 2012, ETHOS - 2013, NAVONMESH - 2014, SYNERGY - 2015

Funding : By college

ULLAS - 2012



"ULLAS - 2012"
Annual Sports & Cultural Meet



"ETHOS - 2013"
Annual Sports & Cultural Meet



"NAVONMESH - 2014"
Annual Sports & Cultural Meet



"SYNERGY - 2015"
Annual Sports & Cultural Meet

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

The Students Council has various specific academic activity members who take active part with specific academic committees such as Internal Quality assurance Cell, Magazine Committee, Cultural Committee and Games & Sports Committee. Certain associations in the College like Women Cell, Eco club, Sports and Cultural Activity, in the capacity of office bearers.

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

The faculty members of the College maintain a good relation with the former faculty members. The former faculty members are also invited as resource person in the technical session of the seminar organized by the College. The College networks with the Alumni through the activities of the Alumni Association, invitation in the various activities especially in large gathering functions of the College etc.



Self Study Report



CRITERION- VI GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

Vision and Mission of the Institution

Vision: "To take education to the doorsteps of the downtrodden and economically backward people of Eastern Vidarbha."

Mission:

1. To disseminate the latest and updated knowledge.
2. To promote in campus research activity.
3. To ensure all round development of a student.
4. To train students for self-employment.
5. To carve out true-citizens and skilled professional for tomorrow.

Institution's distinctive characteristics are reflected through -

- Serving the society at large for the last four decades, providing wide range of programs options.
- Organizing student based seminars to disseminate the latest and updated knowledge.
- Organizing scientific temper program like AVISHKAR (Research Festival) to promote in campus research activity
- Conducting academic, curricular & extracurricular activities to ensure all round development of a student.
- Self-employment programs like MITCON Entrepreneurial Development, Production of Mushroom Cultivation, Biopesticides Production to train students for self-employment.
- Organizing holistic, skill base training program, to carve out true-citizens and skilled professional for tomorrow.
- Motivating the students to bring out their creative potential
- Equipping students to adopt a plan and strategy for multiple career opportunities.
- Providing wide-rang education by making it accessible to all sections of society.
Introducing modern curricular and subject option to disseminate related and updated knowledge.
- Sensitizing and engaging the students in issues like gender equality, human rights and ecology in order to make them socially responsible citizens.

Vision for the Future

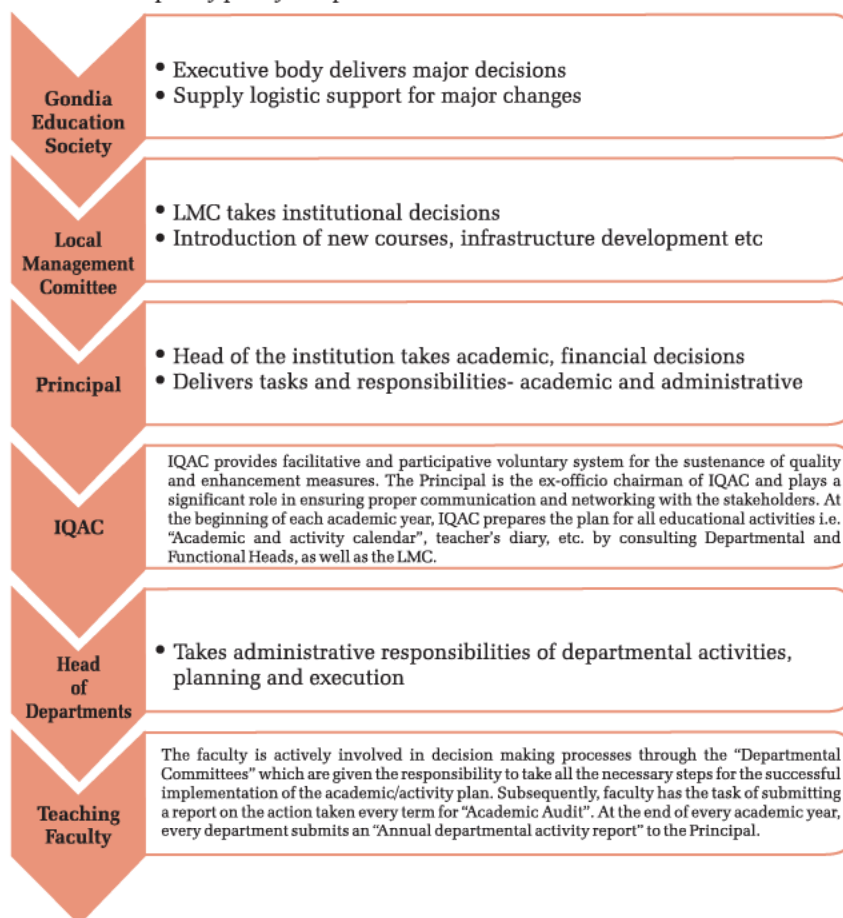
- To offer Post graduation in subjects like Mathematics, Electronics & Zoology and Centre for Higher Learning.
- To establish linkage with national laboratories to use and share expertise.
- Introduction of more skill based courses for employment generation



- Up gradation of library and set up for scientific journals publication
- Set up for campus on alternative source of energy like Solar
- To impart better opportunity to the disabled
- To augment the existing infrastructure

6.1.2 What is the Role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The structure below represent the role of management, Principal and Faculty for design and implementation of quality policy and plans.





6.1.3 What is the involvement of the leadership in ensuring :

■ The policy statement and action plans for fulfilment of the stated mission -

The Management, Principal and IQAC act as a articulate unit in achieving goals. Target set in academic plan and perspective plan are reviewed by the Principal and Management. Management of the college extends support by providing necessary support structure to achieve desired goals and objectives.

■ Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan-

Principal of the college goes through recommendations made by UGC, NAAC, Higher Education department of state government and RTM Nagpur University while formulating Institutional Strategic Plan. These recommendations form integral part of annual Perspective Plan. Most of these recommendations are fulfilled with the support, help and encouragement of top-management.

■ Interaction with stakeholders -

Principal takes appropriate initiatives for interaction with stakeholders. Industrialists, educationists, Alumni and students are involved in various meets for getting inputs and guidelines for setting up quality policy. Our college organizes a large number of interactive sessions on academic, extra-curricular, social, entrepreneurial, research and development, skill improvement, environment development programmes in association with our stakeholders. We take inputs and suggestions from stakeholders for implementing our goals and objectives.

■ Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders -

UGC and Higher Education Department of State provides necessary guidelines and suggestions. These suggestions are an outcome of national level committees and inputs received from research done by government agencies and NGOs specifically working on need analysis in education sector. Our college, faculty and researchers through their involvement with society as a part of their own research and extension work help us in identifying issues of local level importance. We also receive direct inputs from industrialists, educationists through our consultations during Formal and Informal Meetings, Visits, Conferences, Seminars etc. All such inputs help us in designing our quality policy and plans.

■ Reinforcing the culture of excellence -

The college adopts appropriate measures to achieve excellence in teaching, learning and extension. We integrate activities that aim to achieve excellence in academics, cultural, social and extension activities to achieve our mission of building youth through value-based education. Emphasis is given to involve students in activities, research and extension work to make them aware of community and social responsibilities and give them social perspective. We are in the process of building quality education through integration of traditional and modern modes of education.

■ Champion organizational change -

Our management believes in taking risk and bold steps to champion the necessary organizational changes as per the need of changing times in education sector. Hence, efforts are



practiced to get recognize the college as 'Centre for Higher Learning and Research'. College becomes only college having Vocational Degree Course, Skill Based Community College Scheme of UGC and CPE status among the colleges affiliated to Nagpur University, known as very good eco-friendly college.

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

Following steps are adopted by institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement -

- Getting feedback from the stakeholders and discriminating the options available for implementing the policy or planed task
- Developing a conventionally good strategy that can give better results.
- Implementing flexible mode of options according to the need.
- Expert advice and guidance is sought before implementation of plan
- After in-depth review the college Management then takes a final call on implementation of any plan and policy.

To monitor and evaluate the action taken, an internal committee is delegated with the responsibility to monitor and evaluate the success of any new plan and policy. The committee is given full freedom for the successful implementation of any new plan or programme.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

The governing body and Local Managing Committee has given freedom to the Principal and the faculty to develop the academic leadership.

- Principal with an autonomy of academic, administrative and financial works for the betterment of the institution
- The faculty is given a freedom to work as conveners, coordinators, secretary or members of the organizing committees of various academic events organized by the college. Teachers can also work on various academic bodies in the university.
- The Heads of departments are given the freedom to administer their respective departments, plan and execute academic programs. Day wise In-Charges and Program Coordinators are appointed to facilitate smooth conduct of academic activities.

The Departments take all the necessary steps for implementation of the academic plan.

- The faculty members are allowed to participate in and contribute to the deliberations. In addition to in charges and Program Coordinators, there are "Advisory Committees" for
- Self Financing Programs comprising of Members of the Management and teachers who have the responsibility to help in planning academic activities.

6.1.6 How does the college groom leadership at various levels?

The college grooms leadership at three main levels: teaching faculty, students and administrative and support (non-teaching) staff levels. The procedure adopted for creating leaders is as under-

- Identify various activities / tasks to be implemented for every academic year according to the perspective plan of the institute.
- Circulate the list of activities / tasks amongst faculty, staff and students.



- Involve members in choosing activities of his/her own choice.
 - Assign responsibilities by providing freedom and necessary support for implementation.
 - Appreciate and acknowledge innovative ideas and leadership qualities shown by members.
 - College authorities appoint the head of the department to take up the role of departmental administrative and academic responsibilities, handling few of some administrative tasks at the college level.
 - All teachers take various curricular, extracurricular and administrative responsibilities in rotation. Periodic capacity building as well as faculty development programs also help them to sharpen their management skills.
 - For administrative and support staff, some training workshops for overall developmental skills are arranged. Training for effective use of ICT and ERP is usually conducted through some professionals and department of computer science. The college sends the office/library staff for relevant training to meet the demands of the changing requirements of administration.
 - Student leadership is groomed through the students' council which is formed every academic year. For every class, a class representative is selected. All class representatives are members of the council and select one student as College representative for university representation. This representative also works in coordination with the Principal for planning and implementation of annual festivals and extracurricular activities. Many co curricular and extra-curricular activities of the college are planned and executed with the help of students including Seminars, Workshops and Conferences.
- 6.1.7 How does the college delegate authority and provide operational autonomy to the departments/units of the institution and work towards decentralized governance system?**
- Under the supervision of the Principal, the college provides autonomy to the heads of the department. Academic planning, assignment of workload to teachers and non-teaching staff are done at the departmental level by Heads of departments. Each department plans and organizes academic activities related to their subject. Departments are given the freedom to frame time tables for practical, identifying and inviting visiting faculty or Guest speakers, assigning projects, and deciding the theme for workshops and seminars. Delegation of power to sanction leave of the staff and utilization of the allocated budget as per the requirements are also looked after by the respective heads of departments.
 - The college has formulated various committees to facilitate smooth functioning and conduct of all the activities in the college. The roles and responsibilities of the committee members are well defined. Each Committee has a "Coordinator"/ "Convener" who coordinates the meetings/proceedings of the work of the committee including assigning responsibility to every Member of the Committee. The "Coordinators"/ "Conveners" of various Committees provide a brief review of the activities of their committees to the Principal.
 - In addition, the distribution of office administrative work and monitoring is handled by administrative staff (Non-Teaching) in consonance with the relevant college authority. The Principal then ensures that this information is available for the Management to review the activities of the college. This is an important step in aligning the activities of the college with the Institutional Vision and Mission.

**6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.**

Yes, the college is committed to a culture of participative management.

- The Principal and IQAC coordinator is responsible for academic and administrative leadership of the college.
- The Principal meets with Heads of departments to discuss academic or administrative issues.
- The IQAC meets periodically to discuss the points related to the quality policy and plans. The apex decision making body at College level is the Local Managing Committee (LMC).
- The LMC has representatives from teaching as well as non-teaching staff.
- All the issues regarding academics, administration and enhancement of infrastructure, sanctioning of sabbatical/ study leave etc. are decided by the principal.
- The IQAC also includes faculty members who sit with members from the society and assist in policy/ plan formulation and implementation.
- Faculty members from IQAC play an active role in the management of academic activities of the college. Students actively participate in various curricular, co-curricular and extra curricular activities.
- Faculty members participate in the management process not only through the LMC, but are also part of the Board of Life members, Governing Body, as well as the Council of Gondia Education Society.
- The stakeholders are given details of the high points of achievements and activities during the annual general meeting of GES.

6.2 Strategy Development and Deployment**6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?**

Yes, the college has a distinct quality policy oriented towards achieving set goals and missions. The IQAC has revised and reviewed the quality policy through the involvement of stakeholders. The "Quality Policy" of the college is driven by the teaching and non-teaching staff of the college and also by students.

The deployment of "Quality Policy" is channelized through:

- Providing motivation, encouragement and appreciation to the teachers for their contribution in college activities.
- Providing a platform of opportunities to faculty and students to enhance their competency levels.
- Taking a formal feedback on teaching-learning process of all the programs.
- Providing special infrastructure in terms of learners' needs.
- Proactive support of teachers and students for establishing College-Community association network through ISR.

Focusing on overall development of students, quality policies are reviewed during the meetings of the forum of heads, IQAC and LMC. The review of the "Quality Policy" is done as per the changing needs of higher education policies.



The “Quality Policy” focuses on:

- Education Excellence in curriculum development by active participation in curriculum design.
- Implementation of systems and procedures through technology oriented system administration.
- Augmentation of Academic, Co-curricular activities to strengthen and encourage academic participation.
- Strengthen regular feedback system for improvement of academic performance and implementation of automation in feedback system.
- Collaborate with interdisciplinary subject faculties to enhance the quality of academic and research contents.
- Learning Resource: Automation of learning resources to facilitate enhanced participation of students and teachers.
- Extension of working hours which would give flexibility for utilization of facilities.
- Allot substantial grant/Seed money for nurturing research talents among students and teachers. Set higher goals and give an ideal platform to unleash creativity for attaining greater standards of innovation. Support students and teachers for all their research endeavors.
- Mobilize resources and create/ renovate present infrastructure and relocate spaces for academic and administration for congenial teaching-learning facilities.
- Create and preserve an open environment to share resources and views and improve teaching learning on the campus
- Special support and inclusive learning approach, especially for differently-able students to cater to their special needs.
- Inculcate value-based moral and ethical values among staff and students. Aim at preparing global citizens that are physically strong, mentally alert, intellectually sound, socially balanced and spiritually elevated.
- Institute Social Responsibility: Collaborative efforts with NGOs/ Civil Societies for active participation in social activities and contribute towards nation building.

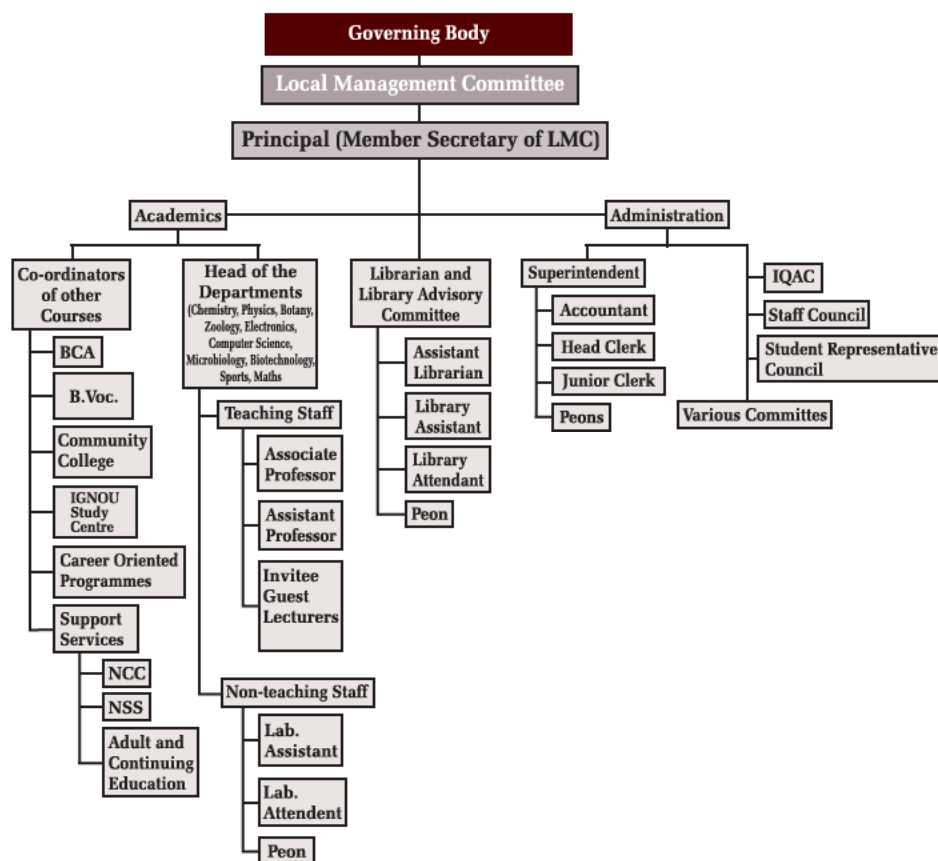
6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes, the college has a perspective plan/development plan of development which was developed a few years ago. This plan has been reviewed as per the needs of learners and in keeping with the higher education policies of the nation. The aspects considered for inclusion in the plan are as follows:

- Introduction of new PG courses and research centre in mathematics, electronics, zoology.
- Laboratory with latest technology equipment.
- Awareness campaigns for zero waste campus model, e-waste management, energy audits, and safety audits, addressing gender issues and aligning our activities with social needs.
- 100 % solar energy campus.

**6.2.3 Describe the internal organizational structure and decision making processes.**

The internal organizational structure for decision making process



- Local Management Committee : At the college level, the Local Managing Committee is constituted according to the Maharashtra Universities Act of 1994. All other committees are given responsibility to look into the management of various parts/matters of the college.
- The Principal of the college heads both the academic as well as the administrative sections, and is overall in-charge of the college. The college office mainly looks into matters related to admissions, eligibility, and examinations. It also provides clerical support required for maintaining records and for interaction with government, university, parents and students.



- Various committees in the college help in monitoring and facilitating several administrative functions and thus make administration open & transparent. The decentralization of power is evident from these committees, some of them are statutory & the others non-statutory in nature.
- The list of committees is given below :

- | | |
|---|---|
| ■ Admission Committee (UG/PG) | ■ Library Committee |
| ■ Student and Grievance Committee | ■ Daily Class Monitoring Committee |
| ■ UGC Schemes Committee | ■ Student Monthly Attendance Record Committee |
| ■ Evaluation Committee | ■ Placement Cell |
| ■ Inter Colleges Activity Committee | ■ Centralize Data Collection |
| ■ Time Table Committee | ■ University Practical Monitoring Committee |
| ■ Anti-Ragging Committee | ■ Incentive Marks |
| ■ Prospectus Committee | ■ Community College |
| ■ Women's Cell Committee | ■ Minority Cell |
| ■ NSS and ACEES Committee | ■ News and Advertise |
| ■ Science Forum Committee | ■ Feedback Committee |
| ■ IGNOU Center Committee | ■ Digital Diary Committee |
| ■ Introduction Program (for Entry Level Students) | ■ College Magazine Committee |
| ■ Culture In charge | ■ Teachers Diary Verification Committee |
| ■ Environmental Education | ■ Digital Classroom Committee |
| ■ Disciplinary Committee | ■ Student Welfare Committee |
| ■ Day-wise In-charges | ■ Academic Plan Committee |
| ■ Staff Daily Biometric Attendance Record | ■ RTI Cell |
| ■ Research Committee | ■ Student Council |

6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following

Teaching and Learning :

One of the strategies for quality improvement in teaching and learning is to make the learning more student-centric. The Feedback committee frequently collects and analyses the feedback of students on the quality of teaching-learning and provides some suggestions for the improvement.

- Internet facility for students
- Exposure of Students to short term projects.
- Concept of "Add-On" practical for some basic science subjects that focus on
- Skill enhancement of the student.



- Guest lectures / Seminars/workshops for students.
- Integration of field studies with practical.
- Faculty development through training at Centre of Higher Learning and Excellence
- Facilities like N-LIST for teachers.
- Platform for interaction with Industry

Research and Development:

The college has 05 post-graduate programs. One of the important strategies of the college is to identify budding researchers from teachers and the students and provide the resources as well as seed money to implement their research ideas.

Other initiatives to improve the quality of research and development in the college are as follows :

- Generating awareness amongst the researchers and providing support related to various proposal formats of different funding agencies, budget, purchases of equipment and material under research schemes, account and audit of project expenditure, any additional infrastructure requirements of the researcher etc.
- Help all the teachers/ researchers in understanding recent updates of their publications in terms of citation index, h-index, etc.,
- Looking after the Central instrumentation facility for all researchers (high end instruments)
- Collaborating/partnering with research institutes/ laboratories like University departments etc., for student projects and teacher projects.
- Partnering with industries.

Community Engagement:

The vision of the founders of the college is the torch bearer for all the teachers and students – viz. using the power of knowledge for the benefit of society. The college always looks for opportunities to modify and improve the extra-curricular/extension activities for the benefit of the community. Some of the initiatives in this direction are as follows:

- Conduction of Social Outreach Activities dedicated for conducting and addressing social issues and community networking.
- Learning about communities and social issues through field based surveys.
- Providing necessary support in terms of infrastructure and finance for such kind of engagements.
- Publication of reports based on surveys and audits.
- Collaborate with NGOs for community engagement.
- NSS unit organizes a College level camp in a nearby adopted village Dhakni. As a part of the camp, students conduct surveys related to rural development, drinking water, health, girl - child education, socioeconomic studies etc.
- Students from NCC, NSS and other volunteer groups conduct several programs for the benefit of the society like Blood donation camp, Aids awareness, Gender sensitivity, Anti-ragging etc.



Human Resource Management:

The success of any organization is dependent on the quality of the Human Resources. College management has given priority to identifying persons with exceptional qualities and giving them opportunities to maximize their performance to meet the strategic objectives.

- Recruitment is in compliance with UGC, University and State Government rules.
- Regular performance appraisal of teaching and non-teaching staff is done.
- Training is arranged for teaching as well as non-teaching staff.

Industry Interaction:

To bridge the gap between theory and practice, Industry-Interaction cell has been established by the college as a part of quality improvement strategy. Some of the initiatives in this direction are:

- Regular interactive sessions with industry/experts for understanding industry needs.
- Face to face / Panel discussions between the students, teachers and industry experts to know the current scenario and recent developments in particular industries (especially for computer science and life sciences).
- On-Site visit to industries to understand the process followed in the industry.
- Facilitate activity of working on live projects for computer science students.
- Guest lectures/ special courses for students with the help of Industry experts.

6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

- The Principal ensures that adequate information is communicated to the top management and stakeholders.
- The Principal collects information through various meetings like forum of heads, IQAC, as well as from the minutes of meetings of different statutory/non-statutory committees.
- This information is placed before the local management committee of the college.
- The college uses the data and information obtained from the feedback in decision making and performance improvement.
- This is obtained through questionnaires given to students and staff members of the college on academic as well as on campus experience.
- A team of teachers takes review with reference to requirements of every department, and gives a feedback to the Principal, who presents this to the LMC for appropriate action.
- Developments in the college are also communicated to the parents and alumni during their meetings. Suggestion Boxes are placed at prominent locations in the campus.
- This is a continuous source of suggestions for improvement of infrastructure and services. The concerned sections/departments/persons are informed about their feedback for improvement or for encouragement and appreciation.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

- The staff is entrusted the responsibility for different tasks such as college admissions,



examinations, document verifications, for scholarships, Rail/bus concessions as well as handling the university/government correspondence.

- In addition to the involvement of faculty members in the various academic and administrative committees, there is always a representation and support of the non teaching staff for all these activities.
- Staff awards are given every year for their valuable contributions.
- The teaching and non-teaching staff are always felicitated for any special achievement during staff meetings.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

Local Management Council in previous minutes resolved that -

- Digitization of Classrooms.
- Floor Tiles in Classroom and veranda as part of renovation.
- Rearranging PG reading room.
- Granite flooring in various places.
- The confidential report of Teaching & Non-Teaching staff.
- Monitoring on Late comers
- To monitor good results and placement of students.
- To start B.Voc. & Community College program of UGC
- To seek permission from university to admit additional students.
- Purchase of library books to meet out additional requirement.
- To Conduct Soft Skill & Communication development programmes
- To establish linkages with industries
- To establish centre for higher learning and research
- To get CPE status to the college

6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?

Yes, University have a provision of Autonomy for Institution and college works accordingly.

6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

The Governing Body formed a committee to address grievances /complaints and resolve them This committee addresses grievances of both teaching and non-teaching staff. The mechanism to handle grievances by the Grievance Redressal Committee is :

- Receive the grievance from Head of the Institute.
- Take cognizance of the grievance (s).
- Settle the grievances within stipulated time.
- Report it to the Management.



6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

No, there is no instances of court cases filed by and against the institution

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?

Yes, the IQAC has well defined feedback Mechanism on teaching. This feedback is taken at the end of each semester and for all the programs. There is a well-established mechanism to implement this activity. The parameters on which the teachers are assessed are:

- Communication Skills, Quality of teaching, Content and Method of Delivery, Resourcefulness and Readiness, Accessibility and Availability to students.
- Report generated analyzed by the IQAC which then arranges an interaction meeting with the teachers and seeks improvement in their classroom performance.
- IQAC has been taking feedback from teachers on various aspects like performance of the various Committees, suggestions for improvement in the "Teachers' Diary", reviewing the requirements (with regard to infrastructure in general, equipment etc.,) that have helped in avoiding duplication of facilities and has also helped in maintenance of instruments/ equipment.
- On line feedback from alumni is also obtained through web portal. Written feedback/compliances from students are also sought and considered significantly. The establishment of Canteen, conduction of 'Fresher' programme, and some other facilities are the outcome of such feedback.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

The institution makes deliberate efforts to enhance professional skills of its teaching and non teaching staff.

- This is achieved by organizing In-House training programs for teachers as well as deputing teachers for training at Centers of Higher Learning and Excellence.
- This has been a routine practice of the college Administration and Management. The college grants special study leave for teachers who wish to avail training programs at various institutions/centers/universities and Research Laboratories.
- Non-Teaching: staff members are skilled with ICT, handling of new and delicate instruments, training for generator and other machineries through experts.
- Various sessions for student and scholarship sections are conducted for jointly with RTM Nagpur University and Govt. of Maharashtra. Training workshops are conducted for Government programs like AISHE & MIS
- Delegated the staff for faculty development programme
Encouraged the staff members for attending international conferences abroad
- Training to the staff to handle interactive board, DLP unit is provided
- Work shop for non-teaching staff is organized for computer proficiency



6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

The college has identified the importance of faculty empowerment strategy for the pursuit of excellence. It follows the following strategies:

- Collect information on the developmental needs and aspirations of the faculty/staff
- Identify training/retraining the employees as per needs
- Motivate them to do better in their roles
- Reward the best performers every year.

The college makes it sure to provide the necessary training, retraining and motivation to staff through following initiatives.

- Faculty members are deputed to participate in professional development courses
- Newly appointed teachers are motivated to participate in national level seminars, conferences and workshops.
- Staff are promoted to apply for research funding and publish their research work in peer reviewed journals
- Teachers are encouraged to take maximum advantage of research collaborations developed by college for their professional development.
- Staff are promoted to work as experts, resource persons
- Staff are encouraged to use e-resources using N-LIST (INFLIBNET) and they are provided necessary training to access e-content.
- Staff is encouraged to contribute in various University work such as paper setting, syllabus restructuring, paper assessment etc.
- Organization of Faculty Development Workshop/ Special Training program for teachers
- Experts from academics are invited for interaction with the teachers.
- Meetings, informal discussions, interaction between teachers of different disciplines, interdisciplinary seminars and conferences motivate the teachers about their roles and responsibilities.

6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal

- The college follows the "Performance Based Assessment System" (PBAS) of UGC as prescribed in its regulations of June 2009.
- The university has developed an "Academic Performance Indicator" (API) system which is based on PBAS System developed by the UGC.
- The college IQAC addresses all the issues related to appraisal system of the staff and regularly evaluates it and then forwards it to the University authorities for final validation of API Scores.
- At the end of session, every teacher submits his/her duly filled PBAS and CR along with supporting documents to the IQAC.



- The IQAC scrutinizes and assigns scores under various categories.
- These scores are compiled and presented to the University authorities at the time of its validation under Career Advancement Scheme (CAS).
- The IQAC of the college has developed a well-defined mechanism for collecting this information, scrutinizing it and storing it. It also acts as a guidance cell for all queries regarding the API system.
- The teacher's diary developed by the IQAC gives clear information of all academic, co curricular and extracurricular contributions teachers.
- For Teaching and non-teaching staff there is a mechanism of confidential report (CR) framed by institution.

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

The outcome of the review of PBAS for all teachers leads to a better understanding of:

- Role of a teacher and his/her contribution to the development of the Institution/ College.
- Use of teaching methods/ methodology followed in the teaching, aids used in teaching, quality of course material and conduct of lectures and practical (term wise)
- It also focuses on the research caliber of the teacher, which is evident through types and number of research projects, quality of research publications/ etc.
- A final report on the appraisal process for each teacher is communicated to the Principal/ Management who jointly take a decision on whether the case has to be forwarded to the university or withheld under Career Advancement Scheme.

6.3.5 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

There are welfare schemes available for teaching and non-teaching staff, which are as follows:

- Availability of financial support through Dhote Bandhu Science College Credit Cooperative Society (Patha pedhi). Financial support is offered as Emergency Loan, Educational Loan, long term loan and Insurance protection to Nominee. Year-wise number of beneficiaries under various schemes availed by staff is given below.

Table No. 6.1: Beneficiaries under various schemes

Financial Scheme	2011-12	2012-13	2013-14	2014-15	2015-16
Long term Loan	54	52	56	51	48
Education Loan	16	18	19	16	17
Emergency Loan	31	24	31	29	32

- Facility of Group Medical Insurance, EPF and Gratuity Fund for regular staff in the college.
- Provision of Employer Welfare Fund Savings Scheme by Credit Cooperative Society.
- Recognition to wards of staff for holding higher ranks in examinations.
- College provides facility of Medical reimbursement as per Govt. Norms.



- Facility for Leave Travel Concessions are also admissible
- Group medical insurance is available for staff.
- Discounts are given in fees for the wards of needy staff members.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

Dhote Bandhu Science College, is well known in the region for rendering outstanding Science education since from 40 years. Our college is first to be accredited with NAAC's 'A' grade in Gondia district. It is only college with adjectives : **College with Potential for Excellence (CPE), Centre for Higher Learning and Research, Community College of UGC and B.Voc. centre among those affiliated to RTM Nagpur University.**

We follow professionalism approach and adhere to recruitment policy as defined by UGC, State Government. Preference is always given to highly qualified and outstanding candidates.

Committed Management, staff, vibrant atmosphere, autonomy, research culture, research facility, recognized research guides and laboratories, dynamic student population and opportunity to explore newer vistas are few of our strengths that provide an atmosphere favorable for life long growth. The tradition of excellence fostered by the college and its glorious heritage are a major source for attracting prospective faculty members.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

- The college is managed by Gondia Education Society. GES has a well formulated financial policy which ensures that the annual budget is prepared well in advance after taking into consideration the requirements of every institute and department.
- Every department is expected to provide a list of requirements such as equipment, computers, instruments as well as consumables required for the next academic session.
- Budget is reviewed by a team of finance experts from GES who approve the same after necessary changes, and if necessary, GES makes a provision for advance/ additional funds wherever needed.
- The Principal and Member (LMC), and the accountant are in charge of managing the financial resources effectively.
- The planning board and the LMC work on the requirements and decides the priorities while allotting financial resources.
- The LMC and finance committee studies the annual expenditure, scrutinizes the budget and provides feedback for efficient use of financial resources.
- A purchase committee ensures that the correct equipment with the right specifications is procured at the best prices.

6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

College conducts audits at various levels



- Academic audit-inviting experts to assess academic performance
- Financial audit carried out by Chartered accountant hired by institution
- Government level audit as per norm conducted every year
- Minor suggestions are noted, the compliance are made by institution.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

Major sources of funding

- The major source of institutional receipts is the grant in aid received from the state government for salary and non-salary expenditure of Grantable section.
- The college is also entitled to utilize some part of student fees, as per rules, for meeting routine non-salary expenses.
- For self-financed courses the major source of receipt is Students' Educational Fees and the deficit is managed by GES.
- College also receives UGC plan development grants for several co-curricular and extra curricular activities and instruments, books and journal purchases for UG and PG.
- Funds for Research Projects, Seminar/ Conferences, INSPIRE Camp of DST

Audited income and expenditure statements will be made available during NAAC-Peer team visit.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

The College seeks additional funding through following means.

- Grants received through UGC schemes.
- Grants received through major and minor research projects funded by UGC.
- Grants received for organization of seminars and conferences from UGC, MNRE etc.
- Grants from DST for INSPIRE Camp.
- Grants received for B.Voc. programme and Community college scheme of UGC.

The details of grants received through UGC under XI and XII Plan Scheme from 2010-11 are given below.

Table No.6.2: Details of grants received through UGC

Sr. No.	Grants Received during XI Plan Period	2010-11
1	Additional Grant	2250000
2	Sports Equipment Grant	400000
3	Career Oriented Program -	700000
4	Merged Scheme XI Plan	2390000
	Total (In Rs.)	5740000



Sr. No.	Grants Received during XI Plan Period	2011-12
1	Building Grant - Merged Scheme	275000
2	Merged Scheme XI Plan	120000
3	Merged Scheme - Furniture	100000
4	Human Rights Education	235000
5	Basic Scientific Research Grant	1000000
6	XI Plan - Building Grant	800000
7	MRP Grant - Dr. K M Hatzade	125000
8	MRP Grant - Dr. M R Patle	125000
9	MRP Grant - Dr. M V Kawade	80000
10	MRP Grant - Dr. S B Narde	125000
	Total (In Rs.)	2985000
Sr. No.	Grants Received during XII Plan Period	2012-13
1	XII Plan Adhoc Grant	568750
2	Seminar Grant - Zoology	82500
3	Additional Assistance Balance Grant I Team	250000
4	XI Plan Merged Scheme Balance Grant	375000
5	Symposia on H.R.E.	60000
6	Additional Grant II Term Phase II (1st. Inst.)	1250000
7	MRP Grant - Prof. D A Chouhan	134500
8	Seminar Grant - Botany	112500
9	Seminar Grant - Chemistry	90000
10	Seminar Grant - Microbiology	97500
11	Seminar Grant - Physics	70313
12	Seminar Balance Grant	6000
13	MRP Grant - Prof. Y. S. Bopche	155000
14	Travel Grant - Dr. J. G. Mahakhode	102664
	Total (In Rs.)	3354727
Sr. No.	Grants Received during XII Plan Period	2013-14
1	Seminar Balance Grant - Botany	37500
2	Seminar Balance Grant - Chemistry	30000
3	Seminar Balance Grant - Physics	23437
4	Seminar Grant - Quality Sustenance	88500
5	IQAC Grant	300000
6	XII Plan Grant	640000
	Total (In Rs.)	1119437



Sr. No.	Grants Received during XII Plan Period	2014-15
1	MRP Grant - Dr. D. S. Choudhary	185000
2	Seminar Grant From MNRE (Ministry of Non-Renewable Energy)	50000
3	Seminar Grant - Mathematics	46875
4	Seminar Grant - Microbiology	69750
5	Seminar Grant - Chemistry	65625
6	Seminar Grant - Electronics	67500
7	Sports Equipment Non Expd. - Balance Grant	100000
8	Additional Grant II Term Phase II (2nd Inst.)	1250000
9	Community College Scheme	2100000
10	B. Voc.	6500000

6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

Yes, the Internal Quality Assurance Cell (IQAC) was established on July 2005. IQAC plays an instrumental role in designing/ framing and implementing the policies plan of the college.

IQAC helps to sustain quality within every sphere of activity held in college campus. Our policies with regard to quality assurance are as below.

- To take appropriate steps for initiate need based courses, mobilization of funding for growth of academics, student support services, research infrastructure etc.
- Developing teaching-learning process through integration of traditional and modern approaches for effective delivery of curriculum.
- To promote use of ICT tools and simultaneously encouraging student centric approach through participative learning.
- Developing Research and Infrastructure facility.
- To promote student participation in extra-curricular, cultural and research activities for flourishing their innate talent.
- To build a sense of belongingness to society through involvement of students in social and extension activities.
- To strengthen support mechanism for needy and poor students through welfare scheme.
- To promote use of infrastructural facility optimally.

The policies have contributed in sustaining quality and have helped in identifying our strengths and future challenges. This has resulted in –

- Identification of college as College with potential for Excellence by UGC.
- There is increased resource mobilization through major, minor research projects and the college recognized as Centre for Higher Learning and Research of RTM Nagpur University.



- The overall quality assurance process has helped in strengthening of academics through initiation of newer under graduate B.Voc. programme, Career Oriented Certificate courses, skill based courses under Community College Scheme of UGC.
 - Smoother functioning of academic and administrative structure of college.
 - Increased research output and enhanced research publications in peer reviewed journals.
 - Faculty participation in orientation, refresher, summer/winter training and short term courses has been doubled
 - Developed and followed innovative teaching methods with reasonable use of ICT.
 - Well established laboratories with state-of-the art facility has helped in peaking of research culture among staff and students.
 - Increased awareness on use of e-content, resources and sharing of in-house library resources.
- b. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?**
- The college IQAC and the Management interact regularly with regard to academics as well administration. Some of the decisions approved by the management and implemented are as follows:
- Initialization of skill based degree course B. Voc., Certificate/Diploma course under Community College Scheme of UGC.
 - Approaching for CPE
 - Establishment of Research Centre
 - Initialization of ICT based teaching by establishing smart class rooms.
 - Organisation of National Conferences on quality sustenance, quality skill development.
 - Initialization of teacher's diary and academic audit for all.
 - Feedback system on teaching for all programs and recent implementation of on-line feedback system on teaching.
 - Major and minor infrastructural changes in science laboratories for their effective utilization.
 - Reformation in administrative processes with regard to special leave/ study leave, submission of research projects, settlement of accounts and auditing, purchases to be made through research schemes and other grants/ schemes, import of equipment, obtaining custom exemption from the university, liaison with custom clearing agents, vendors/ suppliers of equipment.
 - Acceptance of specific processes followed by IQAC with special reference to scrutiny and validation of PBAS scores of teachers.
 - Celebration of 'Achievers' Day' for Felicitating the meritorious students.
- c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

Yes, following external members are represented on IQAC. Their contribution is tabulated below.

**Table No. 6.3. : External members on IQAC and their Contribution**

External members on IQAC	Significant Contribution
Dr. Vijay Gandhewar DGM (Training), Adani Power Maharashtra Ltd. Tirora	Initialization of Skill based certificate course in Power Plant Chemistry by means of designing its need based curricula, internship to the students, industrial visit to the student, Placement, MoU Resource Person in National Conference on Quality Sustenance in HEIs.
Shri. Mahendra Thakur Managing Director of Ruchi Biofertilisers, Gondia	Initialization of Career Oriented Programmes in Biofertilisers and Bio pesticides by means of designing its need based curricula, student visit to plant, Placement, Training sessions.
Dr. P. N. Bagga (Physician and Surgeon), Secretary, Alumni Association, D.B. science College, Gondia	Co-ordinates Alumini Meet

The inputs received from external members have helped us in establishing Industry-Academia link.

d. How do students and alumni contribute to the effective functioning of the IQAC?

Students and alumni are included as members in the functioning of IQAC Cell. Secretary of Students' Council is included as student representative. Shri. Mahendra Thakur Dr. P. N. Bagga, alumni of college are the member of IQAC. Alumni members helped us in providing feedback on functioning of college. This feedback is shared with the Principal and Management, which has helped enhancement of services and facilities. Many of our alumni are invited to deliver expert talks and interactions.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

IQAC communicates and engages staff through various college level committees and Cells. IQAC keeps a track of activities organized in the college through Academic Calender and periodic meets with coordinators of various committees in presence of Hon. Principal. These meetings serve to communicate academic, administrative, extension and social outreach activities organized in the college and important matters are addressed for successful implementation of these activities. Administrative matters are taken with priority and IQAC has taken lead in communicating important matters with college Management. IQAC takes steps for timely analysis of PBAS to generate API scores necessary for academic promotion of staff members. Also maintains a close association with Office staff and supports the office with regard to Accounts and Audit, providing data on various aspects of the college, helping in understanding the MIS of government agencies, and maintain documented institutional records for appropriate measures.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalization.

Yes, and details of the integrated framework and quality assurance are as follows:



- Internal coordination of various activities of the college is done through Heads of Department.
- Certain issues needing wider consultations and deliberations are sorted out either in the meetings of the Advisory/LMC.
- The IQAC meets regularly to take stock of academic and administrative matters to ensure monitoring of the programs, and to ensure sustenance and enhancement of the quality of higher education as stipulated by the NAAC.
- The college LMC guides in planning, monitoring and evaluation mechanisms regarding academic and administrative processes as per the Maharashtra Universities Act, 1994.
- Heads of Departments prepare Academic and Activity Calendar at the beginning of each term/year. Internal Departmental Committees take all the necessary steps/actions for successful implementation of the plan/decisions and provide feedback to the Forum for monitoring the activities.

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

Yes, the college provides training to its staff for effective implementation of quality assurance procedures. Some of the activities are as follows:

- Training related to specific use of software for library, management and uploading of content on the college website, effective use of ERP etc.,
- Use of intra-net server for storing department information and course material.
- Training for non teaching staff with regard to laboratory procedures, safety in laboratory, yoga and health for all.
- Workshops/ interactive sessions on revised guidelines of UGC and State Government with special reference to filling of PBAS and API forms, calculation of scores and overall process followed by the college and University.
- National Conferences are organized on Quality Sustenance in HEIs (16-17Aug. 2012) and on Quality skill development initiatives in HEIs (13-14 March, 2014) as the measures of quality assurance procedures.



Dignitaries during the National Conferences, National Symposium, Felicitation Programme, Consultation Meet and many more organized by IQAC



6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

Yes, the College IQAC undertakes the process of Academic Auditing to identify Strengths, Weaknesses, Opportunities and Challenges of departments. External agencies like LEC for affiliation of course from University, NAAC Peer Team and University deputed Committee for Academic and Administrative Auditing have conducted auditing of various components of college.

Hon. Principal of the college takes adequate steps to address the issues coming out of auditing mechanism. The outcome of such an auditing process is overall strengthening and efforts for continuous sustenance of quality.

6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The internal quality assurance mechanisms are aligned with those of external agencies like NAAC, University LEC, Government agencies like Department of Higher Education etc. through their notices and circulars. The suggestions and recommendations made by such committees are communicated to Principal and concerned staff members for implementation. Details are as follows.

- Implementation of “Teacher's Diary” and “Academic Audit”, which are used for assessing teachers' yearly appraisal.
- Formation of committees/groups, especially for implementation of schemes under UGC, DST for better utilization of funds/grants.
- Planning of academic activities like conferences/ seminars and their requirements (financial) as per the budget heads mentioned in the respective funding agencies.
- Streamlining Purchase procedure for purchases that are to be made under various schemes.
- Sustained efforts for going beyond the curriculum by implementing the concept of “add-on” practical and skill development for undergraduate students, with focus on strengthening undergraduate science education.
- Introduction of innovative concepts like Earn while learning
- Development of course material in the form of e-resources, and using it for classroom teaching.
- Participative teaching methodology is followed in teaching-learning process.

6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

The following steps are taken by the institution to review teaching learning process:

- Preparation of Academic and Activity Calendar
- Preparation and execution of teaching plan
- Calculation of number of lectures/practical available in each term for effective delivery of course content.
- Time table preparation and daily entry of academic activities in teachers' diary.
- Periodic review of syllabus in departmental meetings.
- Deliberations with Coordinators and Heads of various departments during term end meetings on completion of theory and practical curricula.



6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders? Any other relevant information regarding Governance Leadership and Management which the college would like to include.

The institution communicates its quality assurance policies, mechanism and outcomes to stakeholders through :

- Prospectus, brochures and pamphlets
- College website
- Meetings with parent, alumni and external stakeholders
- Interactions with external participants in national conferences
- Meetings organized with coordinators of various college committees
- Meetings and discussions held with Management and Governing Body members
- Publications, discussions and writings appearing in local and national dailies on various events held annually in college.
- Special meetings of heads of department
- Notice/ Circulars/ E-mails to respective departments/ units of the college.



Criteria- VII Innovations and Best Practices

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Yes, the College conducts a Green Audit of its campus and facilities.

Green Audit of the campus is held in the college to improve the environmental conditions with the help of NSS and Eco-club. The Audit observed the following environmental impacts:

Energy conservation, renewable energy, water harvesting, check dam construction, efforts for carbon neutrality, plantation, hazardous waste management and e-waste management.

Enclosed green audit questionnaire in **ANNEXURE: 7.1**

The audit is done in two phases.

Audit : The College has been conducting Green Audit since 2015, on a yearly basis.

Post-Audit : The College (Internal Green Audit Team) reviews environment related initiatives that are implemented. It formulates the action plan for the next academic year in order to have better environmental sensitization.

The internal audit report was positive, reflecting the green initiatives that the College has taken on campus, but also presented recommendations to improve the College's performance. Implementation of these recommendations requires capital expenses that would have to be justified based either on financial return or solely on environmental benefits. The major suggestions of the green audit team to the institution were to have solar panels, a rain water harvesting unit for water conservation and a vermi-composting unit for environment protection.

7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

The college certainly takes some initiatives for creating Eco-friendly environment. The college is enriched by beautiful trees and plants. The landscape of college campus is very peaceful and eco friendly. There have been special efforts and contributions by the faculty members and students to maintain the aesthetic beauty of the campus.

The following are the major environmental initiatives undertaken by the college to maintain the environment pleasant and keep it less-polluted.

Energy Conservation

The college puts efforts to minimize consumption of energy for energy conservation in the campus. The college currently purchased all of its electricity from Maharashtra State Electricity Board. The following table show the energy usages observed from April 2015 to September 2015.

S. No.	Month	Energy usages (Billing Units)	Billing Amount (Rs)
1	April 2015	4460	49280.00
2	May 2015	4685	49370.00
3	June 2015	4010	40320.00
4	July 2015	—	—
5	Aug. 2015	5549	109410.00
6	Sept. 2015	6825	83330.00



To minimize the energy usages (conservation of electricity) in campus, following efforts are made by college,

- The members of faculty are advised to consume energy economically in staff rooms, class rooms, and laboratories
- Energy consumption in classrooms, laboratories, auditorium, corridors, is closely monitored by turning off power during the day and immediately after classes get over.
- The lights and fans are switched off by floor peons and staff after completion of the last lecture of the day.
- All the ACs are with Five star rating in Power saving.
- Maximum utilization of natural light is done to cut down usage of power in classrooms, laboratories, corridors and labs.
- Classrooms and laboratories are well-ventilated with glass window to maximize natural lighting, and to reduce the dependence on artificial lighting or fans.
- Energy saving fans are used in the college.
- CFL, LED bulbs and tube lights are used in the college by replacing high energy consuming incandescent ordinary bulbs and tube lights for reducing power consumption and for economic benefits. Formerly, ordinary bulbs and tube lights were fitted in the college. In stages, these were replaced with CFL fittings. The compact fluorescent lamps (CFLs) are used as they use one-fifth the energy of conventional tungsten bulbs while giving the same output, reducing CO₂ emissions, and lasting 9,000 + hours longer than incandescent bulbs. There is reduced energy consumption and lower emission of heat, reducing cooling requirements.
- As the latest technology to save electrical power, the LED fittings in office are fixed with 2 years replacement warranty.
From Physics laboratory, corridor lighting tubes are removed, and access to natural light is made from the ceiling.
- The use of Air-conditioners is also minimized by restricting their use to only those rooms in which it is absolutely essential.
- An electrical audit was carried out by the person authorized by MSEB to assess the load bearing capacity of the existing wiring. This led to a total overhaul of the same including change of meters, cables, wiring and fittings.
- Purchase of Eco-friendly computers (with one server), replacing the CRT monitors with LCD / LED monitors, most of the computer peripherals are modernized and updated, are some of the measures towards energy conservation.

The Institute is run by conventional energy resource, but every possible measure has been adopted to reduce wastage of electricity and to conserve energy. It is institution's commitment towards energy conservation.

Use of Renewable Energy :

Renewable Energy Initiative taken by college are -

- It is a recommendation of green audit committee to install solar panels in order to use renewable energy for lighting and heating.

- The College is planning to install solar panels for street lighting the entire campus so as to reduce energy demand.
- The college organized a UGC and Ministry of new and renewable energy resources sponsored National Conference entitled “Indigenous sources of renewable energy” on 9th March 2013 to provide opportunities to the students to update their knowledge in solar technologies.



Dignitaries on the dais on the occasion of National Seminar, and a view of the research poster competition involving students.

Water Harvesting

- In the institution, near drinking water facilities, the message “Save Power, Save Water” is displayed to create awareness and a sense of responsibility.
- Gondia water supply authority maintains a water filtration plant that filters water.
- The College gets its water from the Gondia water supply scheme and groundwater from two bore wells. One bore well is located in the botanical garden, and the second is located at the entrance.
- The College purchases its drinking water from the Gondia water supply scheme. Drinking water is further treated at the college campus using RO filter.
- The drinking water from RO plant in the campus is being analyzed by the Microbiology department thrice in a year and it is counter-checked for quality by the District Public Health Laboratory, Gondia (Water quality audit). We display updates of the drinking water quality.
- The following tables show the usages of water from Gondia water supply authority that has been observed from April 2015 to September 2015.

**Table No. 7.2 : Water usage at College**

S. No.	Month	Water usages (Billing Units)	Billing Amount (Rs)
1	April 2015	200	6616.00
2	May 2015		
3	June 2015	196	6484.00
4	July 2015		
5	Aug. 2015	216	7132.00
6	Sept. 2015		

Total water use does not exceed 1224 units per year.

To minimize the water usages following efforts are made by college-

- Auto cut off taps are installed in urinals and at drinking water platform to minimize water losses, which in turn saves money.
- Water pipes and taps are regularly checked and leaks were regularly repaired by a building maintenance committee to avoid leakage and waste of water (water conservation).
- Water harvesting is a global demand due to the scarcity of water. The Green Audit Committee has also recommended the installation of Rain Water Harvesting unit to satisfy the large need of water for the maintenance of the college lawn.
- In this context the college has planned to set up rain water harvesting within the campus for recharging of the existing bore well, even though college has sufficient amount of water for plantation purposes.
- By taking up this project, the college administration will serve the dual purpose of education and environmental improvement.
- To promote the concept of rain water harvesting in villagers, the college had organized a guest lecture by Dr. Asati, Associate Professor in Civil Engineering of MIET, Gondia on "rain water harvesting" on 28th February, 2015 at Grampanchayat Hall, Shaharwani
- Villagers are sensitized through a street play, about the need for saving water and using it economically.



Street play of the students at Village Dhakni

**Check dam construction**

There is no opportunity for creating a check dam since there is not much runoff water originating from the college campus. The college is surrounded by an agricultural farm, which soaks up most of the rain water.

Efforts for Carbon Neutrality

The following measures have been taken to reduce carbon emission to keep the campus, pollution-free and uncontaminated.

- The college maintains a lush green lawn and a large number of plants. The number of plant (plantation) in the campus helps to achieve carbon neutrality. Carbon capture is done by way of a number of trees and plants (plantation) in and around the building which houses the class rooms, admin block etc. This plantation also serves as a Carbon Sink. The purpose is also served through planting saplings in the campus. The college has an 'Eco-club' and NSS unit that functions actively in making the campus green.
- The College makes the student aware of Carbon Credits, Carbon Neutrality etc by giving assignments to students through Environmental Studies in the first year programs. Students are encouraged to go through magazines like Down to Earth, Science Reporter, etc to get knowledge on Environment.
- To reduce Carbon content in the air, the laboratories and canteens are fitted with LPG cylinders. LPG is used in laboratories and for cooking as it is carbon-neutral. To reduce the use of wood, many classrooms have steel benches and/ or modular furniture. This step is intended to save the trees, which are cut for wood, leading to Carbon Neutrality.
- CFC free AC and refrigerators are in use in college to minimize global warming, leading to Carbon Neutrality.
- The college sells its wastepaper for recycling. This step is intended to save trees, which are cut for making fresh paper, leading to Carbon Neutrality.
- Many teachers and students are switching to the electronic texting method of communication to exchange information of any kind. Modern gadgets like smart phones, INTERNET etc. are proving to be a good medium. This helps to reduce our Carbon footprints.

Plantation

- The college is environment conscious and has done sufficient plantations, developed botanical garden blooming with lawn and a lush green lawn in the campus. The college campus looks green and beautiful because of the sufficient plantations, developed botanical garden and lush green lawn. The garden is covered with stone lime pathways axing. The garden and lawn is watered by sprinkler irrigation system.
- The green ambience of the college is largely due to tree plantation.
- The trees in the college campus, lawn and the garden have helped in keeping the environment pleasant, & less-polluted. The flower yielding trees in the Campus not only add to the beauty of the surroundings but also attract and support a variety of insects and birds.
- The college has planted a number of trees with botanical names, with active support from the Botany department.



Table No. 7.3: List of Trees on the Campus

Botanical name	Number of plant	Botanical name	Number of plant
Spathodeacompanulata	18	Acacia nilotica	01
Azadilachtaindica	02	Aeglemarmelos	01
Saracaasoca	03	Callistemon sp.	01
Polyalthialongifolia	05	Thevetiapuruviana	02
Alstoniascholaris	13	Mangiferaindica	05
Cocosnucifera	07	Bauhinia purpurea	05
Caryotamitis	18	Mimusopselengi	01
Eucalyptus regnas	04	Albizialebbek	04
Anthocephaluscadamba	10	Tabubea sp.	15

The College encourage people to make our surroundings green by holding following programs in and outside the campus through its various cells.

- NSS wings clean the garden and plant many tree saplings on the campus to maintain a green atmosphere and improve environment consciousness.
- The NSS volunteers plant tree saplings in the school campus of villages. To enlight young minds with the concept of sustainability.
- Saplings of plants are given as gifts to the guests who visit NSS wing and in inaugural ceremony of Eco-club activities to promote environmental awareness and thereby encourage people to make our surroundings green.



Plantation of saplings in school campus of village Dhakni



Sapling of plant is given as gifts to the guest Radhika Kokate (PSI)

- Above all, to promote environmental consciousness, the Department of Botany organized UGC sponsored national seminars on "Effect of climatic changes on biodiversity" and Department of Zoology organized national seminar on "Bio-resource conservation" in 2013. The conference was attended by eminent delegates and persons who discussed climate related issues and presented papers on the varied sub-themes.
- An exhibition was organised on photographs of fauna of Nagzira wild life sanctuary on 27th January 2013.



Inauguration and Exhibition during National Seminar on Biodiversity

Hazardous Waste Management

Regular monitoring by the management as well as students ensures cleanliness in classrooms, washrooms as well as areas, in and around the college campus. The college disposes the waste material without causing harm to the nearby people.

The following procedures are adopted by the college for management of waste

- The Chemicals used in laboratories are carefully drained out after proper treatment.
- In the chemistry laboratory, strong solutions that are used are neutralized before their disposal. Appropriate measures are taken to dispose of toxic wastes.
- Biological wastes from biological laboratories are autoclaved and rendered harmless before disposal.
- The College has devised a unique system of segregation of the solid waste other than food and organic waste. Different colored bins are allocated for collection of different type of waste i.e. Recyclable, non-recyclable and compost-able waste. This is a very good measure as it helps in segregating waste at the source itself.
 - Green colored bins are used for storing recyclable wastes such as plastic bottles.
 - Red colored bins are used for storing compost-able wastes such as food waste and organic waste which can then be put into the composting process.



- Brown colored bins are used for storing non-recyclable wastes such as plastic wrappers.

Students are also advised to adhere to this norm of garbage segregation. At the beginning of the academic year the fresher are sensitized regarding the importance of waste segregation and their role in maintaining a clean environment.

- Biodegradable wastes are disposed off through Municipal Corporation machinery.

The Green audit committee suggested for introducing eco-friendly vermi-composting unit as a solid waste disposal technology. The Grass cuttings in the campus can be used for producing organic manure. The rich natural manure that will be generated can be used for the plants in the garden. The Green audit committee feels that it is important to reduce the amount of waste it sends to the town landfill. Composting also lowers the amount of fertilizer the college purchases for use on athletic fields and campus gardens.

- Plastics and other non-degradable wastes are disposed through scrap dealing agencies for recycling. As far as possible, the institute tries to inculcate the sense of 3 R's: Restoration, Recycling and Reuse principles in the students and the staff to minimize waste generation.

- "Ban Plastic Day" was observed to create awareness about ill effects of using plastic on the environment.

- The canteen in the college is instructed to use only paper cups for serving beverages.

- With a concern for clean environment, the college has been supporting the "Wealth out of Waste" (WOW) initiative by organizing "Art out of waste competition".

- With a belief in the concept of 'Reduce, Reuse and Recycle' to save natural resources, the college collects old books, news-papers, magazines and loose papers from the library as well as office and periodically sends them for recycling. Payment is also received against the quantity of paper supplied. This initiative is a small contribution towards conservation of natural resources, energy conservation and environment protection.

- The NSS volunteers of the college are also engaged in activities related to environment issues. For example, they participated in SWATCH BHARAT ABHIYAN, a cleanliness drive started by Shri. Narendra Modi, the Prime Minister of India, in which they cleaned the streets. The program was organized in association with Daynik Bhaskar News paper group, Gondia.



Swatch Bharat Abhiyan

- The College has an active Eco-Club which regularly conducts awareness programs to sensitize students about environment issues.
- The Department of Eco-club has introduced and campaigned about the benefits of the use of an Eco Ganesha instead of colored idols. Eco friendly Ganesh idols are made of biodegradable material, and hence cause no harm to water ecosystem.
- Environmental science students in collaboration with Satpuda foundation celebrated "World Wild Life Week" on 7th October, 2016.

E-Waste management

Efforts have been directed towards safety and environment friendly appropriate methods of disposing devices and materials from electronics, computer labs and other areas.

- Electronic goods are put to optimum use and minor repairs are conducted by the staff and laboratory assistants. Major repairs are done by professional technicians to enable reuse.
- As the college is using computers since 20 years, there is a high number of computers and peripherals that become unusable due to frequent use. Disposal of such waste is inevitable, and such items are sold to scrap merchants and are replaced with new ones.
- Non-working computers, monitors and printers are disposed through auction to the outside agency. Parts that can still be used are used in other systems or are kept aside for future use. This is an eco-friendly and cost-effective method of e-waste disposal.
- Old computers which are in working order are donated to various non-profit organizations. UPS batteries are recharged / repaired / exchanged by the suppliers.
- Use of pen drives, flash drives and hard disks are encouraged for e-data storage than the use-and-throw CDs.

For sensitization of students on the necessity of effective waste management, the college organized ministry of environment and forests and UGC, New Delhi sponsored national seminar on "Technological Options for Sustainable Solid Waste Management", conducted by the Department of Microbiology on the 3rd of January, 2012. In this national seminar, the invited resource persons focused on best practices to tackle solid waste. In the conference, the 1st technical session was by Dr. Dilip B. Boralkar, Ex-Member secretary, MPCB on "Electronic Waste Management". Beside the technical sessions, the seminar included exhibition of e-waste management posters organized by department of Computer Science.



E-waste management poster competition



7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

I. Innovation in Courses /Curricula:

- Advanced Certificate course in Power Plant Chemistry in association with Industry partner Adani Power Maharashtra Ltd.
- Diploma course in Information Technology and Web Technology in association with TCS, Chennai and e-PHP solutions, Gondia.
- Initiation of vocational skill based degree course B.Voc. (Food processing and engineering) and B.Voc. (Software Development) as per NSQF framework.
- Departmental Bridge Courses for entry level Student every Year.
- Micro teaching in Mathematics.
- Micro scale Techniques in Chemistry Practical's.
- On Field Teaching in Botany Department.
- Learning Experimental Physics through Exp EYES.
- Simulation method in Chemistry Practical's.
- Involvement of Industry experts in curriculum design and delivery.
- Online feedback and consultation meet of the stakeholders on curricula.
- Participation of staff members in syllabus designing workshop conducted by the board of studies of RTMNU, Nagpur time to time.

II. Innovations in Admission Procedure:

- Fully automatized admission procedure for maintaining transparency and Hassel-free mechanism.
- Help Desk facility
- Orientation Program – Pre, Post and Final (after one month)

III. Innovation in Teaching, Learning and Evaluation:

Teaching :

- Fully ICT enabled classrooms as well as laboratories
- Establishment of Virtual Laboratories.
- Online resources – NPTEL, NKN, INFLIBNET, NMEICT, Circuit Maker, Lab view, etc.
- Online Tools- SPONTANEA, DLP system, PHET simulations, Chem office, e-Herbarium, etc.
- Regular Structured Feedback on teaching learning process.
- Monitoring teaching mechanism through teaching diary as well period monitoring system

Learning :

- Availability of e-resources, print resources, lecture CDs,
- Innovative project based learning, field visits, seminars, subjective hands on training, e-poster presentation, action research,
- Students are benefitted through various forms of training programmes like CRT, Entrepreneurship developments, Invited talks, motivational talks,

**Evaluation:**

- Continuous comprehensive evaluation through Diagnostic, Formative & Summative evaluation.
- Result Data analysis through SPSS.
- In-house designed on line evaluation platform.
- Result alert through SMS.
- Regular structured feedback on evaluation.

IV. Innovation in Research Activities:

- Setting up the college as 'Centre for Higher learning and Research'
- Minor research projects – 12
- Up-gradation of laboratories of Physics, Chemistry & Botany to research level.
- Poster/Paper presentation of UG students at National Seminars
- Participation of students in Winter/Summer school programs
- Conduction of Science Exhibition/seminars/poster presentations at college level
- Sharing of research infrastructure facilities
- Providing research workplace for Ph. D. supervisors belonging to the other institutions

V. Innovative Strategies adopted in Governance:

The best governance practices are as under –

- Complete ERP
- Decentralization of administrative work
- Day wise in-charges
- Period monitoring System
- Monthly students attendance record through SMS alert
- Academic audit of each department
- Movement register for staff
- Monitoring of staff attendance
- Encouraging the students' participation in 'CHATRA SANSAD', a national level program
- Dress code
- Suggestion/Complaints boxes at departmental levels

VI. Innovative Infrastructure Facilities:

- Auditorium with global ambiance
- Wi-Fi enabled campus
- Solar panels
- Centralised public address system
- Guest house in the college campus
- Establishment of vermicom posting unit
- Recharging of bore well through rain water harvesting project
- Use of rain water as an alternative for distilled water

**VII. Innovation in Library**

- Best library user award
- Free books to meritorious & economically weaker students, Access of library for reading lovers

VIII. Innovation in Extension Activities :

- District level consultation meet of Proposed New education policy under HRD ministry
- Conduction of MTS examination
- Survey of drop outs from primary education by NSS
- Fostering scientific attitude among the rural school students
- On-line Filling of Exam Forms of SSC Board For Secondary School Teachers of Gondia District (7th July 2014 To 16 July 2014)
- On-line Exam Conducted by MKCL For Appointment of Assistant Post in MIDC Class A,B,C Recruitment 2014 on 30 November 2014
- Workshop on e-Scholarship System of Maharashtra Government was Organized for High Schools of Gondia District
- Training Programme for Secondary School Teachers conducted by Department of School Education, Mantralaya, Mumbai Using A-VIEW Virtual Classroom e-Learning Software.

7.3 Best Practices**7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.**

There are significant best practices by the institution. The two practices are elaborated below.

Title of the practice:	Cultivating skilled work force for local industry
Goal:	<ul style="list-style-type: none">■ To know the skill required by the industry.■ To develop the skilled manpower for local industry from amongst the students stakeholder
The Context:	To enhance the employability is a major task that every institution working for. Its usual practice that any firm or organisation appoints manpower and then makes them skilled or gives rigorous training as per their requirement. In this contest the knowledge of student gained from the traditional curriculum become somewhat useless. Hence, if the students with their traditional degree course, nurtured with the skill based knowledge as required by industry, the industry will readily absorb such best suited manpower. For it our institution in collaboration with local industry-Adani Power Maharashtra Ltd, designed the syllabus for skill based certificate course and diploma course and started from last academic year. An agreement for syllabus design, faculty, internship programme and placement if vacancy available is came up as a result.



The practice:	The group of teacher stakeholders with knowledge of concerned background thought for the scope for employability in the local industry. The concerned teachers visited local industries in particular Adani Power Maharashtra Ltd; and they knew that what actual kind of skilled work force is needed. The industry people invited to convince them about work force. A bilateral a MoU established for syllabus design, faculty, internship programme and placement of trained students if vacancy available. A Board of Management, Board of Study and Board of Examination for the related skill based certificate course and diploma course constituted. The certificate courses has been started.
Evidences of Success:	Teacher stakeholders have developed needed skill based syllabus in collaboration of industry. The course namely certificate course approved by UGC and NSQF. It is only course in India designed by D. B. Science College and approved by UGC.
Resources required:	The required resources were met from the fund allotted by UGC.
Contact details:	The Principal Dhote Bandhu Science College, Gondia (MH) Pin- 441614 Email- principal@dbscience.org Website: www.dbscience.org Tel. No. (07182)252623 Fax No. (07182) 252467

Best Practice: 2**Fostering Scientific Temper in Young Mind**

Title of the practice:	Fostering scientific temper in young minds
Goal:	The 'Science Forum Committee' of Dhote Bandhu Science College, Gondia, under the Institutional Social Responsibility, successfully carried out the Society Reach Extension Programme 'FOSTERING Fostering Scientific Temper in Young Mind'. The aim of the activity was to encourage the rural school-children to take up basic sciences as their courses. The activity also intended to foster scientific temper and arouse curiosity among them.
The Context:	Science and Technology has become an integral part of modern society and has entered into the fabric of our community life. Educational institutions are the ideal places for promoting a scientific temperament and attitude among the students through various science programs.



	<p>In developing countries like India, science could play a major role in development by building scientific expertise, inculcating rational thinking among the individuals, leading to eradicating of superstitions and social evils.</p>
The practice:	<p>A team of teachers—Sneha Jaiswal, Asst. Prof. in Microbiology, Miss. Rupali Khobragade and few students of our college— Ku. Apeksha Jatpele of B. Voc. Semester I, Ku. Nupur Naidu and Ku. Vaishali Bopche of B.Sc. III visited Vishwakarma High School, Murdara, Teh. and Dist. Gondia along with science gadgets and instruments—microscope, petri plates, permanent slides on 12th of December, 2014. On this day, Miss. Sneha Jaiswal delivered a lecture titled 'Fostering Scientific Temper in Young Mind', which aimed at inculcating scientific attitude and interest in science among students of 10th standard. The lecture contained concepts of scientific temper, science and its branches, career opportunities in life sciences, physical sciences, and earth sciences, fellowships for science students like National Talent Search, Kishore Vaigyanik Protsahan Yojana, Nationwide Education and Scholarship Test, Department of Science and Technology degrees in science and some of the recent developments in science during the year 2014.</p> <p>The team also demonstrated the use of microscope, cultivation of bacteria in the laboratory, etc.</p>
Evidences of Success:	<p>After the lecture of about 40–45 minutes, she had interactive session with attending students. During the interaction, she got an overwhelming response and queries from students' side which indicated the aroused curiosity among them. Many of them seemed willing to opt for the science stream as their course.</p> <p>After the demonstration of scientific instruments, the team observed that children's faces were lit up as if they had got something new.</p> <p>When students were asked to fill-up feedback forms. They gladly filled them up, and the positive feedback of the school children indicated the success of the program</p>
Resources required:	<ul style="list-style-type: none">■ To reach the venue, the institution was compelled to provide a van, an LCD projector and all necessary e-resources.■ Sufficient financial assistance is necessary to ensure that this practice is frequently carried out. This may help involve more number of faculty and students in the programme.■ The team who conducts this program also requires an attendant for assistance during the program



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Best Practice: 3**Micro- Scale Techniques in Chemistry Practical**

Title of the practice:	Micro-scale techniques in chemistry practical
Goal:	<ul style="list-style-type: none"> ■ To make aware the students about microanalysis. ■ To develop the mind of students for using minimal amounts of chemicals for carrying the experiments. ■ The scaling down of quantities of chemicals and reagents will eventually leads to economy and also saves time, energy. ■ To make laboratory management efficient and economical.
The Context:	<p>In general, organic and inorganic qualitative analysis constitutes a major bulk in curriculum of chemistry in an academic program. It consumes a major share of chemicals used not only in rising cost of chemicals which adversely affect the practical exercises. During the chemical reactions, there will be an evolution of fumes and the contaminants which ultimately effect the environment. The awareness of eco-friendly environment is becoming a global phenomenon. In this context, there is a need that the laboratory chemicals to be used to a minimal level without affecting the principles, skill and understanding of them. The chemical analysis by Vogel prescribes the use of about 0.2 g chemical for every test of qualitative analysis. In the modern age of sophisticated instrumentation, this needs a drastic revision. Micro-scale techniques, thus, proposed to reduce the consumption of chemicals without any conceptual deviation from the principles. It uses the same conventional apparatus but on smaller size which saves time, energy and becomes economical while performing the experiments.</p>
The practice:	<p>Micro-scale Separations: The most comprehensively performed experiments in chemistry laboratories is the separation of 2 or 3 components from a mixture. Initially, the students are introduced for identification of a single compound followed by two-component mixture separation in the third year. Such type of experiments helps to develop several skills in the student and</p>



	<p>teaches them several principles of chemistry. In many laboratories, the amount of 2-or 3-component mixture commonly given to the students is usually in excess of 20 g. In this technique, the amount can be reduced to 1 g or 1 ml of each component. After explaining the scheme by which acids, phenols and bases could be separated from a neutral substance by successive extraction with 8-10% sodium bicarbonate, 2M sodium hydroxide and dilute hydrochloric acid, respectively, the required reagents can also be reduced as per stoichiometric proportions.</p> <p>Micro-scale Synthesis: The aim of taking up micro-scale experiments in the undergraduate laboratory goes beyond economy or ecology. Several new experiments are introduced in organic laboratory to explain the theoretical principles to the students. For example, using only 0.250 g of acetanilide, cinnamic acid and p-toluic acid, the students are asked to carry out bromination using solutions of bromine in acetic acid, CCl₄ and NBS, respectively.</p>
Evidences of Success:	The outcome of microscale techniques indicate that most of the students were excited and they thought it easy, more interactive and eco-friendly. As well as, students exposed to this approach appeared to develop better scientific reasoning skill.
Resources required:	The main disadvantage of the microscale technique is that it is not included in prescribed syllabus. Hence, the regular faculty does not have proper exposure of this technique. So, there is a need of proper training of microscale techniques through workshop and other events through experts. The microscale techniques can be amalgamated with traditional methods of chemistry practical if the teachers get proper exposure and training.
Contact details:	The Principal Dhote Bandhu Science College, Gondia (MH) Pin- 441614 Email- principal@dbscience.org Website: www.dbscience.org Tel. No. (07182)252623 Fax No. (07182) 252467

**Best Practice : 4****Enhancing research activities**

Title of the practice:	Enhancing research activities
Goal:	To strengthen Research activities in HEIs.
The Context:	In second cycle accreditation, NAAC peer team recommended to strengthen the research activity in the institution. In this quest college planned for promoting the research.
The practice:	The IQAC of the college considered research promotion as the key issue as it was recommended by peer team during their visit and hence the Research Advisory Committee constituted to promote, enhance, facilitate and monitor the research activities. The committee motivated the staff members to propose the Minor/ Major Research projects to the different funding agencies, also promoted to publish research papers. The cash incentives have been given to the faculty for publishing the papers in National / International peer reviewed journals. Also the authors are felicitated for their publication during the college annual meet. The assistance is provided to present the paper in the conferences, seminars etc. The committee keeps informed the faculty members for the research related updates. Some faculty got recognition as Ph.D. guide. As a mega step, the committee strived hard to get affiliation from RTM Nagpur University as a Centre for Higher Learning and Research, and Ph.D. programme in the subject Physics, Chemistry and Botany has been started.
Evidences of Success:	<ul style="list-style-type: none"> ■ Good numbers of Minor Research Projects are funded by UGC and some Major Projects are in pipeline. ■ Number of Research papers are published in the peer reviewed Journals and presented by the faculty members in the seminar, conferences etc. ■ Every year the National conferences, seminars has been organised. ■ College got recognized as Centre for Higher Learning and Research.
Resources required:	The required resources were met from the fund allotted by UGC and college itself.



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Best Practice : 5**Interactive white board usage and ICT fortified pedagogy**

Title of the practice:	Interactive white board usage and ICT fortified pedagogy
Goal:	Enhancing faculty competencies with the use of interactive white board and ICT for effective teaching and learning. <ul style="list-style-type: none">■ To establish ICT enabled teaching■ To develop e-content for teaching process in and out of the classroom.
The Context:	Use of ICT in teaching learning process has been considered as the innovative best method for upgrading the teaching and learning process in the HEIs. It is not only exciting and permanent but also promotes the teaching capabilities of the teachers as the facilitators of learning. It enhances self-learning and helps the students to acquire knowledge at their own. It prepares the slow as well as advance learners for perspective studies.
The practice:	<p>The apex authorities and the stakeholders have always looked for the innovative teaching and learning rather than traditional ones. In this quest, every class room is equipped with white interactive board and CAD tools. The faculty members are requested to adopt use of audio visual aids. At this end the teachers informed to teach with the help of slides, transparency, power point presentation and then interactive board. The teachers are trained to use the boards by taking numbers of training classes by the experts and the teachers who are expert in handling the ICT enabled system. Further, moving toward the self-learning, the students are encouraged to prepare slides, PPTs as a part of assignment. This makes the teaching-learning process as two way process which involve teachers and students. Monitory mechanism for the use interactive board is practiced. The faculty was informed to use fully ICT enabled teaching method. For assistance an expert from faculty was deployed.</p> <p>As a result, the faculty became skilled to acquaint ICT enabled class room.</p>



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Self Study Report



Department of Chemistry

1. Name of the Department : Chemistry
2. Year of Establishment : 1969
3. Name of programmes /Courses offered : B. Sc., M.Sc., Ph.D.
4. Names of Interdisciplinary courses and the Departments/units involved : Certificate course in Power Plant Chemistry, Department of Vocation (Under community college scheme of UGC)
5. Annual/Semester/Choice based credit system (Programme wise) : B.Sc. – Semester system
M.Sc. – Semester –C.B.C.S.
6. Participation of the department in the courses offered by other departments : Cert. in Power Plant Chemistry offered by Department of Vocation
7. Courses in collaboration with other universities Industries, foreign institutions etc. : Nil
8. Details of courses/ Programme discontinued (if any) with reasons. : Nil
9. Number of Teaching Posts

	Sanctioned	Filled
Professor	Nil	Nil
Associate Professor	Nil	Nil
Assistant Professor	08	05

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Lit/Ph.D/M.Phil. etc.)

S. No.	Name of the Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
1.	Dr. M.R. Patle	M.Sc., B.Ed. Ph.D.	Assistant Professor	Organic Chemistry	06	03 (Registered)
2.	Dr. K. M. Hatzade	M.Sc. B.Ed. Ph.D.	Assistant Professor	Organic Chemistry	06	03 (Registered)
3.	Ms. S. B. Narde	M.Sc. B.Ed. (NET)	Assistant Professor	Physical Chemistry	06	Nil
4.	Dr. J. I. Sheikh	M.Sc. Ph.D.	Assistant Professor	Organic Chemistry	02	Nil
5.	Dr. A. M. Ghatole	M.Sc. Ph.D. M.B.A.	Assistant Professor	Organic Chemistry	03	Nil
6.	Mr. A. M. Parmar	M.Sc.	CHB Invitee Professor	Organic Chemistry	06	Nil
7.	Mr. R. M. Patle	M.Sc. B.Ed. (NET, SET)	CHB Invitee Professor	Organic Chemistry	02	Nil
8.	Miss. Rina Katre	M.Sc., B.Ed.	CHB Invitee Professor	Organic Chemistry	04	Nil
9.	Miss. Varsha Gupta	M.Sc., B.Ed.	CHB Invitee Professor	Organic Chemistry	02	Nil
10.	Mr. P. R. Ambule	M.Sc., B.Ed.	CHB Invitee Professor	Organic Chemistry	02	Nil



11. List of Senior visiting Faculty

Sr. No.	Name of the Faculty	Qualification	Designation	Specialization	No. of Years of Experience
1.	Dr. V. R. K. S. Susarla	M. Sc. Ph. D.	Invitee Professor	Physical Chemistry	34 yrs.

12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty

B. Sc. Theory	- 8.34 %
B. Sc. Practical	- 45.45 %
M.Sc. Theory	- 93.75%
M.Sc. Theory	- 75%

13. Students-Teacher Ratio (Programme wise) : B.Sc.- 68:1
M.Sc. – 5:1

14. Number of academic support staff (technical) :
and administrative staff, sanctioned and filled

	Sanctioned	Filled
Technical Staff	04	03
Administrative Staff	-	Nil

15. Qualification of teaching faculty with D.Sc/ D.Lit/Ph.D/M.Phil/PG :

Sr. No.	Name of the Faculty	Qualification
	Dr. M. R. Patle	M.Sc., B.Ed., Ph.D., P. G. Dip. Nano.
	Dr. K. M. Hatzade	M.Sc. B.Ed. Ph.D.
	Ms. S. B. Narde	M.Sc. B.Ed. (NET)
	Dr. J. I. Sheikh	M.Sc. Ph.D.
	Dr. A. M. Ghatole	M.Sc. Ph.D. M.B.A.
	Mr. A. M. Parmar	M.Sc.
	Mr. R. M. Patle	M.Sc. B.Ed. (NET)
	Miss. Rina Katre	M.Sc., B. Ed.
	Miss. Varsha Gupta	M.Sc., B.Ed.
	Mr. P. R. Ambule	M.Sc., B. Ed.



16. Number of faculty with ongoing projects : From a) National b) International funding Agencies and grant received.

Sr. No.	Title	Funding agency	Sanctioned Amount	Period
1	Identification of Novel Chemicals compounds as Anti tuberculosis agent by using Computational approaches (PI- Dr. M. R. Patle)	UGC	1,70,000/-	2 Years
2	Synthesis and Biological studies of Nitrogen and Sulphur containing Heterocycles (PI- Dr. K M Hatzade)	UGC	1,70,000/-	2 Years
3	Synthesis and Biological studies of substituted pyrazolo [1,5]pyrimidine-3-carboxamide compounds (PI –Ms. S. B. Narde)	UGC	1,70,000/-	2 Years
Total Grant Received			5,10,000/-	

17. Departmental Projects funded by : Nil
DST-FIST, UGC, DBT, ICSSR etc. & total grant received

18. Research Centre/Facility recognized by the university : Yes
05 students registered for Ph.D.

19. Publications:

- a) Publication per faculty

Sr. No.	Name of faculty	No .of papers published in Conference (National & International)	No. of Paper published in peer reviewed journals	Total	Source : - Google Scholar & Scopus			
					Citation indices	Impact factor (Max.)	h-index	i10-index
1.	Dr. M. R. Patle	01	08	09	06	0.765		
2.	Dr. K.M Hatzade	04	06	10	91	2.353	6	4
3.	Dr. Javed Sheikh	00	22	22	332	3.467	10	11
4.	Dr. A.M. Ghatole	05	09	14	14	2.386		
5.	Smt. S. B. Narde	09	02	11				



20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National committees

Sr. No.	Name of Faculty	Organizations
1	Dr. M. R. Patle Dr. K. M. Hatzade Ms. S. B. Narde	■ Society for Promotion of Material Science. ■ Indian Science Congress ■ Chemistry Teachers Association ■ Organizing member of National conferences

20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National committees

b) International Committees

: Dr. M. R. Patle as member of organising committee of one International conference.

c) Editorial Boards

: Dr. K. M. Hatzade as Editor and Section Editor of Journal of Advances in Chemistry.

d) University level

: Dr. M. R. Patle as member of Board of Examination of RTMNU.

22. Student projects: M.Sc. Student Projects - 17

23. a) Percentage of students who have done in-house projects including inter departmental /programme

Class	Percentage
M. Sc.	100 %

24. Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies : Nil

25. Awards/Recognitions received by faculty and students.

26. List of eminent academicians and scientists/visitors to the department

- Honorable Shri Tarunsagaraji Maharaj
- Shri. Chinmay Pandya, VC, Devsanskriti Vidyalaya, Haridwar.
- Shri. Rajan Mittal, MD, Bharti Enterprises.
- Shri. Jotiraditya Sindiya. MoS for energy, Govt. Of India.
- Shrimati. Shobhana Bhartiya, Editor, Hindustan Times.
- Shri. Vir Sanghavi, Advisor, Editor, Hindustan Times.
- Shri. Rayan Karanjawala, MD, Karanjwala & Co.
- Shri. Lokesh Sharma, MD, Twenty first century Media Ltd.

27. Seminars/Conferences/Workshops organized & the source of funding

a) National



- National Seminar on 'Micro-Scale Techniques in Chemistry' 20th December, 2014 funded by UGC, New Delhi.
- INSPIRE SCIENCE CAMP" 15th-19th February, 2014 funded by Department of Science & Technology, New Delhi
- National Seminar on 'Chemistry for Drug Discovery: Current and Emerging Opportunities' 3rd February 2013 funded by UGC, New Delhi.
- National Seminar on "Synthesis and Characterization of Therapeutic compounds (Drugs) by using Modern Techniques" 3rd January 2012 funded by UGC, New Delhi.

b) International : Nil

28. Student profile program/coursewise:

Course	Year	Applications received	Selected	Enrolled		Pass percentage
				M	F	
B.Sc. Part I	2011-12	208	208	66	114	12.02
	2012-13	254	244	61	147	15.35
B.Sc. Sem I	2013-14	268	258	67	201	16
	2014-15	337	335	87	250	26
	2015-16	354	354	95	259	33.61
B.Sc. Sem. II	2013-14	266	266	68	199	24.81
	2014-15	319	309	75	244	37.86
	2015-16	354	354	54	300	RA
B.Sc. Part II	2011-12	50	105	27	78	28.15
	2012-13	103	103	21	82	41.41
	2013-14	135	135	32	103	37.30
B.Sc. Sem III	2014-15	198	198	45	153	27.27
	2015-16	277	277	55	222	48.01
B.Sc. Sem. IV	2014-15	194	194	44	150	38.14
	2015-16	277	277	55	222	RA
B.Sc. Part III	2011-12	49	49	11	38	55
	2012-13	62	62	11	51	61
	2013-14	76	6	16	60	64
	2014-15	109	109	23	86	59
B.Sc. Sem. V	2015-16	111	110	31	79	65.45
B.Sc. Sem VI	2015-16		111	41	80	RA
M.Sc. I	2011-12	19	18	09	09	00
M.Sc. Sem I	2012-13	22	20	08	12	05
	2013-14	20	20	07	13	00
	2014-15	22	21	07	14	00
	2015-16	23	23	05	18	25



M.Sc. Sem II	2012-13	19	19	07	12	50
	2013-14	22	20	06	14	05
	2014-15	19	19	07	12	20
	2015-16	23	23	05	18	RA
M.Sc. II	2011-12	12	12	04	08	50
	2012-13	11	10	02	08	23
M.Sc. Sem III	2013-14	10	10	02	08	25
	2014-15	05	05	01	04	20
	2015-16	08	08	03	05	20
	2013-14	07	07	01	06	40
M.Sc. Sem IV	2014-15	07	07	01	06	15
	2015-16	08	08	02	06	RA

*M=Male *F=Female

29. Diversity of Students

Name of the Course	% of students from the same state	% of students from other state	% of students from abroad
B. Sc.	97%	3%	Nil
M. Sc.	92%	08%	Nil

30. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Sr. No.	Name of Student	Exam Passed
1	Mr. R. M. Patle	SET, GATE
2	Mr. C. V. Bisen	NET
3	Mr. S. P. Avchat	NET

31. Student progression

Student progression	Against%enrolled
UG to PG	25 %
PG to M. Phil.	Nil
PG to Ph. D.	03
Ph. D. to Post-Doctoral	Nil
Employed	
■ Campus selection	3 %
■ Off campus recruitment	2 %
Entrepreneurship/Self-employment	-



32. Details of Infrastructural facilities:

1.	Library	Available, 64 books
2.	Laboratory	Available, Five Laboratories
3.	Internet facilities for Staff & Students	Available
4.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
5.	Instrumentation facilities	Available (significant particulars amounting Rs.1743366/-)
6.	Staff Room	01
7.	HOD Room	01
8.	Conference Room	01
9.	Store Room	01

33. Number of students receiving financial assistance from college, university, Government or other agencies.: 85% in terms of scholarships and free-ships.

34. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

a. State level, Entrepreneurship Development Program by "MITCON Consultancy and Engineering IS/ISO 9001:2008 certified", Cert. No. EDP/02140017, from 06/01/2014 to 08/02/2014, Sponsored by: DST, NSTEDB, NSTE, Government of India.

b. Guest Lectures

i. Dr. L. J. Paliwal, Head & Professor, Deptt. Of Chemistry, RTMNU, Nagpur

ii. Dr. N. N. Karde, Professor, Deptt. Of Chemistry, RTMNU, Nagpur

c. Workshops on 'Microscale Techniques in Chemistry'

d. Industry visits

i. Visit to NEERI, Nagpur

j. Visit to Patel Plastics, MIDC, Gondia.

35. Teaching methods adopted to improve student learning

- Lecture method
- PowerPoint presentation
- Simulation techniques
- Educational videos
- 3D models
- Practical
- Demonstration
- Student Seminar
- Guest lectures

36. Participation in Institutional Social Responsibility (ISR) and Extension activities

		2014-15	2013-14	2012-13	2011-12
Number of participant in relevant activity	Swach Bharat Abhiyan	120	-	-	-
	Shram Dan	125	115	114	110
	Literacy Day	117	105	106	103
	Wild Life week	109	105	109	108



36. SWOC analysis of the department and Future plans

Strength

- Well-equipped laboratories
- Research facilities
- Faculties

Weakness

- M.Sc. Course is non aided
- Fee structure for P.G. is decided by the University
- Input of low caliber students
- Financial constraints of student

Opportunities

- U.G. students can do P.G. in chemistry
- Employment in Pharmaceuticals/Chemical/Educational institutions.
- Consultancy to local industry.

Challenges

- Implementation of Job oriented courses
- To develop entrepreneur skills

Future Plan

- To apply for more Major and Minor research projects
- To have collaborations with the various pharmaceutical and research organizations. This will help in placement of the students in near future.



National Conference. Workshop, DST Inspire Camp organised by Department



Department of Electronics

1. Name of the Department : Electronics
2. Year of Establishment : 1986
3. Name of programmes /Courses offered : B. Sc.
4. Names of Interdisciplinary courses and the Departments/units involved : Nil
5. Annual/Semester/Choice based credit system (Programme wise) : Annual pattern upto 2012-13 for B.Sc.
Semester pattern from 2013-14 onwards for B.Sc .
6. Participation of the department in the courses offered by other departments : Department of Computer Science for teaching electronics in B.C.A.
7. Courses in collaboration with other universities Industries, foreign institutions etc. : Nil
8. Details of courses/ Programme discontinued (if any) with reasons. : Nil
9. Number of Teaching Posts

	Sanctioned	Filled
Professor		
Associate Professor	03	03
Assistant Professor		

10. Faculty profile with name, qualification, designation, speciation (D.Sc./D.Lit/Ph.D/M.Phil. etc)

Sr. No.	Name of the Faculty	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D. students guided for the last 4 years
1.	J.G.Mahakhode	M.Sc., Ph.D.	Associate Professor	Electronics, Luminescence	28	01 (Registered)
2.	D.G.Nalamwar	M.Sc.	Associate Professors	Electronics	28	----
3.	A.A.Bhoyar	M.Sc., PGDCS	Associate Professors	Electronics	27	----

11. List of Senior visiting Faculty : Nil
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : NA
13. Student -Teacher Ratio (programme wise) : B.Sc. - 54:1



14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Post	Sanctioned	Filled
Laboratory Assistant	01	01
Laboratory Attendant	01	01

15. Qualifications of teaching faculty with DSc / D.Litt / Ph.D / MPhil / PG.

Nature of faculty	Qualification	Number of faculty
Permanent	M.Sc., Ph.D.	01
Permanent	M.Sc.	01
Permanent	M.Sc. PGDCS	01

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil
17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received:- Nil
18. Research Centre/facility recognized by the University:- Nil
19. Publications:

Sr. No.	Author(s)	Title	Journal / Source data	Year	ISSN	SNIP	SJR	Impact factor	Citation
1	Mahakhode J. G. et al	One step synthesis and X-ray induced luminescence in RGB PDP phosphors	Advanced Materials Letters 2 (5) , pp. 331	2011	0976-3961	--	0.571	1.90 (2014)	----
2	Mahakhode J.G. et al	Blue-shifted photoluminescence of Alq 3 dispersed in PMMA	Bulletin of Materials Science 34 (7), 1649-1651	2011	0250-4707	--	--	1.02	02

16. Number of faculty with ongoing projects from a) National b) International funding
- a) Publication per faculty

Publications (from 2011 onwards) listed in International Database- Scopus & Google Scholar



- b) Number of papers published in peer reviewed journals(national/international) by faculty and students

Name of faculty	No. of papers published in Conference (National & International)	No. of Paper published in peer reviewed journals	Total	Source : -Google Scholar & Scopus			
				<u>Citation indices</u>	<u>Impact factor (Max.)</u>	<u>h-index</u>	<u>i10-index</u>
Dr. J. G. Mahakhode	Nil	02	02	52	2.99	03	02

20. Areas of consultancy and income generated : NIL

21. Faculty as members in

a) National committees

1. Dr. J. G. Mahakhode

: 1. Life member of luminance society of India

b) International Committee

: Nil

c) Editorial Boards

: 1. Dr. J. G. Mahakhode- Editor in Proceeding of "National Conference on Synthesis of advance materiel" 2014.

2. Prof. A. A. Bhoyar:- Editorial Board Member Gurukul International multi discipline journal

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme: 70%

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies : NIL

23 Awards/Recognitions received by faculty and students

■ Dr. J. G. Mahakhode - Member of board of Study in Electronics

■ Shri. D. G. Nalamwar - Member of Board of Studies in Home Science.

24. List of eminent academicians and scientists/visitors to the department

■ Dr. Navin Chandra, Vice chancellor-Shri Satya Sai University of Technology and Medical Sciences (Sehor) and Ex- director Advanced Material Lab. -CSIR- Bhopal.

■ Shri S. S. Gagrini, Chief Executive Officer- H. M. Rail development corporation- Bangaluru.

■ Dr. Jatin Bhatt, Department of Metallurgical and Materials Engineering, Visvesvaraya National Institute of Technology, (VNIT) Nagpur.

■ Dr. S. V. Moharil, Ex-Head Department of Physics- RTM Nagpur University- Nagpur.

■ Dr. Parag Nimeshe, Principal, Balerao Science College, Saoner.

■ Dr. S. J. Dhoble, Department of physics, RTM Nagpur University, PGTD Campus, Nagpur.



- Dr. Vilas Chandrayan, Manoharbai Patel Institute of Engineering and Technology, Gondia
 - Dr. Tiwari, Ex- Scientist, ISRO and Member of Vijnana Bharti, Vidharbha Prant
 - Dr. Shriramji Jyotishi, President Vijnana Bharti, Vidharbha Prant
 - Dr. Sanjay Wate, Secretary, Vijnana Bharti, Vidharbha Prant
 - Prof. U. N. Udupure, N.M.D. College, GONDIA
 - Adv. Anita Sharma Dist. Cort Gondia
 - Shri. P. D. Pandhare, Police Inspector Amgaon
 - Honorable Chandrchud Gogle, Dist. Judge Gondia
25. Seminars/Conferences/Workshops organized & the source of funding National Level
1. UGC Sponsored National Conference on Novel synthesis of Advanced materials on 20th Dec.-2014.
26. Student profile program/coursewise :-

Course	Year	Applications received	Selected	Enrolled		Pass percentage
				M	F	
B.Sc. Part I	2011-12	36	36	20	16	33.33 %
	2012-13	59	59	29	30	25.42 %
B.Sc. Sem I	2013-14	55	55	27	28	45.45 %
	2014-15	84	83	33	50	65.06 %
	2015-16	73	73			
B.Sc. Sem. II	2013-14	55	55	27	28	41.08%
	2014-15	82	82	32	50	38.15%
	2015-16	73	73			
B.Sc. Part II	2011-12	18	18	05	13	26.06%
	2012-13	16	16	06	10	31.25%
	2013-14	34	34	14	20	15.62%
B.Sc. Sem III	2014-15	44	44	22	22	67.44%
	2015-16	71	71			
B.Sc. Sem. IV	2014-15	44	44	22	22	65.78%
	2015-16	71	71			
B.Sc. Part III	2011-12	08	08	04	04	75.00%
	2012-13	11	11	02	09	81.81%
	2013-14	08	08	04	04	87.50%
	2014-15	22	22	09	13	63.63%
B.Sc. Sem. V	2015-16					
B.Sc. Sem VI	2015-16					



27. Diversity of Students

Name of the Course	%of students from the same state	% of students from other States	%of students from abroad
UG	97%	03	----

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, defense services, etc.?

Three Students cleared SET/NET

1. Mr. Lalchand Patle 2. Mr. Madhusudan Lanjewar 3. Mr. Shivkumar Atrey

29. Student progression

Student progression	Against % enrolled
UG to PG	50%
PG to M.Phil.	
PG to Ph.D.	
Ph.D.to Post-Doctoral	
Employed	
■ Campus selection	20%
■ Other than campus recruitment	
Entrepreneurship/Self-employment	10%

30. Details of Infrastructural Facilities

1.	Library	Available. Books 150, thesis 02, proceedings 10, project 10.
2.	Internet facilities for Staff & Students	Computers with internet facility And printers
3.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
4.	Laboratories	02
5.	HOD cubunal	01

31. Number of students receiving financial assistance from college, university, government or other agencies: 85% in terms of scholarships and free ships. Moreover, Ku. Shilpa Joshi awarded with INSPIRE scholar ship from 2012-13



32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

Year	Name of program
2012-13	<ul style="list-style-type: none">■ Science Exhibition■ Industrial Visit – Birsi air port
2013-14	<ul style="list-style-type: none">■ Group Discussion■ Industrial visit to Doordarshan Gondia.■ Guest lecture by Dr. V. M. Pendsy Associate Prof., Sindhu Mahavidyalay Nagpur Dt. 10th September 2014
2014-15	<ul style="list-style-type: none">■ Hands on training and Guest lecture On “Circuit Maker” By Dr. V. M. pendse, Sindhu Mahavidyalya, Nagpur■ National Conference NCNSAM-2014 in Collaboration with Vijanan Bharti & Luminescence Society of India
2015-16	<ul style="list-style-type: none">■ Poster and E presentation, Addressed By Mr. S. G. Revatkar, Assitt. Electrical Engg., MSE-DCL, Gondia.■ Guest lecture By Dr. S. Selvasekarapandian, Materials Research Center, Coimbatore Dt. 04th March 2016■ Guest lecture by Prof. Abhay Deshpande, Rajeev Gandhi Institute of Technology and Research center, Nagpur. Dt. 31st March 2016

- Bridge Course for entry level Student almost every Year

33. Teaching methods adopted to improve student learning

- Designing building Electronic circuits ,
- Use of Circuit Simulation ,
- Power point presentation ,Tutor –CD's
- Group Discussion, Quiz Competition,
- Model- chart- poster,
- Student seminar

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Conducting course on “Foundation Course in Human Right Education”
- Interaction with eminent Scientists
- Conducting work shop on fire safety precaution
- Guest lecture on Safety use of LPG Cylinder By Mr. Pushpak Jasani , Owner of Gondia Gas agency
- Guest lecture on Safety use of Fire extinguisher By Mr. Bhratdwaj , Owner of Fir Extengusher agency

- Delivered Guest lecture by Dr. J. G. Mahakhode on Digital India - Addressing about E- waste management.
- Organized ISR and Extension activity in collaboration with Maharashtra state electricity board at gram Kudwa On “ Save and safety: Electricity “on 02/04/2016
- In addition to this students also participated in College ISR and extension activity like Swach Bharat Abhiyan, Shram Dan etc.
- Prof. D. G. Nalamwar every year Donates Rs. 5000/-

35. SWOC analysis of the department and Future plans

Strength <ul style="list-style-type: none"> ■ Qualified, Skilled, Dynamic, Dedicated, Full time permanent faculty ■ Project based learning 	Weakness <ul style="list-style-type: none"> ■ Since rural area, slow economic and industrial growth. ■ Job opportunity is less in Gondia city ■ Percentage of Students pursuing higher education is less.
Opportunity <ul style="list-style-type: none"> ■ Mass education at entry level. ■ To explore hidden talent of the student belong to economically backward area. ■ Employment in the Metro city 	Challenges <ul style="list-style-type: none"> ■ Declined interest in basic science ■ More popular and accepted by industry courses for jobs in the subject available like Polytechnique, Engineering, ITI etc. are running in the town. ■ To develop entrepreneur skills
Future Plan <ul style="list-style-type: none"> ■ To introduce P.G. Course ■ To continue students enrichment program. ■ To establish Collaboration with industries. 	



Dignitaries during the National Conference



Self Study Report



Department of Computer Science

1. Name of the Department : Computer Science
2. Year of Establishment : 1993
3. Name of programmes /Courses offered : B. Sc., B.C.A., M.Sc., B.Voc. (Software Development), Diploma ITWT,
4. Names of Interdisciplinary courses and the Departments/units involved :
 1. UGC sponsored Career Oriented Programme E- commerce Security Through Cryptography Departments involved: Mathematics
 2. UGC Skill Development Programme, B. Voc. (Software Development) Departments involved : Languages, Mathematics
 3. BCA, Departments involved: Language, Mathematics, Electronics
5. Annual/Semester/Choice based credit system (Programme wise), : B.Sc., B.C.A. - Semester system M.Sc., B.Voc. -Semester -C.B.C.S. ITWT - Semester- CBCS
6. Participation of the department in the courses offered by other departments : B.Voc. (Software Development), Diploma in ITWT
7. Courses in collaboration with other universities Industries, foreign institutions etc. : B.Voc. (Software Development), Diploma in ITWT
8. Details of courses/ Programme discontinued (if any) with reasons. : PGDCSA/ PGDCCA Due to lack of admissions
9. Number of Teaching Posts

	Sanctioned	Filled
Professors	--	--
Associate Professors		-
Asst.Professors	04	01

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Lit/Ph.D/M.Phil.etc)

Sr. No.	Name of the Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
1.	R. K. Dhuware	M.Sc. PGDCS	Asst. Prof	Data Mining Techniques	19 Years.	02 (Registered for Ph.D)
2.	M. G. Katre	M.C.A, M.Phil	CHB	Regression Analysis	10 Year's	----
3.	N. N. Thakre	M.SC., M.Phil	CHB	Computer Networks	04 Year's	----



11. List of senior visiting faculty
 - 1) Dr. H. R. Trivedi Head, Department of Maths, D. B. Science ,College Gondia
 - 2) Mr. Sessa Bhattra Venu (Overseas Education Consultant, Hyderabad)
 - 3) Mr. V.KA. Vijaya (Assistant Maneger, Training, Mahindra Namaste PVT. LTD., CHENNAI)
 - 4) Dr. J. Duragaprasad Rao (Add. Director and Head Department of Computer Science, Shri. Shankaracharya Mahavidyalay Bhilai)
 - 5) Dr. Prushottam JHA, (Head Department of MATH, J. Y. AUTONOMOUS College, RAIPUR)
 - 6) Mr. ANIL NAIR, (Mathematician and Motivational Speaker, Hyderabad)
 - 7) Mr. Shantosh Deo (TIU Consultant, Gondia)
 - 8) Ms. Savitri Murthy (CAT, GMAT, GRE, Trainer In Spoken and Written English, Bangalore)
12. Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:

B.Sc. -75%, B.C.A. -100%, B.Voc. -80%, M.Sc. -100%
13. Student-TeacherRatio (Programme wise)1:30
14. Number of academic support staff (technical) and administrative staff, sanctioned and filled.

Administrative Staff	- Nil
Lab Attendant	- 4 (filled)
Academic Support Staff	- 15
15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

1) Prof. R. K. Dhuware	M.Sc. PGDCS, Ph.D, (Pursuing)
2) Mr. M. G. Katre	M.C.A, M.Phil
3) Ms. N. N. Thakre	M.SC., M.Phil
4) Ms. R. G. Kureshi	M.Sc.
5) Ms. P. A. Shahoo	M..C.A
6) Ms. P. L. Hottachandani	M.Sc
7) Ms. G. S. Patil	M.Sc
8) Ms. S. A. Bodele	M.Sc
9) Ms. P. N. Bante	M.CA
10) Ms. N. R. Mishra	M.Sc
11) Mr. S. T. Borkar	M.C.A.
12) Mr A. U. Bawane	M.C.A.
13) Ms. P. D. Gyanchandani	M.Sc
14) Ms. S. S. Yerolla	M.Sc
15) Ms. P. N. Shribhadre	M.Sc



16. Number of faculty with on going projects from a) National b) International funding agencies and grants received : Nil
17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received : Nil
18. Research Centre/facility recognized by the University -
19. Publications
 - a) Publication per faculty Number of papers published in peer reviewed journals (national/international) by faculty and students -02
 - Prof. R. K. Dhuware -
International - 02; National - 02
National Conference Proceedings - 12
 - Mr. M. G. Katre
International - 01; National Conference Proceedings - 03
20. Areas of consultancy and income generated:
 - Online Filling of Exam Forms of SSC Board For Secondary School Teachers of Gondia District (7th July 2014 To, 16 July 2014)
 - Online Exam Conducted By MKCL For Appointment of Assistant Post in MIDC Class A, B, C Recruitment 2014 on 30 November 2014.
 - Registered Centre for Conducting On Line Exam Of M.S. Board of Secondary and Higher Secondary Education, Pune in Information Technology Subject
 - Workshop on E-Scholarship System of Maharashtra Government was Organized for High Schools of Gondia District
 - Training Programme for Secondary School Teachers Conducted by Department of School Education, Mantralaya, Mumbai using A-VIEW Virtual Classroom e-Learning Software on 25 Oct. 2013
21. Faculty as members in
 - a) National committees b) International Committees c) Editorial Boards....
22. Student projects
 - a) Percentage of students who have done one in-house projects including inter departmental /programme : 60%
 - b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories / Industry / other agencies : 10%
23. Awards/Recognitions received by faculty and students
 - Prof. R. K. Dhuware - received BEST PAPER PRESENTATION AWARD in NAAC Sponsored National Conference on "Quality Sustenance in Higher Education Institutions" Organized by Dhote Bandhu Science College Gondia on 16-17th Oct. 2012.



24. List of eminent academicians and scientists/visitors to the department-

- Ms. Vijaya Mair (Head Training & Placement CVR College of Engineering, Hyderabad)
- Mr. Sessa Bhatte Venu (Overseas Education Consultant, Hyderabad)
- Mr. V. Ka. Vijaya (Assistant Manager Training Mahindra Namaste Pvt. Ltd, Chennai)
- Dr. J. Durga Prasad Rao (Additional Director & Head, Department of Computer Science, Shri Shankaracharya Mahavidyalay, Bhilai)
- Dr. Purushottam Jha (Head Dept. of Math, J Y Autonomous College Raipur)

25. Seminars/Conferences/Workshops organized & the source of funding

a) National

- UGC Sponsored National Seminar on 'Emerging Trends in Cryptography, Coding Theory and Allied Topics' on 20 Dec. 2014
- Workshop on 'e-Scholarship System for Post Matric Scholarship for Minority Students of Gondia Districts
- Poster Exhibition on 'e-Waste: Challenges and opportunities' was Organised in the UGC Sponsored National Seminar on Technological Options for Sustainable Development.

b) International : Nil

26) Student profile programme/coursewise:

Academic Year	Name of the Course /programme	Application Received	Selected	Enrolled		Pass percentage
				*M	*F	
2011-12	B.Sc. I	71	66	24	42	21.21%
	B.Sc. II	44	43	13	30	37.20%
	B.Sc. III	30	30	05	25	50%
	M.Sc. I	11	11	01	10	30%
2012-13	M.Sc. II	11	11	03	08	63.63%
	B.Sc. I	72	71	27	44	11.26%
	B.Sc. II	46	46	13	33	45.65%
	B.Sc. III	33	33	09	24	57.57%
	M.Sc. Sem-I	17	17	02	15	7.69%
	M.Sc. Sem-II	17	17	02	15	13.33%
2013-14	M.Sc. II	09	08	02	06	87.5%
	B.Sc. I (Sem-I)	134	134	41	93	65.87%
	B.Sc. I (Sem-II)	134	134	41	93	62.71%
	B.Sc. II	57	57	20	37	56.86%
	B.Sc. III	38	38	09	29	99%
	M.Sc. I (Sem I)	18	18	05	13	7.6%
	M.Sc. I (Sem II)	18	18	05	13	10%
	M.Sc. I (Sem III)	07	07	NIL	07	28.57%
	M.Sc. I (Sem IV)	07	07	NIL	07	14.28%



2014-15	B.Sc. I (Sem I)	89	89	27	62	62.92%
	B.Sc. I (Sem II)	89	89	27	62	65.11%
	B.Sc. II (Sem III)	104	104	29	75	58.65%
	B.Sc. II (Sem IV)	104	104	29	75	68.32%
	B. Sc	47	47	10	37	97.72%
	M.Sc. I (Sem I)	06	06	01	05	20%
	M.Sc. I (Sem II)	08	08	02	06	00%
	M.Sc. II (Sem III)	06	06	01	05	00%
2015-16	M.Sc. II (Sem IV)	06	06	01	05	16.66%
	B.Sc. I (Sem I)	123	123	34	89	57.47%
	B.Sc. II (Sem III)	83	83	19	64	61.44%
	B.Sc. III (Sem IV)	67	67	20	47	88%
	B.Sc. II (Sem II)	123	123	34	89	Result Awaited
	B.Sc. II (Sem IV)	83	83	23	60	Result Awaited
	B.Sc. III (Sem VI)	67	67	20	47	Result Awaited
	M.Sc. I (Sem I)	NA	NA	NA	NA	NA
	M.Sc. II (Sem II)	NA	NA	NA	NA	NA
	M.Sc. II (Sem III)	08	08	01	07	25%
	M.Sc. II (Sem IV)	08	08	01	07	Result Awaited

27 Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Sc.			Nil
B.C.A.			Nil
B.Voc. (SD)	100	Nil	Nil
M.Sc.	100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

NET - 01

Banking Service Recruitment Board- 08



29. Student progression

Student progression	Against % enrolled
UG to PG	20%
PG to M.Phil.	---
PG to Ph.D.	---
Ph.D. to Post-Doctoral	---
Employed ■ Campuss election ■ Other than campus recruitment	08 students in e-php solutions. 10 students in IL& FS 22 Students in TCS 09 Students in INFOSYS
Entrepreneurship/Self-employment	---

30. Details of Infrastructural facilities

1. Library	Available (Central 2015 books)
2. Laboratory	Available, Five Laboratories with 15, 15, 40, 10 20 terminals.
3. Internet facilities for Staff & Students	Available, 02 Broadband Connections of BSNL-2Mbps
4. Class rooms with ICT facility	Fully ICT enabled Common class rooms
5. Instrumentation facilities	Available, Multimedia system, printer, scanners, Voltage regulator etc
6. Staff Room	01
7. HOD Room	01

31. Number of students receiving financial assistance from college, university, Government or other agencies : 85% in terms of scholarships and free ships.

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts—

- A Lecure on "Placement in Industries" by Mrs. Vijaya Mair (Head Training & Placement CVR College of Engineering, Hydabad)
- Session with Students on "Campus Recruitments & Training " by Sessa Bhatther Venu
- Seminar on "Communication and Soft Skill Development "by Mr. V. Ka. Vijaya
- Guest Lecture on "Job opportunities and challenges in IT Sector", By Dr. Anand Manjarkhede PRO MIET Gondia.
- Guest Lecture on "PHP Programming", By Mr. Santosh Dev, TIU Consultancy Gondia.
- Workshop on TCS open ignite portal for recruitment on graduate training in TCS Chennai.



- Guest lecture on women's security against Cyber Crime By Kiran Kumar Kabadi, In charge, Ramnagar, Police Station
 - Workshop on Soft skill development By D V Ravishankar and Shri Hemant Nadegowda IL & FS Company, Noida (UP)
 - Campus recruitment training programme By Mr. Anil Nair Mathematician, CAT Trainer & Motivational Speaker, Hyderabad & Mrs. Savitri, Sopken and written English, Verbal ability for CAT GMAT and GRE Bangalore.
33. Teaching methods adopted to improve student learning
- Use of Smart boards for Teaching
 - Use of LCD Projector
 - Use of Computer Assisted Learning Packages (CALP)
34. Participation in Institutional Social Responsibility (ISR) and Extension activities
- Workshop on e-scholarship system organised for Training to staff member of Gondia District.
35. SWOC analysis of the department and Future plans :

Strength

- Wide range of Programme Options available for students.
- Assessment of students by sector skill council NASSCOM.
- Campus Recruitment Training Programme for placement of students in MNC. Such as TCS, & Infosys.

Weakness

- Appointment of Regular Faculty in the department is pending.

Opportunities

- Generation of Self Employment through Career-Orientation Programme & Skill Development Programme.

Challenges

- To prepare trained manpower to meet Industries demands with the rapid development in Technology.

Future Plan

- To make the department as recognised research centre to promote research activities in thrust areas.
- To organise National/International level conference once in a year.
- To start M. Voc. Programme on software development.



Self Study Report



Department of Mathematics

1. Name of the Department : Mathematics
2. Year of Establishment : 1969
3. Name of programmes /Courses offered : B. Sc.
4. Annual/Semester/Choice based credit system (Programme wise) : B.Sc.– Semester system
5. Participation of the department in the courses offered by other departments : B.Voc., B. C. A.
M.Sc. (Computer Science)
6. Courses in collaboration with other universities Industries, foreign institutions etc. : Nil
7. Details of courses/ Programme discontinued (if any) with reasons. : Nil
8. Number of Teaching Posts

	Sanctioned	Filled
Professors	01	01 (Principal)
Associate Professors	02	02
Asst.Professors		

9. Faculty profile with name, qualification, designation, specialization.

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the Last 4 years
Dr. Anjan Naidu	M.Sc, M.Ed, PGDCSA, Ph.D	Principal & Head	Approximation & graph Theory	25 yrs	02 (Registered)
Dr. Haresh Trivedi	M.Sc., Ph.D	Associate Professor	Maximum Entropy Principle	31 yrs	01 (Registered)
Prof. Vijay Soni	M.Sc, M.Ed.	Associate Professor	Theory of relativity	24 yrs	

10. Percentage of lectures delivered and practical classed handled (Programme wise) by temporary faculty : B. Sc. - 20%
Students-Teacher Ratio (Programme wise) : B.Sc.- 119:1



11. Number of academic support staff (technical) :
and administrative staff, sanctioned and filled

	Sanctioned	Filled
Technical Staff	---	---
administrative Staff	---	---

12. Qualification of teaching faculty with D.Sc./D.Lit/Ph.D/M.Phil/PG :

Sr. No.	Name of the Faculty	Qualification
	Dr. P. A. S. Naidu	M.Sc, M.Ed, PGDCSA, Ph.D
	Dr. H. R. Trivedi	M.Sc., Ph.D.
	Prof. V. M. Soni	M.Sc., M.Ed.

13. Number of faculty with ongoing projects : Nil

From a) National b) International funding
Agencies and grant received.

14. Departmental Projects funded by : DST-FIST, UGC, DBT, ICSSR etc.
and total grant received.

Sr. No.	Title	Funding agency	Sanctioned Amount	Period
1	UGC Minor project submitted & Finalized. by Dr H. R. Trivedi	UGC	80,000/-	2 Years

15. Research Centre/Facility recognized by the university : Dr. Anjan Naidu & Dr. Haresh Trivedi are recognized as Ph.D. supervisor by Rashtrasant Tukadoji Maharaj Nagpur University.

16. Publications:
Publication per faculty

Faculty Name	Papers	Books
Dr. A. Naidu	02	03
Dr. H. R. Trivedi	03	01
Prof. V. M. Soni	-	07

17. Areas of consultancy and income generated : Nil



18. Faculty as members in
 - a) National committees :
 - Dr. P. A. S. Naidu - Accessor, NAAC, Bangalore
 - Dr. H. R. Trivedi - Life member Indian society of information theory and applications
 - b) International Committees - Nil
 - c) Editorial Boards - Nil
 - d) University and regional level :
 - Dr. P.A.S. Naidu
 - Dean, Faculty of Science, RTM Nagpur University, Nagpur.
 - Member, Academic Council, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
 - Secretary Nagpur University Principal forum.
 - Member State Principals Federation.
 - Member Maharashtra State Higher Secondary Board.
 - Chairman, RRC, RTM Nagpur University.
 - Member, Railway Advisory Board.
19. Awards/Recognitions received by faculty and students. :
 - Dr. P. A. S. Naidu : 1. "Ideal Principal" award by RTM Nagpur University, Nagpur.
 - 2. State Level SHIV-PUTRA Maharashtra Gaurav Puraskar.
20. List of eminent academicians and scientists/visitors to the department
 - Dr. Purshottam Jha - A P Govt JY Autonomous Science college Raipur
 - Dr. K. C. Deshmukh - Ex dean & Head P G T D Mathematics RTMNU, Nagpur
 - Dr. Premlata Verma - A P Govt Science Autonomous college, Bilaspur
 - Dr. Kiran Avasthi - A P Govt Science Autonomous college, Bilaspur
 - Dr. Narendra Khobragade - Board member Mathematics R T M Nagpur university
 - Dr. Ashok Chute - Associate Professor M B Patel College of Arts Commerce & Science, Sakoli
 - Dr. O. L. Shrivastava - Govt. College, Rajnandgaon
21. Seminars/Conferences/Workshops organized & the source of funding
 - a) National
 - UGC sponsored National Conference
 - Date 20-12-2014,
 - Fund sanctioned Rs. 65000.00
 - b) International : Nil



22. Student profile program/course wise:

Course	Year	Applications received	Selected	Male	Female	Pass percentage
B.Sc. Part I	2011-12	438	219	104	115	22%
	2012-13	500	250	112	138	53.28%
B.Sc. Sem I	2013-14	386	293	104	189	24.23%
	2014-15	412	206	81	125	34.33%
	2015-16	628	252	92	160	35%
B.Sc. Sem. II	2013-14	386	293	104	189	34.46%
	2014-15	412	206	80	125	36.15%
	2015-16	628	252	92	160	
B.Sc. Part II	2011-12	120	120	52	68	33%
	2012-13	149	149	60	89	39.42%
	2013-14	137	137	41	96	58.33%
B.Sc. Sem III	2014-15	116	116	33	83	38.30%
	2015-16	221	221	67	54	58.33%
B.Sc. Sem. IV	2014-15	116	116	33	83	50%
	2015-16	221	221	67	54	
B.Sc. Part III	2011-12	99	99	41	58	60.53%
	2012-13	83	83	27	56	51.09%
	2013-14	92	92	26	66	80.30%
	2014-15	66	66	18	48	55.05%
B.Sc. Sem. V	2015-16	123	123	38	85	82.30%
B.Sc. Sem VI	2015-16	123	123	38	85	

23. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

■ Mr. Pradip Patle, SET and GATE

24. Student progression

Student progression	Against % enrolled
UG to PG	20
PG to M.Phil.	05
PG to Ph.D.	10
Ph.D. to Post - Doctoral	00
Employed	
■ Campus selection	
■ Other than campus recruitment	
Entrepreneurship/Self - employment	05



25. Details of Infrastructural facilities:

1.	Library	Available, Central 10030 books
2.	Laboratory	NA
3.	Internet facilities for Staff & Students	Available
4.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
5.	Staff Room	01
6.	HOD	01

26. Number of students receiving financial assistance from college, university, Government or other agencies. Students of college are getting prestigious Department of Science & Technology (DST) Scholarship for Higher Education (SHE)

27. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

- Lecture on Cyber Crime by PSI Kiran Kabadi (16-12-2013)
- Digital India : (23-07-15)
- Management information system govt of Maharashtra initiative and all India survey in higher education MHRD workshop jointly with RTM Nagpur university (12-12-14)
- Raj yoga meditation lecture by B. K. Surendra Kumar, Mount Abu
- Road safety jointly with department of RTO Gondia, (23-01-15)
- Lecture on teachers day by Trilokinathji of Jain Foundation
- Yuva Dhoran an initiative by RTM Nagpur University for teacher

28. Teaching methods adopted to improve student learning:

- Methods adopted for teaching Mathematics are teaching through ICT,
- e-resources,
- Participation of higher learners in teaching (POSIT).

29. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Counselling on physiotherapy for students by Dr. Chandni Agrawal (29-03-14)
- Law awareness program jointly with Bar Association Members (10-10-14)
- Live your dreams-motivational program by S.S. Gagarin CEO Railway Traffic, Bangalore
- A regular feature MTS examination for students of std VIII, IX & X in Gondia District jointly with Wadia College Pune

30. SWOC analysis of the department and Future plans

- Strength-Experienced & Regular 100% faculty for students
- Weakness- Student teacher ratio
- Opportunity- Expanding role of department with emergence of new courses
- Challenges- To avail job opportunities to students



Future Plan

- To start P G (M.Sc.) in Mathematics.
- To start Research centre in Mathematics.
- To form a Mathematical club to promote Mathematics research.



Delegation during National Conference



Department of Physics

1. Name of the Department : Physics
2. Year of Establishment : 1969
3. Name of programmes /Courses offered : B. Sc., M.Sc., Ph.D.
4. Names of Interdisciplinary courses and the Departments/units involved : Nil
5. Annual/Semester/Choice based credit system (Programme wise) : B.Sc. – Semester system
M.Sc. – Semester – C.B.C.S.
6. Participation of the department in the courses offered by other departments : One faculty member is coordinator of courses under Community college Scheme of UGC.
7. Courses in collaboration with other universities Industries, foreign institutions etc. : Nil
8. Details of courses/ Programme discontinued (if any) with reasons. : Certificate Course in Sources of Renewable Energy under Jeevan Shikshan Abhiyan of RTM Nagpur University
9. Number of Teaching Posts

	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	Nil	03
Assistant Professor	08	03

10. Faculty profile with name, qualification, designation, specialization(D.Sc./D.Litt./Ph.D./M. Phil. etc.,)

Sr. No.	Name of the Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D. Students Guided for the Last 4 years
1.	Dr. S. R. Chopane	M.Sc. , M. Phil., Ph.D.	Associate Professor	Electronics and X-Ray	35 Years	Nil
2.	Dr. S. K. Paliwal	M.Sc. , Ph.D.	Associate Professor	Solid State Physics & Digital Electronics	25 Years	Nil
3.	Dr. D. S. Choudhary	M.Sc. , SET , Ph.D.	Associate Professor	Solid State Physics & Digital Electronics	17 Years	05 (Guiding)



4.	Ms. P. K. Nagpure	M.Sc., M. Phil.	Assistant Professor	Solid State Physics & Digital Electronics	6 Year	Nil
5.	Mr. A. M. More	M.Sc., SET	Assistant Professor	Solid State Physics	6 Year	Nil
6.	Mr. Y. S. Bopche	M.Sc., NET, SET	Assistant Professor	Condensed Matter Physics	6 Year	Nil

11. List of senior visiting faculty : Nil
12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty
 B.Sc . : NIL
 M.Sc. : 80%
13. Student-Teacher Ratio (Programme wise)
 B.Sc . : 80:1
 M.Sc. : 10:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Technical Staff	04	03
administrative Staff	---	Nil

15. Qualifications of teaching faculty with D. Sc/D.Lit./Ph.D/M. Phil/PG.

Sr. No.	Name of the Faculty	Qualification
1.	Dr. S. R. Chopane	M.Sc., M. Phil., Ph.D.
2.	Dr. S. K. Paliwal	M.Sc., Ph.D.
3.	Dr. D. S. Choudhary	M.Sc., SET, Ph.D.
4.	Ms. P. K. Nagpure	M.Sc., M. Phil.
5.	Mr. A. M. More	M.Sc., SET
6.	Mr. Y. S. Bopche	M. Sc., NET, SET
7.	Miss. Neha S. Singh (CHB invitee)	M. Sc.,
8.	Mr. Ashish M. Shahare (CHB invitee)	M. Sc., SET
9.	Miss. Ashu M. Rangari (CHB invitee)	M. Sc.
10.	Mr. Akash V. Bagde (CHB invitee)	M. Sc., NET, SET



16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Sr. No.	Name of the Faculty	Title of Project	Funding Agency	Grant Received	Status
1.	Dr. D. S. Choudhary	Study of influence of certain substitutions in NiCuZn ferrite on structural, electric and magnetic properties	UGC, Pune	2,15,000	Ongoing
2.	Mr. Y. S. Bopche	"Study of Compatibility in Polymer blend Using Thermo-Acoustic Technique"	UGC, Pune	1,80,000	Completed

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

18. Research Centre / facility recognized by the University : Yes

19. Publications :

a) Publication per faculty

Sr. No.	Name of faculty	Papers in Conference (National & International)	Paper published in peer reviewed journals	Source : - Google Scholar & Scopus			
				Citation indices	Impact factor (Max.)	h-index	i10-index
1.	Dr. S. R. Chopane	03	01	-	5.611	-	-
2.	Dr. D. S. Choudhary	15	07	24	4.438	03	01
3.	P. K. Nagpure	01	---				
4.	Y. S. Bhopche	04	02				
5.	S. K. Paliwal	02	---				
6.	A. M. More	03	01	00	00	00	00

Books published:

Dr. S. R. Chopane:

Electrostatics, Electrical Current and Time Varying Fields , B.Sc. I Sem, GC Publication, 2013 ISBN- 978-93-82962-08-3

Revised Edition, B.Sc. I Sem, Paper I and II, GC Publication, 2014, ISBN-978-93-82962-12-0

Dr. D. S. Choudhary

1. A text book – 'PHYSICS B.Sc. First Year (Semester I)', Publisher- Himalaya Publishing House ISBN : 978-93-5097-904-4

2. A text book – 'PHYSICS B.Sc. First Year (Semester II)', Publisher- Himalaya Publishing House ISBN: ISBN : 978-93-5142-293-8



3. A text book – 'PHYSICS B.Sc. Second Year (Semester III)', Publisher- Himalaya Publishing House ISBN: ISBN : 978-93-5142-831-2.
4. A text book – 'PHYSICS B.Sc. Second Year (Semester IV)' Publisher- Himalaya Publishing House ISBN : 9789352023363
5. A text book – 'PHYSICS B.Sc. Final Year (Semester V)', Publisher- Himalaya Publishing House ISBN: ISBN : 9789352027880
6. A text book – 'PHYSICS B.Sc. Final Year (Semester VI)', Publisher- Himalaya Publishing House

Y. S. Bopche

1. Polarization of light (Physical Optics) & Electromagnetic (EM) waves Paper – II (302)
Page No.: 165-210 (2 Units); Physics B. Sc. (Semester III) Himalaya Publishing House (ISO9001:2008 Cert.) ISBN : 978-93-5142-831-2.
2. Molecular Physics (Rotational, Vibrational, Raman & Electronic Spectroscopy) Paper – II (402) Page No.: 134-173 (2 Units); Physics B. Sc. (Semester IV) Himalaya Publishing House (ISO9001:2008 Cert.); ISBN : 978-93-5202-336-3.
3. Statistical Physics, Page No.: 61-117 (Units 3 & 4) Paper I; Physics B. Sc. (Semester V) Himalaya Publishing House (ISO 9001:2008 Cert.); ISBN : 978-93-5202-788-0.
20. Areas of consultancy and income generated : Nil
21. Faculty as members in
 - a) National committees
Dr. D. S. Choudhary
 - Member, Indian Association of Physics Teachers
 - Member, Indian Science Congress
 - Member, Organising committee of National conferences
 - b) International Committee:
Dr. D. S. Choudhary
 - Member, Organising committee of International Conferences
 - c) Editorial board :
Dr. D. S. Choudhary
 - Member, Editorial Board of proceedings of National Conference
Prof. Y. S. Bopche
 - Member, Editorial Board of proceedings of National Conference
 - d) University level:
Dr. S. R. Chopane
 - Member of Special Task Committee, Physics, RTMNU.
Dr. D. S. Choudhary
 - Member, Board of Examination Physics, RTMNU.



22. Student projects :
- Percentage of students who have done in-house projects including inter departmental programme : 100% (PG Students)
 - Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies : Nil
23. Awards / Recognitions received by faculty and students:
- Dr. S. R. Chopane - Member of Senate, RTM Nagpur University
 - Dr. D. S. Choudhary - Nodal Officer, UGC New Delhi
 - Mr. Y. S. Bopche - Coordinator, IGNOU Study Centre
- Coordinator, Community College Scheme of UGC
24. List of eminent academicians and scientists/visitors to the department
- Dr. M. R. Choubey, Director, National Power Training Institute, Nagpur
 - Mr. Amit Deotale, Director, Horizon Fuel Cell Pvt. Ltd., Nagpur
 - Mr. V. K. Dabhade, Project Executive Officer, Maharashtra Energy Development Agency (MEDA)
 - Dr. Singh Assistant Director, NPTI, Nagpur
 - Mr. Durgesh Kulkarni, Adani Power Maharashtra Ltd. (APML), Tirora
 - Shri D. V. Ravishankar, IL & FS company, Noida
 - Shri Hemant Madegoda, IL & FS company, Noida
 - Dr. D. K. Kawalkar, LIT, Nagpur
 - Dr. S. D. Dawande, LIT, Nagpur
 - Dr. V. R. Chandrayan, MIET, Gondia
 - Shri Ashish Soni, Senior Manager, Air Traffic Management.
25. Seminars/Conferences/Workshops organized & the source of funding
- National Seminar on Indigenous Sources of Renewable Energy (09/03/2013) sponsored by UGC and Ministry of New and Renewable Energy, GOI, New Delhi.
 - International : Nil
26. Student profile programme/course wise:

Academic Year	Name of the Course / programme	Application Received	Selected	Enrolled		Pass percentage
				*M	*F	
2011-12	B.Sc. I	141	141	57	84	36.17
	B.Sc. II	84	84	29	55	63.09
	B.Sc.III	45	45	10	35	57.77
	M. Sc. I	10	10	04	06	Nil
	M.Sc. II	08	08	04	04	25%



2012-13	B.Sc. I	165	165	55	110	24.84
	B.Sc. II	90	90	27	63	60
	B.Sc. III	63	63	17	46	74.60
	M.Sc. Sem-I	18	18	06	12	5.56
	M.Sc. Sem-II	18	18	06	12	Nil
	M.Sc. II	08	08	03	05	12.5
2013-14	B.Sc. I (Sem I)	169	169	59	110	25.44
	B.Sc. I (Sem II)	158	158	52	106	41.13
	B.Sc. II	101	101	27	74	45.54
	B.Sc. III	63	63	19	44	88.88
	B.Sc. III (Sem V)	97	97	28	69	RA
	M.Sc. I (Sem I)	21	21	02	19	9.5
	M.Sc. I (Sem II)	21	21	02	19	9.5
	M.Sc. I (Sem III)	03	03	Nil	03	Nil
	M.Sc. I (Sem IV)	03	03	Nil	03	Nil
2014-15	B.Sc. I (Sem I)	485	228	87	141	35.08
	B.Sc. I (Sem II)	203	203	62	141	47.29
	B.Sc. II (Sem III)	153	153	52	101	39.21
	B.Sc. II (Sem IV)	144	144	47	97	52.08
	B.Sc. III	83	83	17	66	69.87
	M.Sc. I (Sem I)	27	22	09	13	9.09
	M.Sc. I (Sem II)	22	22	09	13	Nil
	M.Sc. II (Sem III)	20	20	03	17	Nil
	M.Sc. II (Sem IV)	20	20	3	17	Nil
2015-16	B.Sc. I (Sem I)	555	206	77	129	42.7
	B.Sc. II (Sem III)	186	186	61	125	44.6
	B.Sc. III (Sem V)	96	96	29	67	82.29
	B.Sc. II (Sem II)	555	206	77	129	RA
	B.Sc. I (Sem IV)	555	206	77	129	RA
	B.Sc. II (Sem VI)	96	96	29	67	RA
	M.Sc. I (Sem I)	43	23	02	21	52%
	M.Sc. I (Sem II)	23	23	02	21	RA
	M.Sc. II (Sem III)	16	16	4	12	Nil
	M.Sc. II (Sem IV)	17	17	5	12	RA

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Sc.	99%	1%	--
M.Sc.	100%	--	--



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sr. No.	Examination	No. of students passed
1	SET	02
2	NET	03

29. Student progression.

Student progression	Against % enrolled
UG to PG	08
PG to M.Phil.	Nil
PG to Ph.D.	03
Ph.D. to Post-Doctoral	Nil
Employed	
■ Campuss election	15
■ Other than campus recruitment	--
Entrepreneurship/Self-employment	04

Students' achievements:

- Selection of the students in Research Laboratories/ Organisation of National repute:
 - Homi Bhabha Centre for Science Education , Tata institute of fundamental Research summer course in Exp. Physics - 02 students (Summer- 2016)
 - IUAC Summer Programme 2016 for B. Sc. Physics Students : 01 student (summer-2016)
- VUPTA Seminar : Won IInd prize by B. Sc. IInd Sem student
- IIT JAM qualifiers : 02 students (2016)
- University Merits : 05 students in last four years.

30. Details of Infrastructural facilities

1.	Library	Available, 86 books
2.	Laboratory	Available, Four Laboratories
3.	Internet facilities for Staff & Students	Available
4.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
5.	Instrumentation facilities	Available
6.	Research Lab	01
7.	HOD Room	01
8.	Store Room	01

31. Number of students receiving financial assistance from college, university, Government or other agencies : 85% the enrolled students in terms of scholarships and free-ships



32. Details on student enrichment programs (special lectures/workshops/ Seminar) with external experts
- Special lectures : 02
 - Workshops for UG students : 04
 - Research festival Avishkar - 02
 - Celebration of World's student Day, Science Day, Program on Noble Laureates in Physics etc.
33. Teaching methods adopted to improve student learning
- Lecture method
 - PowerPoint presentation
 - Simulation techniques
 - Educational videos
 - 3D models
34. Participation in Institutional Social Responsibility (ISR) and Extension activities NEP
- Anti- Tobacco Drive in the college campus.
 - District level Consultation meeting of all stakeholders on New Higher Education Policy
35. SWOC analysis of the department and Future plans

Strength <ul style="list-style-type: none">■ Well Qualified staff■ Well equipped and spacious Labs■ Research facilities for Research Scholars	Weakness <ul style="list-style-type: none">■ Unaided P. G. course■ High student to staff ratio■ Proportionate non-teaching staff
Opportunities <ul style="list-style-type: none">■ Research for P. G. students■ P. G. for degree students	Challenges <ul style="list-style-type: none">■ Financial constraints of student■ Implementation of Job oriented courses■ To develop entrepreneur skills
Future Plan <ul style="list-style-type: none">■ To strengthen the Research lab by providing more characteristic set-ups■ To make linkages with industries for placement and training	



Research Festival 'Avishkar' and National Conference organised by department



Department of Zoology

1. Name of the department : Zoology
2. Year of Establishment : 1969
3. Name of programmes /Courses offered : B.Sc.
4. Names of Interdisciplinary courses and the Departments/units involved : NIL
5. Annual/Semester/Choice based credit system (Programme wise) : B.Sc. Semester Pattern
6. Participation of the department in the courses offered by other departments : NIL
7. Courses in collaboration with other universities Industries, foreign institutions etc : NIL
8. Details of courses/ Programme discontinued (if any) with reasons. : NIL
9. Number of Teaching Posts:

Regular	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	Nil	Nil
Assistant Professor	04	03

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Lit/Ph.D/M.Phil. etc.)

Name of the Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the Last 4 years
Dr. G. P. Gadekar	M.Sc, MA, B.Ed, Ph.D.	Assistant Professor	Ichthyology	07	Nil
Dr. S. B. Juneja (Banerjee)	M.Sc. , Ph.D., SET	Assistant Professor	Entomology	05	Nil
Dr. D. R. Tembhare	M.Sc., Ph.D	Assistant Professor	Mammalian Reproductive Physiology	05	Nil
Smt M. M. Raje	M.Sc, M.Phil	CHB	Animal Physiology	05	Nil



11. List of Senior visiting Faculty	NIL		
12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty	Lecture-30% and Practical-30%		
13. Students-Teacher Ratio (Programme wise)	B.Sc.: 132:1		
14. Number of academic support staff (technical) and administrative staff, sanctioned and filled.	Sanctioned -02	Filled - 02 Lab Assistant - 01 LabAttendant - 01	
15. Number of faculty with ongoing projects from and grant received.	Year	Funding Agencies	Sanctioned Amount
	2013	UGC	1,00000/-
	2013	UGC	60,000/-
	Title: Role of Alkaline Phosphatase in the reproduction of the female Indian major carp <i>Labeo rohita</i> . (PI- Dr. G. P. Gadekar)		
	Title: Studies on growth, infestation, development and management of cereal stored grain pest <i>Sitophilus Sps</i> (PI- Dr. S. B. Juneja)		
16. Departmental Projects funded by DST-FIST, GC, DBT, ICSSR etc. and total grant received	NIL		
17. Research Centre/Facility recognized by the university	NIL		
18. Research Centre/Facility recognized by the university	NIL		
19. Publications: Number of papers published in peer reviewed Journals (National/International) by faculty and students.	Dr. G. P. Gadekar - 14 Dr. S. B. Juneja - 01 Dr. D. R. Tembhare - 01		
a. Number of publication listed in International Database (for e.g web of Science, Scopus, Humanities, International Complete, Database-International Social Sciences Directory, EBSCO host, etc	NIL		
b. Monograph	NIL		
c. Chapters in Books	NIL		
d. Book Edited	NIL		
e. Books with ISBN/ISSN numbers with details of Publisher	Dr. G. P. Gadekar -06 books with ISBN number Publisher: Himalaya Publishing House.		
f. Citation index	03		
g. SNIP	NIL		
h. SJR	NIL		
i. Impact factor	1.5		
j. h index	01		
20. Areas of consultancy and income generated	NIL		



21. Faculty as member in	National Committees	International Committees	Editorial Boards
	Nil	Nil	Nil
22. Students projects			
a. Percentage of students who have done in house projects including inter departmental / programme:			Nil
b. Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies:			Nil

25. Awards/Recognitions received by faculty and Students:

- Mrs. S. B. Juneja awarded Ph.D degree in 2015.
- Mr Manish A. Shinganjude won second prize in University level Avishkar Competition 2014 organized on 21st to 23rd Jan 2014.
- Ms Kalyani Dahare of B.Sc I yr won third prize in Debate competition.
- Ms Manisha V. Narsane won second prize in Inter-collegiate Debate Competition organized by Manoharbai Institute of Pharmacy, Gondia on "Cyber Crime".

26. List of eminent academicians and scientists/visitors to the department:

- Dr. Pradip N. Gujar, Renowned Pediatric, Gondia.
- Dr. M. S. Shastri, Head, Department of Zoology, RTM Nagpur University, Nagpur.
- Dr. Arun Jahdao, Professor, Department of Zoology, RTM Nagpur University, Nagpur.
- Dr. Abhay Wankhede, Project Co-ordinator, KVK, Badgaon (MP)

27. Seminars/Conferences/Workshops organized & the source of funding:

- National Seminar on 'Bioresource Conservation' organized on 27th Jan 2013 funded by UGC

28. Student profile programme/course wise:

Class	Year	Application Received	Selected	Enrolled		Pass percentage
				*M	*F	
B.Sc Part I	2011-12	220	96	21	75	31.25%
	2012-13	285	116	31	85	27.0%
B.Sc Sem I	2013-14	320	114	19	95	37.61%
	2014-15	355	189	39	150	45.10%
	2015-16	385	203	50	153	52.47%



B.Sc. Sem II	2013-14	115	115	20	95	38.67%
	2014-15	175	175	32	143	50.89%
	2015-16	203	203	50	153	--
B.Sc. Part II	2011-12	41	41	10	31	30.0%
	2012-13	46	46	06	40	68.18%
	2013-14	58	58	12	46	71.72%
B.Sc.Sem III	2014-15	83	83	16	67	31.5%
	2015-16	152	152	23	129	46.55%
B.Sc. Sem IV	2014-15	84	84	14	70	42.85%
	2015-16	152	152	23	129	---
B.Sc. part III	2011-12	26	26	05	21	88.0%
	2012-13	23	23	04	19	82.61%
	2013-14	36	36	06	30	77.14%
	2014-15	42	42	11	31	66.66%
B.Sc. V Sem	2015-16	41	41	09	32	87.17%
B.Sc. VI Sem	2015-16	41	41	09	32	--

29. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Sc.	95%	5%	Nil

30. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? NIL

31. Student progression

Student progression	Against % enrolled
UG to PG	30%
PG to M.Phil.	Nil
PG to Ph.D.	3%
Ph.D. to Post-Doctoral	1%
Employed	
■ Campuss election	Nil
■ Other than campus recruitment	15%
Entrepreneurship/Self-employment	20%



32. Details of Infrastructural facilities

1.	Library	Available departmental also, 137 books
2.	Laboratory	Available, 3 Laboratories
3.	Internet facilities for Staff & Students	Available
4.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
5.	Instrument Room	01
6.	Museum	01
7.	HOD Room	01
8.	Dark Room	01
9.	Store Room	01

33. Number of students receiving financial assistance from college, university, government or other agencies: 85% in terms of scholarships and free ships

34. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts.

Time to time skill based career guidance lectures were organized for students from experts. Faculty constantly motivates the students to attend lecture on personality development, career opportunities, placements etc. Apart from this how to prepare for competitive examination, writing skill of university papers, workshop on fabrication of Aquarium were also conducted.

35. Teaching methods adopted to improve student learning.

Use of ICT, Use of Student corner, Seminar, Group discussion, Guest lectures, Assignments on syllabus topics and Student mentoring are the method use to improve students' learning

36. Participation in Institutional Social Responsibility (ISR) and Extension activities Numerous extension activities through National Service Scheme and Adult and continuing education as the faculty members shoulder the responsibility as NSS Programme Officer, ACEEC Coordinator, Student Welfare Officer, Member of Gender sensitization, In-charge Women Grievance Committee, Coordinator of Gender Champion Club, Co-ordinator of Environmental cell etc.

Strength

- A competent well qualified and Enthusiastic staff.
- Well maintained museum of rare specimen available.
- Good results as compared to the University & other Colleges.

Weakness

- Research facilities not available.
- No Industry Link and collaboration available.
- Input of low caliber students.

Opportunities

- Students can appear for Employment in teaching field.
- Employment in Zoology related fields such as forensics, forest services, pathology, etc

Challenges

- Student Placement
- Poor quality of students.
- Focus of the students in studies

Future Plan

- Linkage with the University and Agro based industries for skill development.
- To strengthen extension activity.
- To intensity research activity in fish culture lac of culture of Gondia District.



Delegates during National Conference and Wild-Life Posters Exhibition



Department of Botany

1. Name of the Department : Botany
2. Year of Establishment : 1969
3. Name of programmes /Courses offered : B. Sc., M.Sc., Ph.D.
4. Names of Interdisciplinary courses and the Departments/units involved : Nil
5. Annual/Semester/Choice based credit system (Programme wise) : B.Sc., - Semester system
M.Sc., - Semester -C.B.C.S.
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities Industries, foreign institutions etc. : Nil
8. Details of courses/ Programme discontinued (if any) with reasons. : Nil
9. Number of Teaching Posts :

Regular	Sanctioned	Filled
Professors	---	---
Associate Professors		---
Assistant Professor	03	01

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Lit/Ph.D/M.Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
Dr. Mahesh V. Kawale	M. Sc. Ph.D	Asst. Professor	Cytology and Genetics	6 years	01 (Registered)
Dr. Prashant Shahare	M.Sc. B.Ed. Ph.D	Lecturer (CHB)	Mol. bio and Biotech	4 years	Nil
Akta Jain	M.Sc., MA, M. phil.	Lecturer (CHB)	Plant pathology	6 years	Nil
Jyotsna D. Pantawane	M.Sc., B.Ed.	Lecturer (CHB)	Mycology and plant pathology	2 years	Nil



Sharita Thakur	M.Sc., B.Ed.	Lecturer (CHB)	Mycology and plant pathology	3 years	Nil
Shilpa Mendhe	M.Sc., B.Ed.	Lecturer (CHB)	Mycology and plant pathology	3 years	Nil
Dipti Popat	M.Sc., B.Ed.	Lecturer (CHB)	-	-	Nil
Turendra K. Lilhare	M.Sc., B.Ed., D. Pharmacy	Lecturer (CHB)	Mycology and plant pathology	1 year	Nil

11. List of senior visiting faculty : Nil
12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty : B.Sc. : 75 %
M.Sc. : 97%
13. Student -Teacher Ratio (programme wise) : B.Sc. : 25:1
M.Sc. : 3:1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled : Laboratory Attendant : 2
15. Qualifications of teaching faculty with DSc/D.Litt/ Ph.D/ MPhil/PG:
M. Sc. Ph.D. - 02
M. Sc. M.Phil. - 01
M. Sc. B. Ed. - 05
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Sr. No.	Title	Funding agency	Sanctioned Amount	Status
1	Collection and characterization of Andrographis paniculata (Burm.f.) Wallich ex Nees. germplasm from Gondia district. P.I.- Dr. M. V. Kawale	UGC	1,10,000/-	Completed

17. Departmental Projects funded by : Nil
DST-FIST, UGC, DBT, ICSSR etc and total grant received.
18. Research Centre/Facility recognized by the university : Yes
05 students registered for Ph.D.



19. Publications:

a) Publication per faculty

Dr. Mahesh V. Kawale:

- Total Publications	- 08
- National Journal	- 06
- Proceeding	- 01
- Book	- 01

20. Areas of consultancy and income generated

- Area of Consultancy	- Plant Identification and Authentification
- Income Generated	- Nil

21. Faculty as members in

- National committees	: member of organizing committee of National conference (02)
- International Committees	: Nil
- Editorial Boards	: Nil

22. Student projects

a) Percentage of students who haved one in-house projects including inter departmental/programme	: PG - 100%
b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies	: Nil

23. Awards/Recognition received by faculty and students : Nil

24. List of eminent academicians and scientists/visitors to the department

- Dr. Sharma, Asso. Prof. Department of Botany, University of Jammu Jammu Sagar (MP)
- Dr. Muratkar, Asso. Prof. Department of Environmental Sciences, Chikhaldara
- Dr. Dongarwar, Asso. Prof. Department of Botany, RTM Nagpur University, Nagpur
- Dr. Badere, Asso. Prof. Department of Botany, RTM Nagpur University, Nagpur

25. Seminars/Conferences/Workshops organized & the source of funding :

- National- National Seminar on Effect of Climate change on Biodiversity	funded by UGC
- International	: Nil

26. Student profile programme/coursewise :



Course	Year	Applications received	Selected	Enrolled		Pass %
				M	F	
B.Sc. Part I	2011-12	76	74	21	53	4.05
	2012-13	100	96	36	60	6.25
B.Sc. Sem I	2013-14	88	88	15	73	10.03
	2014-15	104	97	21	76	17.08
	2015-16	128	128	98	29	37.79
B.Sc. Sem. II	2013-14	88	88	15	73	9.09
	2014-15	104	97	21	76	25.77
	2015-16	128	128	98	29	RA
B.Sc. Part II	2011-12	30	29	5	23	13.79
	2012-13	28	28	6	22	32.14
	2013-14	41	41	13	28	26.82
B.Sc. Sem III	2014-15	54	51	6	45	15.68
	2015-16	87	86	17	70	45.97
B.Sc. Sem. IV	2014-15	54	51	6	45	19.60
	2015-16	87	86	17	70	RA
B.Sc. Part III	2011-12	06	06	0	6	50
	2012-13	16	16	4	12	56.25
	2013-14	19	19	6	13	63.15
	2014-15	35	35	9	26	37.14
B.Sc. Sem. V	2015-16	24	24	7	17	75
B.Sc. Sem VI	2015-16	24	24	7	17	RA
M.Sc. I	2011-12	16	16	1	15	25
M.Sc. Sem I	2012-13	22	22	6	16	0
	2013-14	11	11	4	7	27.27
	2014-15	16	12	4	8	8.33
	2015-16	28	19	1	18	55.55
M.Sc. Sem II	2012-13	22	22	6	16	18.18
	2013-14	11	11	4	7	9.09
	2014-15	16	12	4	8	0
	2015-16	28	18	0	18	RA
M.Sc. II	2011-12	12	12	4	8	75
	2012-13	10	10	2	8	40
M.Sc. Sem III	2013-14	5	5	0	5	20
	2014-15	6	6	1	5	16.66
	2015-16	9	9	4	5	0
M.Sc. Sem IV	2013-14	5	5	0	5	80
	2014-15	6	6	1	5	16.66
	2015-16	9	8	3	5	RA



27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B. Sc.	98%	2%	Nil
M.Sc.	97%	3%	Nil
Ph.D.	100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

SET	01
GATE	01

29. Student progression

Student progression	Against % enrolled
UG to PG	5
PG to M.Phil.	Nil
PG to Ph.D.	2
Ph.D. to Post-Doctoral	Nil
Employed	
■ Campus Selection	01
■ Other than campus recruitment	
Entrepreneurship/Self-employment	02

30. Details of Infrastructural facilities

1.	Library	Available (Departmental), 90 books
2.	Laboratory	Available, Two Laboratories
3.	Internet facilities for Staff & Students	Available
4.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
5.	Instrumentation facilities	Available
6.	Staff Room	01
7.	HOD Room	01
8.	Cutural Media	01
9.	Tissue culture lab	01
10.	Botanical garden	01



31. Number of students receiving financial assistance from college, university, Government or other agencies : 85% in terms of scholarships and free ships
32. Details on student enrichment programmes (special lectures/workshops/Seminar) with external experts

Organized Guest lecture on Protein Sorting for M. Sc. Students by Mr. Ravi Zode, Asst. Prof, Botany Dept. C. J. Patel College, Tirora.

Organized Guest lecture of Mr. Sunil Akare, Asst. Prof, Botany Dept. M. B. Patel College, Sadak Arjuni on 'Plant Physiology' for M. Sc. Students.

Organized Guest lecture of Dr. Walay Tagade, Head, Botany Dept. C. J. Patel College, Tirora on Diseases of vegetables.

Organized Guest lecture of Dr. Bhupesh Mendhe, Asst. Prof, Botany Dept. Shankarlal Agarwal College, Salekasa.
33. Teaching methods adopted to improve student learning
 - Conventional teaching with reasonable use of ICT, Charts, Slides, Models and plant Material
 - Field based studies with special reference to Bio diversity
 - Group discussions
 - Open Book Tests and Surprise Tests
 - PowerPoint presentation
 - Practical Demonstrations
 - Educational videos
 - Students Seminar
34. Participation in Institutional Social Responsibility (ISR) and Extension activities
 - Students participate in Tree plantation
 - Interaction with farmers
 - Participation in National Disaster (Nepal relief Fund)

34. SWOC analysis of the department and Future plans

Strength : Recognized Research Centre	Weakness : Very high Teacher Students Ratio Lack of research publications
Opportunity : <ul style="list-style-type: none"> ■ Promote Consultancy in special areas like Taxonomy ■ Biodiversity of the district ■ Motivating students to learn plant sciences and apply their knowledge in corporate sector like green audit, carbon credits, carbon sequestration, use of plants for mitigating climate change, city farming, organic farming etc. 	Challenges : <ul style="list-style-type: none"> ■ Efforts to be made for Inter disciplinary Research ■ Students Placement ■ Upgrade quality of students

Future Plan :

- Development of Digital Herbarium of the district (Area).
- To develop inventory of Biological diversity of local plants.
- To survey, identify the endangered plant species of the district (Area).



Inauguration of National Conference organised by department of Botany



Self Study Report



Department of Languages

1. Name of the Department : Languages
2. Year of Establishment : 1969
3. Name of programmes /Courses offered : B. Sc., B.C.A.
4. Names of Interdisciplinary courses and the Departments/units involved : Nil
5. Annual/Semester/Choice based credit system (Programme wise) : Semester system-Credit Based System
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities Industries, foreign institutions etc. : Nil
8. Details of courses/ Programme discontinued (if any) with reasons. : Nil
9. Number of Teaching Posts :

	Sanctioned	Filled
Professors	---	---
Associate Professors		---
Assistant Professor	03	---

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.):

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
Mr. L. R. Rane	M. A. M.Phil.	Invitee CHB Lecturer	Marathi lit.	26 years	Nil
Ms. S. S. Pardhi	M. A., B.Ed.	Invitee CHB Lecturer	Hindi Lit.	6 years	Nil
Ms. R. Khan	M. A.	Invitee CHB Lecturer	English Lit.	3 years	Nil

11. List of senior visiting faculty : Nil
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : B.Sc., B.C.A., B.Voc. – 100%



13. Student -Teacher Ratio (programme wise) : B.Sc. : 120:1,
B.C.A. - 33:1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled : Nil
15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG : M. A. M.Phil - 01
M. A., B.Ed. - 01
M. A. - 01
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : Nil
17. Departmental Projects funded by DST-FIST, UGC, DBT, ICSSR etc and total grant received. : Nil
18. Research Centre/Facility recognized by the university : No
19. Publications : Nil
20. Areas of consultancy and income generated : Nil
21. Faculty as members in
- a) National committees : Nil
 - b) International Committees : Nil
 - c) Editorial Boards.... : Nil
22. Student projects
- a) Percentage of students who have one in-house projects including inter departmental / programme : NA
 - b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies : NA
23. Awards/Recognitions received by faculty and students : Nil
24. List of eminent academicians and scientists/visitors to the department
- Mr. Sessa Bhatr Venu (Overseas Education Consultant, Hyderabad)
 - Mr. V. K A. Vijaya (Assistant Manager, Training, Mahindra Namaste PVT. LTD., CHENNAI)
 - Mr. ANIL NAIR, (Mathematician and Motivational Speaker, Hyderabad)
 - Ms. Savitri Murthy (CAT, GMAT, GRE, Trainer In Spoken and Written English, Bangalore)
25. Seminars/Conferences/Workshops organized & the source of funding :
- a) National : Nil
 - b) International : Nil



26. Student profile programme/coursewise:

Course	Year	Applications received	Selected	Subject	Enrolled		Pass %
					M	F	
B.Sc. Part I	2011-12	348	318	Marathi	62	113	68
				Hindi	47	96	76
				English	109	209	48
	2012-13	767	415	Marathi	83	149	64
				Hindi	62	121	62
				English	145	270	55
B.Sc. Sem I	2013-14	1002	417	Marathi	67	179	55
				Hindi	53	118	
				English	120	297	
	2014-15	1450	473	Marathi	71	187	22
				Hindi	68	147	32
				English	139	334	26
	2015-16	1450	504	Marathi	82	159	31
				Hindi	70	193	26
				English	152	352	28
B.Sc. Sem. II	2013-14	--	417	Marathi	67	179	
				Hindi	53	118	
				English	120	297	
	2014-15	--	473	Marathi	71	187	17
				Hindi	68	147	22
				English	139	334	19
	2015-16	--	504	Marathi	82	159	
				Hindi	70	193	
				English	152	352	
B.C.A. I	2011-12	80	79	Marathi	8	13	
				Hindi	35	23	
				English	43	36	
	2012-13	47	47	Marathi	5	10	86
				Hindi	13	19	87
				English	18	29	70
	2013-14	47	46	Marathi	10	4	
				Hindi	19	13	
				English	29	17	
	2014-15	46	43	Marathi	13	06	70
				Hindi	14	10	92
				English	27	16	58
	2015-16	98	93	Marathi	18	06	
				Hindi	40	29	
				English	58	35	



27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other state	% of students from abroad
B. Sc.	98%	2%	Nil
B.C.A.	97%	3%	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

29. Student progression

Student progression	Against % enrolled
UG to PG	NA
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed <ul style="list-style-type: none">■ Campus selection■ Other than campus recruitment	NA
Entrepreneurship/Self-employment	NA

30. Details of Infrastructural facilities

1.	Library	Available
2.	Internet facilities for Staff & Students	Available
3.	Class rooms with ICT facility	Fully ICT enabled Common class rooms

31. Number of students receiving financial assistance from College, University, Government or other agencies : 85% in terms of scholarships and freeships

32. Details on student enrichment programmes (special lectures/workshops/Seminar) with external experts

- Students' seminar
- Jagarjaniwancha
- College Magezine- Udan

33. Teaching methods adopted to improve student learning

- Lecture method
- Group discussions
- Open Book Tests and Surprise Tests
- Power Point presentation



34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Students participate in Tree plantation
- Interaction with farmers

35. SWOC analysis of the department and Future plans

Strength : <ul style="list-style-type: none">■ Language subject as compulsory for graduating student	Weakness : <ul style="list-style-type: none">■ Communication skill■ Research publications
Opportunities : <ul style="list-style-type: none">■ Promotion of communication skill	Challenges : <ul style="list-style-type: none">■ Up gradation of quality of students■ Developing interest in the compulsory subject
Future Plan : <ul style="list-style-type: none">■ Development of Language lab	



Self Study Report



Department of Software Development

1. Name of the Department : Software Development
2. Year of Establishment : 2014
3. Name of programmes /Courses offered : B.Voc. (Software Development)
4. Names of Interdisciplinary courses and the Departments/units involved : Departments involved: Languages, Mathematics, and Computer Science.
5. Annual/Semester/Choice based credit system (Programme wise) : B.Voc. – Semester –C.B.C.S.
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities Industries, foreign institutions etc. : Yes, EPhP, TCS, Lighthouse, IT & ITes
8. Details of courses/ Programme discontinued (if any) with reasons. : Nil
9. Number of Teaching Posts :

	Sanctioned	Filled
Professors	---	---
Associate Professors		---
Assistant Professor	04	01

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.):

Core faculty of Department of computer Science look after the whole academic process.

11. List of senior visiting faculty
 - 1) Dr. H. R. Trivedi Head, Department of Maths, D. B. Science, College Gondia
 - 2) Mr. Sessa Bhattra Venu (Overseas Education Consultant, Hyderabad)
 - 3) Mr. V. K. A. Vijaya (Assistant Manager, Training, Mahindra Namaste PVT. LTD., CHENNAI)
 - 4) Dr. J. Duragaprasad Rao (Add. Director and Head Department of Computer Science, Shri. Shankaracharya Mahavidyalay Bhilai)
 - 5) Dr. Prushottam JHA, (Head Department of MATH, J. Y. AUTONOMOUS College, RAIPUR)
 - 6) Mr. ANIL NAIR, (Mathematician and Motivational Speaker, Hyderabad)
 - 7) Mr. Shantosh Deo (TIU Consultant, Gondia)
 - 8) Ms. Savitri Murthy (CAT, GMAT, GRE, Trainer In Spoken and Written English, Bangalore)
12. Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty : B.Voc. - 80%
13. Student-Teacher Ratio(Programmewise) 30:1



14. Number of academic support staff (technical) and administrative staff; sanctioned and filled
Administrative Staff - Nil
Lab Attendant - 4 (filled)
15. Qualifications of teaching faculty with D.Sc./D.Litt/ : Provided in point 10 above.
Ph.D/M.Phil/PG
16. Number of faculty with ongoing projects from : Nil
a) National b) International funding agencies and grants received.
17. Departmental Projects funded by DST-FIST, : Nil
UGC, DBT, ICSSR etc. and total grant received.
18. Research Centre/Facility recognized by the : Nil
university.
19. Publications
a) Publication per faculty
20. Faculty as members in
(a) National committees (b) International Committees (c) Editorial Boards : Nil
21. Student projects
a) Percentage of students who have had one : NA
in-house projects including inter departmental / programme.
b) Percentage of students placed for projects : NIL
in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies.



23. Awards/Recognitions received by faculty and students : Nil
24. List of eminent academicians and scientists/visitors to the department-
- Ms. Vijaya Mair (Head Training and Placement CVR College of Engineering, Hyderabad)
 - Mr. Sesha Bhatte Venu (Overseas Education Consultant, Hyderabad)
 - Mr. V. Vijaya (Assistant Manager Training Mahindra Namaste Pvt. Ltd, Chennai)
 - Dr. J. Durga Prasad Rao(Additional Director and Head, Department of Computer Science, Shri Shankaracharya Mahavidyalay, Bhilai)
 - Dr. Purushottam Jha (Head Dept. of Math, J. Y. Autonomous College Raipur)
25. Seminars/Conferences/Workshops organized & the source of funding
- a) National : Nil
- b) International : Nil
26. Student profile programme /course wise:

Sr. No.	Session	Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage	
					M	F	M	F
1	2014-15	B. Voc. Sem I	62	49	41	08	51%	87%
		B.Voc. Sem III		49	41	08		
2	2015-16	B.Voc. Sem I	75	50	30	20	46%	45%
		B.Voc. Sem III		31	25	06		
		B.Voc. Sem IV		31	25	06		
3	2016-17	B.Voc. Sem I		43	29	14		

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other state	% of students from abroad
B. Voc. (SD)	100%	NIL	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? NA

29. Student progression

Student progression	Against % enrolled
UG to PG	NA
PG to M.Phil.	NA
PG to Ph.D.	NA
Employed	NA
■ Campus selection	
■ Other than campus recruitment	
Entrepreneurship/Self-employment	--



30. Details of Infrastructural facilities

1.	Library	Available
2.	Laboratory	Available
3.	Internet facilities for Staff & Students	Available, o2 Broadband Connections of BSNL- 2 Mbps
4.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
5.	Instrumentation Facilities	Available, Multimedia system, printer, scanners, Voltage regulator etc

31. Number of students receiving financial assistance from College, University, Government or other agencies : NA

32. Details on student enrichment programmes (special lectures/workshops/Seminar) with external experts -

- A Lecture on "Placement in Industries" by Mrs. Vijaya Nair (Head Training & Placement CVR College of Engineering, Hyderabad)
- Session with Students on "Campus Recruitments and Training" by Sesha Bhattar Venu
- Seminar on "Communication and Soft Skill Development" by Mr. V. Vijaya
- Guest Lecture on "Job opportunities and challenges in IT Sector", By Dr. Anand Manjarkhede PRO MIET Gondia.
- Guest Lecture on "PHP Programming", By Mr. Santosh Dev, TIU Consultancy Gondia.
- Workshop on TCS open ignite portal for recruitment on graduate training in TCS Chennai
- Guest lecture on women's security against Cyber Crime By Kiran Kumar Kabadi, In - charge, Ramnagar, Police Station
- Workshop on Soft skill development By D V Ravishankar and Shri Hemant Nadegowda IL & FS Company, Noida (UP)

33. Teaching methods adopted to improve student learning

- Use of Smart boards for Teaching
- Use of LCD Projector
- Use of Computer Assisted earring Poehoges.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities : Nil

35. SWOC analysis of the department and Future plans:

Strength : Skill oriented course

Weakness : Lack of IT Industries in the region

Opportunity : IT education to the rural mob

Challenge : To Initiate PG Course in Software Development

Future Plan : Getting PG course in software development



- Campus recruitment training programme By Mr. Anil Nair Mathematician, CAT Trainer and Motivational Speaker, Hyderabad and Mrs. Savitri, Sopken and written English, Verbal ability for CAT GMAT and GRE Bangalore.
33. Teaching methods adopted to improve student learning
- Use of Smart boards for Teaching
 - Use of LCD Projector
 - Use of Computer Assisted earring Poehoges.
34. Participation in Institutional Social Responsibility (ISR) and Extension activities : Nil
35. SWOC analysis of the department and Future plans:
- Future Plan:**
- Getting PG course in software development



Self Study Report



Department of Microbiology

1. Name of the Department : Microbiology
2. Year of Establishment : 1986
3. Name of programmes /Courses offered : B. Sc., M.Sc., COP - 1. Bio-fertilizers and bio-pesticides production.
2. Tissue Culture
4. Names of Interdisciplinary courses and the Departments/units involved : COP-Department involved: Microbiology Department, Chemistry, Department, Botany Department, Biotechnology,
5. Annual/Semester/Choice based credit system (Programme wise) : B.Sc. - Semester system
M.Sc.- Semester System-
Credit Based Choice System
COP - annual -Non credit pattern
6. Participation of the department in the courses offered by other departments : B.Sc. (Biotechnology) B. Voc. (Food Processing-and-Engineering). Diploma in Nutrition and Health Education" offered by the college-under-IGNOU
7. Courses in collaboration with other universities Industries, foreign institutions etc. : COP-in collaboration with Ruchi Bio-chemicals, Gondia
8. Details of courses/ Programme discontinued (if any) with reasons. : Nil
9. Number of Teaching Posts :

Designation	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	Nil	01
Assistant Professor	04	03

10. Faculty profile with name, qualification, designation, specialization,(D.Sc./D.Litt. /Ph.D. / M. Phil. etc.):

Name	Qualification	Post	Specialization	Experience	Ph.D. Students Guided
Mr. S. P. Timande	M.Sc.	Associate-Professor	Microbiology	29-Years	Nil
Mr. D. A. Chouhan	M.Sc, NET, GATE,DMLT	Assistant-Professor	Microbiology	08-Years	Nil
Dr. S. D. Tambekar	M.Sc, M.Phil, Ph.D.	Assistant-Professor	Microbiology	04-Years	Nil
Ms. S. S. Jaiswal	M.Sc, Net	Assistant-Professor	Microbiology	02-Years	Nil



11. List of senior visiting faculty

- Dr. B. J. Wadher, Prof. & Head, P. G. Dept. at RTM Nagpur University, Nagpur.
- Dr. V. N. Charde Head, Department of Microbiology at Arts Com. & Sci. College, Nagpur.
- DR. J. B. Chawla, Head of Department of Microbiology at J. M. Patel College, Bhandara.
- Dr. Kunal Roychoudhary Head, Department of Microbiology at S. K. P. Science College, Nagpur. Arts, Com. & Sci. college, Kamptee, Nagpur.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty :- B.Sc.: Nil, M.Sc. -80 % Lectures and practicals.

13. Student -Teacher Ratio (Program wise):

B.Sc.- 86:1 M.Sc. - 10:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

S. No.	Academic support staff	Sanctioned	Filled
1	Laboratory Assistant (MB)	01	01
2	Laboratory Attendant (MB)	02	02

15. Qualifications of teaching faculty with D.SC/D.LITT/PH.D/M.PHIL/PG.

16. Number of faculty with ongoing projects from

a) National

Title	Funding-agency	Grants received
Study on solid state bioprocessing of rice mill by products for food grade enzymes production. Principal-investigator : Mr. S. P. Timande	UGC Implemented on-11 th Mar, 2011	Rs.1,65,000/-
Economic production of nisin from whey and fish waste using Lactococcus species. Principal-investigator : Mr. D.A. Chouhan	UGC Implemented on-24 th July, 2012	Rs.134500/-

b) International funding agencies and grants received : Nil

17. Departmental Projects funded by DST-FIST, UGC, DBT, ICSSR etc and total grant received. : Nil

18. Research Centre/Facility recognized by the university : No



19. Publications

a) Publication per faculty

During five years (2011 to 2016), papers published in peer reviewed journals (National / International) by faculty

S. No.	Faculty	National	International	Total
1	Mr. S. P. Timande	02	06	08
2	Mr. D. A. Chouhan	02	02	04
3	Dr. S. D. Tambekar		15	15
4	Ms. S. S. Jaiswal		01	01

■ Number of papers published in peer reviewed journals : Nil
(national/International) by students

■ No. of publications in international data base : Refer point 19(a)

■ Chapter in Books

Faculty	National / International
Mr. S. P. Timande	Chapter : Production of calcium gluconate by fermentation. Title of book : Environmental Awareness (e. Book). ISBN : 8170355403 Author : Arvind Kumar, Pro-vice Chancellor, S.K.M. University, Dumka (Jharkhand) Publisher : Daya Publication, New. Delhi

■ Books with ISBN numbers with details of publishers

Faculty	ISBN/ISSN number	Publishers
Text Book of Microbiology B.Sc. Sem II. Author : Mr. S. P. Timande Mr. D. A. Chouhan Year of Publication : 2015	97893-5202-274-8	Himalaya publishing house Pvt. Ltd. ISO : 9001 2008

■ Monographs : Nil

■ Books Edited : Nil

■ Citation Index : Mr. Sanjay Timande- 10
Dr. S. D. Tambekar-14 (Google Scholar)

■ SNIP : NIL

■ SJR : NIL

■ Impact factor : Provided in ANNEXURE 3.12

■ h-index : Mr. Sanjay Timande- 02 (Google Scholar)
Dr. S. D. Tambekar-03 (Google Scholar)



20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National Committees:

Faculty	Committee
Prof. S. P. Timande	Life member of Microbiologists society of India. Ex - Joint secretary, Nagpur chapter of Microbiologists society of India.
Dr. S. D. Tambekar	Life Member of Association of Microbiologist in India (AMI) Life Member Of Microbiological Society of India (MSI) Life Member of Biotechnological Research Society of India (BRSI) Life Member of Vishwashanti Multipurpose Society, Nagpur, MS.

b) International Committees : Nil

c) Editorial-Boards

Faculty	Committee
Mr. S. P. Timande	1. Chief Editor-Proceeding of UGC sponsored National seminar entitled “Technological Options for Sustainable Solid Waste Management” organized on 3 rd January, 2012. 2. Member of editorial board -Proceeding of UGC sponsored National seminar entitled “Molecular biology techniques: concepts and applications” organized on 3 rd January, 2012. 3. Chief editor of second issue of departmental magazine – Biohorizon-2015 released on the 3 rd Feb, 2015.
Mr. D. A. Chouhan	Chief Editor -Proceeding of UGC sponsored National seminar entitled “Molecular biology techniques: concepts and applications” organized on 3 rd January, 2012
Mr. D. A. Chouhan Dr. S. D. Tambekar Miss. S. S. Jaiswal	Member of editorial board for publication of second issue of departmental magazine –Biohorizon -2015 released on the 3 rd Feb, 2015

22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental /programmes : 100% (P.G.)

b) Percentage of students placed for projects in organizations outside their institution i.e. in Research laboratories/Industry/ other agencies : Nil



23. Awards/recognitions received by faculty and students

Awards/recognitions received by faculty		
1.	Mr. S. P. Timande	<ul style="list-style-type: none"> ■ Chief guest-Of National Science Day celebration at St. Xavier's High School, Gondia (28th February, 2014) ■ Chairman - At technical session of DST New-Delhi sponsored Inspire science camp, 2014 organized by D. B. Science College, Gondia. ■ Best paper presentation award in NAAC sponsored national conference on Quality sustenance in higher education at D. B. Science College, Gondia (17th August, 2012) ■ Consolation prize for presentation of poster entitled Biotechnological utilization of cheese whey in UGC sponsored national seminar on Recent advances in medical microbiology and Immunology. (18th October, 2011)
2.	Dr. S. D. Tambekar	<ul style="list-style-type: none"> ■ Recognition as a Ph. D supervisor in 2015 for subject Microbiology by RTM Nagpur University.
Awards/recognitions received by students		
1	Ms. Shreya Shrivastava and Ms. Aishwarya Gupta	2015–2016 <ul style="list-style-type: none"> ■ Selected by RTMNU for 3rd cycle of Interuniversity Research Festival
1	Ms. Aflin G. Shekh and Ms. JuhiHattewar	2014 –2015 <ul style="list-style-type: none"> ■ Won the second prize in District level research festival “Avishkar -2015” organized by RTM Nagpur University
2	Ms. Priyanka N. Kirnapure	<ul style="list-style-type: none"> ■ Cracked JAM 2015 JOINT ADMISSION TEST for M.Sc-2015 Indian Institute of Science and Indian Institute of Technology (Rank 381) scored 81.33%
1	Ms. Shilpa Thakre & Ms. Madhumita Singh	<ul style="list-style-type: none"> ■ Won the prize in District level research festival “Avishkar -2012” organized by RTM Nagpur University.

24. List of eminent academicians and scientists/visitors to the department:

- Dr. Vilas Sapkal, Ex. Vice Chancellor, RTM Nagpur University, Nagpur
- Dr. S. L. Govindwar, Advisor, Department of Biotechnology, Union Ministry of Science and Technology
- Dr. Prof. Parvin Sinclair, Pro. Vice Chancellor, Indira Gandhi National Open University and Director of NCERT.
- Dr. Sindi, Principal, Birla Women's College, Kolkata.



- Dr. Vaidya, Scientist E II and Head, Solid and Hazardous Waste Management Division, NEERI, Nagpur
- Dr. Dilip B. Boralkar, Ex-Member secretary, MPCB
- Shri. M. G. Chandrikapure, Superintendent; Govt. of Maharashtra.
- Mrs. Hema Deshpande Member and Regional officer, MPCB, Nagpur
- Dr. Rajpal Singh Kashyap, Senior research consultant, CIIMS, Nagpur.
- Dr. Prof. V. C. Kalia, Chief Scientist, CSIR Institute of Genomics, New. Delhi.
- Dr. Hemant Purohit, Head, Division of Environmental Genomics, NEERI, Nagpur.
- Dr. R. K. Trivedi, Former Professor and Head , Department of Environmental Science, University of Pune, Pune.
- DR. A. M. Deshmuk, Professor and Head, P. G. Department of Microbiology,
- Dr. Babasaheb Ambedkar University, Osmanabad.
- Dr. Mrs. Saoji, Former Professor (Botany) and Director, Institute of Science, Nagpur.
- Dr. Mrs. Vijayakumari, Principal Scientist , NRCC, Nagpur.
- Dr. K. S. Ramchander Rao, Professor and Head, Department of Biotechnology, Aurora's Technological and Research Institute, Hyderabad.
- Dr. Prashant Thakre Assistant Professor, Department of Biotechnology, Sant Gadgebaba Amravati University, Amravati.
- Dr. Prashant Gawande Assistant Professor , Department of Botany , Sant Gadgebaba Amravati University, Amravati

25. Seminars / conferences/ workshops organized & the source of funding

a) National:

Title of Seminar / Conference / Symposia	Funding Agency	Sanction No. & Date	Amount Sanctioned (Rs.)	Event Date
Technological options for sustainable solid waste management	UGC, Pune	F.No.24-563/08 (WRO) 30/09/08	60,000/-	03 Jan. 2012
Molecular Biology Techniques -Concepts and Applications	UGC, Pune	F.No.24-2776/11 (WRO) 20/04/12	1,30,000/-	03 Feb. 2013
Environmental Security	UGC, Pune	F.No.24-648/13 (WRO) 18/03/14	93,000/-	To be organized

b) International : Nil



26. Student profile programme/course wise : B.Sc. (Microbiology)

Course	Year	Applications received	Selected	Enrolled		Pass percentage
				M	F	
B.Sc. Part I	2011-12	82	78	17	61	12.82
	2012-13	130	124	30	94	24.19
B.Sc. Sem I	2013-14	47	41	10	31	41.46
	2014-15	121	108	20	88	20.37
	2015-16					
B.Sc. Sem. II	2013-14	149	125	27	98	17.6
	2014-15	121	110	20	94	46.49
	2015-16	152				
B.Sc. Part II	2011-12	63	63	14	49	11.11
	2012-13	46	43	07	36	22.22
	2013-14	64	61	09	52	27.86
B.Sc. Sem III	2014-15	110	104	23	81	29.24
	2015-16					
B.Sc. Sem. IV	2014-15	110	108	23	85	36.11
	2015-16	96	96			
B.Sc. Part III	2011-12	37	37	08	29	24.32
	2012-13	33	31	04	27	77.41
	2013-14	40	35	04	31	28.57
	2014-15	55	55	09	46	38.18
B.Sc. Sem. V	2015-16	53	53			
B.Sc. Sem VI	2015-16					
M. Sc. (Microbiology)						
M.Sc. I	2011-12	14	13	04	09	57.14
M.Sc. Sem I	2012-13	11	10	02	08	0
	2013-14	14	13	0	13	38.46
	2014-15	-	-	-	-	-
	2015-16					
M.Sc. Sem II	2012-13	11	10	02	08	0
	2013-14	14	13	0	13	46.15
	2014-15	-	-	-	-	-
	2015-16	07	07			
M.Sc. II	2011-12	18	16	03	13	75
	2012-13	12	12	02	10	33.33
M.Sc. Sem III	2013-14	08	08	01	07	0
	2014-15	13	13	0	13	53.84
	2015-16					
M.Sc. Sem IV	2013-14	08	07	0	07	0
	2014-15	13	12	0	11	63.63
	2015-16					



Career Oriented Programmes

Session	Name of the Course/programme	Applications received	Selected	Pass percentage
2015-16	COP IN BIOFERTILIZER Certificate Diploma Adv. Dip.			
	COP IN TISSUE CULTURE Certificate Diploma Adv. Dip			
2014-15	COP IN BIOFERTILIZER Certificate	21	21	100
	Diploma	17	17	100
	Adv. Dip.	12	12	100
	COP IN TISSUE CULTURE Certificate	16	16	100
	Diploma	07	07	100
	Adv. Dip	04	04	100
2013-14	COP IN BIOFERTILIZER Certificate	25	25	100
	Diploma	6	6	100
	Adv. Dip.	2	2	100
	COP IN TISSUE CULTURE Certificate	35	35	100
	Diploma	2	2	100
	Adv. Dip	2	2	100
2012-13	COP IN BIOFERTILIZER Certificate	14	14	100
	Diploma	11	11	100
	Adv. Dip.	03	03	100
	COP IN TISSUE CULTURE Certificate	33	33	100
	Diploma	11	11	100
	Adv. Dip	02	02	100
2011-12	COP IN BIOFERTILIZER Certificate	18	18	100
	Diploma	07	07	100
	Adv. Dip.	05	05	100
	COP IN TISSUE CULTURE Certificate	21	21	100
	Diploma	20	20	100
	Adv. Dip	0	0	100



27. Diversity of students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B. Sc. Microbiology	100%	Nil	Nil
M. Sc. Microbiology	100%	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense Services, etc.?

JRF-NET – 01

29. Student progression

Student progression	Against % enrolled
UG to PG	40%
PG to M.Phil.	Nil
PG to Ph.D.	2%
Ph.D. to Post-Doctoral	Nil
Employment :	
■ Campus selection	Nil
■ Other than campus recruitment	10%
Entrepreneurship/Self-employment	Nil

30. Details of Infrastructural facilities:

1.	Library	Available
2.	Laboratory	Available, Four Laboratories
3.	Internet facilities for Staff & Students	Available, wi-fi enabled
4.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
5.	Instrumentation facilities	Available
6.	Staff Cubunals	01
7.	HOD Room	01
8.	Seminar Hall	01
9.	Store Room	01

31. Number of students receiving financial assistance from college, university, Government or other agencies.:85% in terms of scholarships and free-ships.



32. Details on student enrichment programmes(special lectures/workshops/ seminar) with external experts

Student enrichment programmes :

- Hands on practical in-house training workshop entitled “Sterility testing of injectable”
 - Hands on practical in-house training workshop entitled “Sugarcane tissue culture”
 - Guest lectures on Miracles of Ayurveda, Indian civil services, Chikungunya fever
 - Workshop on In vitro fertilization
 - Motivational and educational movie : Life story
 - Industrial and field visits: Raipur Banana Tissue Culture Plant Farm, Blood Bank, Packaged Drinking Water Plant
 - Out campus Seminar on Techniques in diagnostic science
 - Poster competition
 - Science Exhibition,
 - Intercollegiate quiz competition,
 - Medical education programme: Continuing medical education programme on leprosy
33. Teaching methods adopted to improve student learning : Use of LCD/OHP, Seminars, study tours, industrial trainings, competitions, popular lectures, assignments, question paper solving etc.
34. Participation in institutional social responsibility (ISR) and extension activities
- Outreach programme : Fostering scientific temper in young minds
 - Outreach programme : Rain water harvesting
 - World tuberculosis day
 - A talk on Career opportunities in life science
 - Guest Lectures on Anti Superstition Act
 - Health camp
 - Laboratory tour for outsider students
35. SWOC analysis of the department and future plans

Strength:

- Highly competent teaching as well as non teaching staff
- Equipped Laboratory
- MoU with G V. Beverages , Gondia and Ruchi Biochemicals , Gondia for training, visits and invited lectures.
- UGC career oriented programme.
- Plant tissue culture lab.

Weakness:

- Academically weak students at the first year level

Opportunities:

- Opportunities for the students in pharma companies, food & dairy industry, medical sales, academic, research institutes, patho-labs, etc.

Challenges:

- To provide Quality education that prepares students for a global work environment.
- Very limited placement for students with B.Sc. Microbiology
- Limitation of finance

Future plans:

- Getting the department recognised for research



Dignitaries Inaugurating & Releasing the proceedings of conference



Self Study Report



Department of Biotechnology

1. Name of the Department : Biotechnology
2. Year of Establishment : 2006
3. Name of programmes /Courses offered : B. Sc., COP –Tissue Culture
4. Names of Interdisciplinary courses and the Departments/units involved : COP –Tissue Culture
Microbiology Department, Chemistry,
Department involved –Microbiology
and Botany Department.
5. Annual/Semester/Choice based credit system (Programme wise) : B.Sc. – Semester system
COP –annual –Non credit pattern
6. Participation of the department in the courses offered by other departments : M.Sc. (Microbiology) and B. Voc. (Food
Processing-and-Engineering)
7. Courses in collaboration with other universities Industries, foreign institutions etc. : COP –Tissue Culture in collaboration
with Ruchi Biochemicals, Gondia
8. Details of courses/ Programme discontinued (if any) with reasons. : Nil
9. Number of Teaching Posts
The Biotechnology course is solely managed by Microbiology Department. The two contributory teachers were appointed in department of Biotechnology every year for sharing work load with permanent faculty members of Microbiology Department.

Designation	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	Nil	Nil
Invited Lectures (CHB)	02	02

10. Faculty Profile With Name, Qualification, Designation, Specialization, (D. Sc. / D.Litt./ Ph. D. /M.Phil. etc.)

The faculty of department of Microbiology is looking after the academic activities. The faculty profile is same as given in evaluative report of Microbiology department.

11. List of senior visiting faculty:
 - Dr. B. J. Wadher, Prof. & Head, P. G. Dept. at RTM Nagpur University, Nagpur.
 - Dr. V. N. Charde of Head, Department of Microbiology at Arts Com. & Sci. College, Nagpur.
 - DR. J. B. Chawla, Head, Department of Microbiology at J. M. Patel College, Bhandara.
 - Dr. Kunal Roychoudhary Head, Department of Microbiology at S.K. P. Science College, Nagpur. Arts, Com. & Sci. college, Nagpur.



12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty :- B.Sc.: 80% Lectures and 100 % practical

13. Student -Teacher Ratio (Program wise) :

27:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

S. No.	Academic support staff	Sanctioned	Filled
1	Laboratory Assistant (MB)	01	01
2	Laboratory Attendant (MB)	02	02
3	Temporary Lab. Att.		01

15. Qualifications of teaching faculty with D.SC/D.LITT/PH.D/M.PHIL/PG.

16. Number of faculty with ongoing projects from

a) National : Information is provided in evaluative report of department of Microbiology.

b) International funding agencies and grants received : Nil

17. Departmental Projects funded by : Nil
DST-FIST,UGC, DBT, ICSSR etc. and total grant received.

18. Research Centre/Facility recognized by the : No

19. Publications:

a) Publication per faculty

The detailed information is provided in the evaluative report of Department of Microbiology as core staff members are looking after the department of Biotechnology.

20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National Committees :

b) International Committees : Nil

c) Editorial-Boards

The detailed information is provided in the evaluative report of Department of Microbiology as core staff members are looking after the department of Biotechnology.

22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental /programmes: 10 %

b) Percentage of students placed for projects in organizations outside their institution i.e. in Research laboratories/Industry/ other agencies : Nil



23. Awards/recognitions received by faculty and students

Refer point 23 of evaluative report of Department of Microbiology.

24. List of eminent academicians and scientists/visitors to the department:

- Dr. Vilas Sapkal, Ex. Vice Chancellor, RTM Nagpur University, Nagpur
- Dr. S. L. Govindwar, Advisor, Department of Biotechnology, Union Ministry of Science and Technology.
- Dr. Prof. Parvin Sinclair, Pro. Vice Chancellor, Indira Gandhi National Open University and Director of NCERT.
- Dr. Sindi, Principal, Birla Women's College, Kolkata.
- Dr. Vaidya, Scientist E II and Head, Solid and Hazardous Waste Management Division, NEERI, Nagpur
- Dr. Dilip B. Boralkar, Ex-Member secretary, MPCB
- Shri. M. G. Chandrikapure, Superintendent; Govt. of Maharashtra.
- Mrs. Hema Deshpande Member and Regional officer, MPCB, Nagpur
- Dr. Rajpal Singh Kashyap, Senior research consultant, CIIMS, Nagpur.
- Dr. Prof. V. C. Kalia, Chief Scientist, CSIR Institute of Genomics, New. Delhi.
- Dr. Hemant Purohit, Head, Division of Environmental Genomics, NEERI, Nagpur.
- Dr. R. K. Trivedi, Former Professor and Head , Department of Environmental Science, University of Pune, Pune.
- DR. A. M. Deshmuk, Professor and Head, P. G. Department of Microbiology, Dr. Babasaheb Ambedkar University, Osmanabad.
- Dr. Mrs. Saoji, Former Professor (Botany) and Director, Institute of Science, Nagpur.
- Dr. Mrs. Vijayakumari, Principal Scientist , NRCC, Nagpur.
- Dr. K. S. Ramchander Rao, Professor and Head, Department of Biotechnology, Aurora's Technological and Research Institute, Hyderabad.
- Dr. Prashant Thakre Assistant Professor, Department of Biotechnology, Sant Gadgebaba Amravati University, Amravati.
- Dr. Prashant Gawande Assistant Professor, Department of Botany , Sant Gadgebaba Amravati University, Amravati

25. Seminars/conferences/workshops organized & the source of funding

- a) National : Organised Jointly with department of Microbiology funded by UGC.
- b) International : Nil



26. Student profile programme/course wise :

Course	Year	Applications received	Selected	Enrolled		Pass percentage
				M	F	
B.Sc. Part I	2011-12	27	26	08	18	44.44
	2012-13	48	44	08	36	20.45
B.Sc. Sem I	2013-14	47	41	10	31	41.46
	2014-15	--	--	--	--	--
	2015-16	--	--	--	--	--
B.Sc. Sem. II	2013-14	47	40	09	31	30
	2014-15	--	--	--	--	--
	2015-16	21	20	--	--	--
B.Sc. Part II	2011-12	21	21	05	16	4.76
	2012-13	18	17	04	13	29.41
	2013-14	27	26	06	20	50
B.Sc. Sem III	2014-15	34	32	06	26	25
	2015-16	--	--	--	--	--
B.Sc. Sem. IV	2014-15	34	33	08	25	51.51
	2015-16	--	--	--	--	--
B.Sc. Part III	2011-12	14	14	03	11	21.42
	2012-13	14	14	01	13	57.14
	2013-14	12	09	01	08	55.55
	2014-15	26	26	05	21	53.84
B.Sc. Sem. V	2015-16	22	22	--	--	--
B.Sc. Sem VI	2015-16	--	--	--	--	--

27. Diversity of students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B. Sc. Biotechnology	100%	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense Services, etc.? Nil

29. Student progression

Student progression	Against % enrolled
UG to PG	40%
PG to M.Phil.	Nil
PG to Ph.D.	2%
Ph.D. to Post-Doctoral	Nil
Employment :	
■ Campus selection	Nil
■ Other than campus recruitment	10%
Entrepreneurship/Self-employment	Nil



30. Details of Infrastructural facilities:

1.	Library	Available
2.	Laboratory	Available, Four Laboratories
3.	Internet facilities for Staff & Students	Available, wi-fi enabled
4.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
5.	Instrumentation facilities	Available
6.	Staff Lavatory	01
7.	HOD Room	01
8.	Seminar Hall	01
9.	Store Room	01

31. Number of students receiving financial assistance from college, university, Government or other agencies.:85% in terms of scholarships and free-ships.

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

Student enrichment programmes :

- Hands on practical in-house training workshop entitled “Sterility testing of injectable”
 - Hands on practical in-house training workshop entitled “Sugarcane tissue culture”
 - Guest lectures on Miracles of Aurveda, Indian civil services, Chikungunya fever
 - Work shop on In vitro fertilization
 - Motivational and educational movie : Life story
 - Industrial and field visits: Raipur Banana Tissue Culture Plant Farm, Blood Bank, Packaged Drinking Water Plant
 - Out campus Seminar on Techniques in diagnostic science
 - Poster competition
 - Science Exhibition,
 - Intercollegiate quiz competition,
 - Medical education programme: Continuing medical education programme on leprosy
33. Teaching methods adopted to improve student learning Use of LCD/OHP, Seminars, study tours, industrial trailing, competitions, popular lectures, assignments, question paper solving etc.



34. Participation in institutional social responsibility (ISR) and extension activities

- Outreach programme : Fostering scientific temper in young minds
- Outreach programme : Rain water harvesting
- World tuberculosis day
- A talk on Career opportunities in life science
- Guest Lectures on Anti Superstition Act
- Health camp
- Laboratory tour for Off coming students

35. SWOC analysis of the department and future plans

Strength:

- Equipped Laboratory
- MoU with G V. Beverages, Gondia and Ruchi Biochemicals, Gondia for training, visits and invited lectures.
- UGC career oriented programme.
- Plant tissue culture lab.

Weakness:

- Academically weak students at the first year level
- Short of trained laboratory staff due to government recruitment policy.

Opportunities:

- Opportunities for the students in pharma companies, food & dairy industry, medical sales, academic, research institutes, patho-labs, etc.

Challenges:

- To provide Quality education that prepares students for a global work environment.
- Very limited placement for students with B.Sc. Biotechnology
- Limitation of finance

Future plans:

- Establishment of linkages with laboratories for enhancing placements



Department of Food Processing and Engineering

1. Name of the Department : Food Processing and Engineering
2. Year of Establishment : 2014
3. Name of programmes /Courses offered : B. Voc. (Food Processing and Engineering)
4. Names of Interdisciplinary courses and the Departments/units involved : Department of Microbiology
5. Annual/Semester/Choice based credit system (Programme wise) : B. Voc. -Semester System-Credit Based System
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities Industries, foreign institutions etc. : B. Voc. In collaboration with
 - National Skill Qualification framework (NSQF)
 - G. V. Beverages, Gondia,
 - S. V. K. Milk and Milk Products, Bhandara
 - Kisan Milk & Bhandara
8. Details of courses/ Programme discontinued (if any) with reasons. : Nil
9. Number of Teaching Posts

Designation	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	01	Nil
Assistant Professors	02	Nil

10. Faculty Profile With Name, Qualification, Designation, Specialization, (D. Sc. / D.Litt./ Ph. D. /M.Phil. Etc.)

The B. Voc course is solely managed by Microbiology Department. The core faculty of institute, guest faculty from industries and other institutes were invited to share work load of the Department.



Name	Qualification	Post	Specialization	Experience	Ph.D.Students Guided
Core faculty of Department of Microbiology					
Mr. S. P. Timande	M.Sc.	Associate-Professor	Microbiology	29-Years	Nil
Mr. D. A. Chouhan	M.Sc, NET, GATE, DMLT	Assistant-Professor	Microbiology	08-Years	Nil
Dr. S. D. Tambekar	M.Sc, M.Phil, Ph.D.	Assistant-Professor	Microbiology	04-years	Nil
Ms. S. S. Jaiswal	M.Sc, Net	Assistant-Professor	Microbiology	02-years	Nil
Core faculty of Department of Chemistry					
Dr. A. M. Ghatole	M.Sc, Ph. D	Assistant-Professor	Chemistry	02-Years	Nil
Core faculty of Department of Zoology					
DR.S. B. Juneja	M.Sc, NET, Ph. D	Assistant-Professor	Zoology	05-Years	Nil

The visiting faculty from industries and other institutes :

Name	Qualification	Post
Prof. Wathore	M. Pharm	Assistant-Professor, M. P. Institute of Pharmacy, Gondia. (Guest Faculty), Hira Tola ,Tedha
Prof. Bawankar	M .Tech (Food)	Assistant-Professor, M. P. Agriculture College, Hira Tola, Tedha. (Guest Faculty)
Ms. Bachere	M.Sc. (Micro.)	Ad-Hoc staff in Department of Microbiology
Ms. Dongre	M.Sc (Home Science)	Dietician at Central Hospital, Gondia. (Guest Faculty)
Ms. Rina Katre	M.Sc (Chemistry)	Contributory staff in Department of Chemistry
Ms. Sonal Dixit	M.Sc (Microbiology)	Contributory staff in Department of Microbiology
Ms. Swati Patle	M.Sc (Microbiology)	Contributory staff in Department of Microbiology
Mr. Gopal Kalambe	M.Sc. (Microbiology)	Senior Analyst, Hitech healthcare laboratory and research center, Ahmadabad.
Miss. Nupur Raghuwanshi	M.Sc. (Microbiology)	Contributory staff in Department of Microbiology
Miss. Rupali Khobragade	M.Sc. (Microbiology)	Contributory staff in Department of Microbiology



11. List of senior visiting faculty

- Dr. V. N. Charde Head, Department of Microbiology at Taywade Arts Com. & Sci. College, Nagpur.
- DR. J. B. Chawla, Head, Department of Microbiology at J. M. Patel College, Bhandara.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : B.Voc.- (Lectures and practical)

13. Student-Teacher Ratio (Program wise) :
B.Voc.- 10:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

S. No.	Academic support staff	Sanctioned	Filled
1	Laboratory Assistant	---	---
2	Laboratory Attendant	---	---

15. Qualifications of teaching faculty with D.SC/D.LITT/PH.D/M.PHIL/PG.
Provided in point No.10 above.

16. Number of faculty with ongoing projects from
a) National : Information is provided in evaluative report of department of microbiology.
b) International funding agencies and grants received : Nil

17. Departmental Projects funded by : Nil
DST-FIST,UGC, DBT, ICSSR etc and total grant received.

18. Research Centre/Facility recognized by the University : No

19. Publications:

a) Publication per faculty

The detailed information is provided in the evaluative report of Department of Microbiology as core staff members are looking after the department of Food Processing and Engineering.

20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National Committees :
b) International Committees : Nil
c) Editorial-Boards

The detailed information is provided in the evaluative report of Department of Microbiology as core staff members are looking after the department of Food processing and Engineering.

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental /programmes: Nil



- b) Percentage of students placed for projects in organizations outside their institution i.e. in Research laboratories/Industry/ other agencies : Nil
- All B.Voc. students participate in Industrial training/ Industrial visits as a part of their University syllabus requirements.
 - Training was provided to students those are selected in campus interviews for placements.
23. Awards/recognitions received by faculty and students
- Awards/recognitions received by faculty are provided in evaluative report of department of Microbiology.

24. List of eminent academicians and scientists/visitors to the department:

S. No.	Visitors	Organization
1	Dr. Bhotmange	Associate Professor, Department of Food Technology, LIT, Nagpur.
2	Dr. Kawadkar	Associate Professor, Department of Food Technology, LIT, Nagpur.
3	Dr. Shrikant Godbole	Trainer, Mitcon consultancy and services.
4	Mr. B. M. Shivankar	Inspector, DIC, Gondia.
5	Mr. Kulkarni	KVIC, Gondia.
6	Mr. Ingle	Accountant, MPBCDC, Gondia.
7	Mr. Sanjay Bhoyewar	Food Inspector
8	Mr. Amit Bharmar	Area Manager, MIDC, Nagpur.
9	Mr. Rajesh Mishra	Divisional Manager, MITCON, Nagpur.

25. Seminars/conferences/workshops organized & the source of funding:

- a) National : Workshop

Entrepreneurship Development Programme in food processing

College in collaboration with MITCON Consultancy and Engineering Services, Pune organized a long Entrepreneurship Development Programme in food processing from 03/08/201 to 1/09/2015 for setting up food processing -based enterprises This programme was sponsored by State Food Processing Mission Directorate, MAIDC, Mumbai. MITCON Consultancy and Engineering Services Ltd, is a state government agency that imparts training in the field of entrepreneurship development and self employment.

- b) International : Nil

26. Student profile programme/course wise:

Session	Name of the course/programme	Applications received	Selected	Enrolled		Pass percentage.
				M	F	
2015-16	B.Voc Sem-II	28	28	10	18	32.14
	B.Voc Sem-I	42	42	15	27	
2014-15	B.Voc Sem-I	28	28	10	18	



27. Diversity of students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B. Voc. (Food Processing and Engineering)	100%	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense Services, etc.? NA

29. Student progression

Student progression	Against % enrolled
UG to PG	NA
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employment : ■ Campus selection ■ Other than campus recruitment	NA
Entrepreneurship/Self-employment	NA

30. Details of Infrastructural facilities:

1.	Library	Available
2.	Laboratory	Available
3.	Internet facilities for Staff & Students	Available, wi-fi enabled
4.	Class rooms with ICT facility	Fully ICT enabled Common class rooms
5.	Instrumentation facilities	Available
6.	HOD Room	01
7.	Seminar Hall	01

31. Number of students receiving financial assistance from college, university, Government or other agencies : The B.Voc is funded by UGC.

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts



Student enrichment programmes :

■ **Workshops and In-House Training:**

- Training programme in collaboration with MITCON consultancy & engineering services ltd, Nagpur.
- Hands on practical in. house training workshop entitled “Sterility testing of injectable”
- Hands on practical in-house training workshop entitled “Sugarcane tissue culture”
- Water and food testing at Hi-tech healthcare laboratory and research center, Ahmadabad

■ **Guest lecturers on :**

- Miracles of Aurveda,
- Indian civil services
- Chikungunya fever

■ **Industrial and field visits :**

- G. V. Beverages LLP, Gondia
- Prabhu Cold Storage, Gondia.
- Raipur Banana Tissue Culture Farm
- Hi-tech health care laboratory and research center, Ahmedabad
- Kitchen Xpress overseas ltd, Ahmedabad
- Shah Paper Plast industries Ltd, Nadiad.

■ **Poster competition on 'Scenario of food industry in India'**

■ **Participation in National Conference on “Quality skill development in higher education institutions” organized by IQAC of D. B. Science College, Gondia**

■ **Workshops**

- How to Prepare for campus placements
 - Communication skills development
 - Soft skill (English) development programme
33. Teaching methods adopted to improve student learning
Use of LCD/OHP, Seminars, study tours, industrial training, competitions, popular lectures, assignments, question paper solving etc.
34. Participation in institutional social responsibility (ISR) and extension activities
- Outreach programme : Fostering scientific temper in young minds
 - Outreach programme : Rain water harvesting
 - A talk on Career opportunities in life science
 - Guest Lectures on Anti Superstition Act

35. SWOC analysis of the department and future plans

Strength :

- B.Voc. - major employment intensive segments.
- MoU with industries

Weakness :

- Laboratory space too small
- The department short of trained lab staff and permanent teaching staff due to the policy of scheme.

Opportunities :

- Job placements in local industries

Challenges :

- Up-gradation of laboratory
- To maintain the high standards and perform continuously extraordinarily

Future plan :

- Getting MoUs for internships and placements



Industrial Training & National Conference on Quality Skill Initiatives in HEI



Self Study Report



Department of Vocation

1. Name of the Department : Vocation
2. Year of Establishment : 2014
3. Name of programmes /Courses offered : 1. Certificate Course in Power Plant chemistry
2. Diploma in Information and web technology.
4. Names of Interdisciplinary courses and the Departments/units involved : Nil
5. Annual/Semester/Choice based credit system (Programme wise) :
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities Industries, foreign institutions etc. : 1. Certificate Course in Power Plant chemistry
2. Diploma in Information and web technology in collaboration with industries –)
- E-PhP Solution Pvt. Ltd., Gondia
- Lighthouse Info Systems Pvt. Ltd., Nagpur
- Tata Consultancy Services (TCS)
- IT & ITeS sector skill council, NASCOM, New Delhi
- Adani Power Maharashtra Limited (APML) Tirora
- Vidarbha Power Maharashtra Ltd. (VPML), Butibory, Nagpur
- Enviro Power Maharashtra Ltd; Butibory, Nagpur
8. Details of courses/ Programme discontinued (if any) with reasons. : Nil
9. Number of Teaching Posts : NA

Designation	Sanctioned	Filled
Professors	--	--
Associate Professors		--
Assistant Professors		



10. Faculty Profile With Name, Qualification, Designation, Specialization, (D. Sc. / D.Litt./ Ph. D. /M.Phil. Etc.) :

Regular faculty from other department look after the working of the academic and industrial activities of the course

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students
Mr. Y. S. Bopche	M.Sc. SET, NET	Asstt. Professor	Physics	6 yrs	NA
Dr. Ajay M. Ghotole	M.Sc., Ph.D.	Asstt. Professor	Chemistry	3 yrs	

11. List of senior visiting faculty :

- Mr. Sriprakash Singh, Adani Power Maharashtra Ltd., Tirora
- Mr. Ashok Banergy, Adani Power Maharashtra Ltd., Tirora
- Ms. Vijaya Mair, Hyderabad
- Mr. Bhanghe, Mumbai
- Prof. S. Venu, Hyderabad
- Vijay Kalidas, Chennai
- Mr. Mayank Purohit, Adani Power Maharashtra Ltd., Tirora
- Prof. M. G. Katre, D. B. Science College, Gondia
- Prof. R. K. Dhaware, D. B. Science College, Gondia
- Dr. Ajay Ghatole, D. B. Science College, Gondia
- Dr. H. R. Trivedi, D. B. Science College, Gondia
- Mr. Nair, Hyderabad, D. B. Science College, Gondia.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : 100%

13. Student -Teacher Ratio (programme wise) – NA

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled : Nil

15. Qualifications of teaching faculty with D.Sc./D.Litt/ Ph.D/M.Phil/PG:
As provided in point 10 above.

16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received : Nil

17. Departmental Projects funded by funded by : Nil
DST-FIST,UGC, DBT, ICSSR etc and total grant received.

18. Research Centre/Facility recognized by the university : No

19. Publications: Nil



20. Areas of consultancy and income generated : Nil
21. Faculty as members in
- a) National committees : Nil
 - b) International Committees : Nil
 - c) Editorial Boards.... : Nil
22. Student projects
- a) Percentage of students who have done in-house projects including inter departmental/programme : NA
 - b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies : NA
23. Awards/Recognitions received by faculty and students : Nil
24. List of eminent academicians and scientists/visitors to the department
- Mr. Seshu Bhattra Venu (Overseas Education Consultant, Hyderabad)
 - Mr. V.K.A. Vijaya (Assistant Manager, Training Mahindra Namaste PVT. LTD., CHENNAI)
 - Mr. Anil Nair, (Mathematician and Motivational Speaker, Hyderabad)
 - Ms. Savitri Murthy (CAT, GMAT, GRE, Trainer In Spoken and Written English, Bangalore)
25. Seminars/Conferences/Workshops organized & the source of funding :
- a) National - Nil
 - b) International : Nil

26. Student profile programme/coursewise:

Course	Year	Applications received	Selected	Enrolled		Pass percentage/ SSC Result
				M	F	
Diploma in ITWT	2014-15	49	49	26	23	40 % (SSC)
	2015-16	40	38	19	19	NA (Appear)
Certificate in PPC	2014-15	44	44	37	07	60 % (Industries)
	2015-16	28	28	22	06	NA (Appear)

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
Power Plant Chemistry	100%	Nil	Nil
Information and web Technology	100%	Nil	Nil



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? NA

29. Student progression

Student progression	Against % enrolled
UG to PG	NA
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employment : ■ Campus selection ■ Other than campus recruitment	NA
Entrepreneurship/Self-employment	NA

30. Details of Infrastructural facilities

1.	Library	Available
2.	Internet facilities for Staff & Students	Available
3.	Class rooms with ICT facility	Fully ICT enabled Common class rooms

31. Number of students receiving financial assistance from college, university, Government or other agencies.: As the norm ALL

32. Details on student enrichment programmes (special lectures/workshops/seminar) with External experts

- Industrial visit
- Internship at the industries
- Industrial experts invited sessions

33. Teaching methods adopted to improve student learning

- Lecture method
- Group discussions
- Open Book Tests and Surprise Tests
- Students Seminar

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Students participate in Tree plantation
- Anti-tobacco awareness

35. SWOC analysis of the department and Future plans

Strength : <ul style="list-style-type: none"> ■ Courses as per industry requirement ■ Horizontal mobility to students 	Weakness : <ul style="list-style-type: none"> ■ Regional attachment of the students
Opportunity : <ul style="list-style-type: none"> ■ Introduction of more skill based courses 	Challenges : <ul style="list-style-type: none"> ■ Skill identification among the students ■ Establishment of MoUs

Future Plan :

- Enhancement of placement
- Inculcation of such job oriented courses



Meeting with partner Industry & Industrial Training to the students



Self Study Report



POST-ACCREDITATION INITIATIVES

Our College has gone through two cycles of accreditation and in second cycle of accreditation, it has been rated with 'A' Grade by NAAC. During the last five years after reaccreditation our college has taken numerous initiatives for securing quality in all aspect including teaching-learning and accountability in our activities. In the context of the same, the major initiatives taken are summarized below-

Initiatives taken	Outcomes
Recognition of College for excellence	UGC identified our college as 'COLLEGE WITH POTENTIAL FOR EXCELLENCE'
Promotion of research	<ul style="list-style-type: none"> ■ College obtain recognition as 'Centre for Higher Learning and Research' from RTM Nagpur University in subject Physics, botany and Chemistry. ■ Ten faculty members recognized as supervisor for Ph.D. and also as PG teacher. ■ 12 MRPs successfully completed ■ 15 national conference/seminar have been conducted in last five years ■ Around 100 papers published peer reviewed journals, more than 90 in proceedings and numerous papers are presented by faculty in seminar/conferences. ■ Faculty participating international conferences abroad has been enhanced. ■ More than five faculties registered for Ph.D. ■ 13 students are pursuing Ph.D. ■ Students are also publishes papers and started news letter Biohorizon. ■ Collaborative research has been initiated. ■ Students participation in Research festival with their novel idea has been enhanced. ■ Students started to opt for summer/ winter school programme in research institute of national repote. Four students has been selected in IUAC, TIFR for students research programme. ■ One students has undertaken research work abroad (Korea)
Introduction programme	Introduction programme is initiated for new entrant students for making them friendly with college ambience and for their academic counselling.
Enhancing Staff Involvement in Design and Development of Curricula	<ul style="list-style-type: none"> ■ Principal has become Dean of Faculty of Science of RTM Nagpur University ■ More than 50% of our faculty participate in design and development of curricula as members of BOS, Task Force.



	<ul style="list-style-type: none"> ■ Staff deputed for industrial visit to interact the industry people for the skill they required and staff designed syllabi for skill based courses in collaboration with the industry partner.
Involvement of stakeholders in upgradation of Curricula	<ul style="list-style-type: none"> ■ Structural feedback is sought from all stakeholders on the curriculum through web portal, manual, interaction, meetings and consultation meet of the people related to education. ■ Well known industrialists from region were involved for Academia Industry Collaboration
Establishing linkages with local industries MoUs	<ul style="list-style-type: none"> ■ 12 linkages has been established and six MoUs has been signed for curriculum design as per their need, placement of students, internship, industrial visit etc
Introduction of New Courses	<ul style="list-style-type: none"> ■ Two Skill based courses under Community College Scheme of UGC has been initiated. ■ 3 year degree course B.Voc. (Food processing and Engineering) and B.Voc. (Software Development) funded by UGC are commenced.
Use of ICT in Teaching Learning and evaluation Process	<ul style="list-style-type: none"> ■ All class rooms has been equipped with Smart interactive boards with multimedia facility and connectivity, video conferencing. ■ Up graded Computer laboratories ■ Training to staff for handling CAD tools ■ All terminals connected through LAN, Legal softwares ■ BSNL connection with 2 MBPS, Lease line of Vodafone ■ Wi-Fi campus ■ Promoting use of N-LIST-INFLIBNET, British Council online library. ■ E-content sharing ■ On line evaluation ■ SMS alerts to the parents for students performance ■ At least one students appears in the merit list of RTM Nagpur university examination. Around 15 UG student shine up in each semester with distinction.
Training and Placement of students	<ul style="list-style-type: none"> ■ Campus Recruitment Trainings are arranged. ■ Professional trainers Invited for training on personality development, communication skill, interview skills for the students. ■ Career guidance and Students placement cell is functioning through networking with various companies and organizations for student placements. ■ In last four years 528 students appeared for campus placement by TCS, Infosys, Adani Power etc. and significantly 100 students selected in last 4 years. Many more are selected in off campus interviews.



Infrastructure development	<ul style="list-style-type: none"> ■ Auditorium renovated ■ RO water facility ■ Canteen started ■ Fully ICT enabled class rooms ■ Centralized public address system ■ Approach towards 100% solar campus ■ Rest Room, Guest rooms ■ Girls' common room
Society reach programmes	Conducted a large number of social action based programmes addressing issues of Gender, Climate change and Environment which includes Campus Cleaning Programme, Tree Plantation, Anti-Child Labour Rally, Eye Donation Rally, AIDS Awareness Rally, Medical Health Check Up Camp, Women Empowerment, Superstition, Anti-Dowry lecture, A Blood Donation Camp, Yuva Divas, Blood Donation Awareness Programme, Oath ceremony on Swach Bharat Abhiyan, Jointly with Media group of Danik Bhaskar "Clean Gondia Clean India" programme, Traffic Awareness Week, Pulse Polio Rally Awareness Programme, School Dropout Survey, Rallies on Safe Driving etc.
Campus Security	Close Circuit Cameras are installed for overall security within campus.
Organizing visits of Dignitaries	Visit to the college are arranged for- <ul style="list-style-type: none"> ■ Bollywood actor Salman Khan ■ Reporter Rajat Sharma ■ Media Guru Sohil Seth ■ Former Union Minister of India for the Ministry of Power Shri Jyotiraditya Sindhiya ■ Former Minister for higher and technical education (Maharashtra state)- Shri Rajesh Tope ■ Former Minister of State for Education, Women and Child Welfare, Health (Maharashtra state)- Smt. Fouzia Khan ■ An Indian-American businessman-Shri. Sant Singh Chatwal ■ Chairperson and Editorial Director of the Hindustan Times Group- Ms. Shobhana Bhartia - ■ Vice Chairman & Managing Director of Bharti Enterprises Mr. Rajan Mittal ■ Indian print and television journalist- Mr. Vir Sanghvi ■ Founder and managing partner of Karanjawala & Co.- Mr. Raian Karanjawala. ■ Principal Secretary, Rural Development Group - Mr. Arun Singhal. ■ CMD, BHEL Ltd.- Mr. B. P. Rao.



- Director, (Engineering, Research & Development) Bharat Heavy Electricals Ltd. - Mr. O. P. Bhutani.
- President (Corporate affairs) Adani Enterprises Ltd. - Mr. Narayan Hariharan.
- Former Chairman Kotak Mahindra - Mr. Abhay Kotak.
- Advisor on skill development from TCS - Mr. Jayant Krishna.
- Former Directorate General of Civil Aviation (DGCA), Govt. of India - Mr. E K Bharat Bhushan.
- Tarun Sagar and Vidhya Sagar.
- Chinmay Pandya for Wruindawan Gaytri.
- Ex DGCA Bhushan Eminent Scientist.



Iconic Personalities in Dhote Bandhu Science College

Dignitaries and Eminent Scientists in the College



H/E The former President of India **Smt. Pratibhatai Patil** visited the College on the occasion of Late Manoharbhay Patel's Birth Anniversary



Scientists from DST, New Delhi visited the college for Sensitization Programme on Research Initiatives & Promotions



Mr. Uday Kotak of Mahindra



Dr. Neeta Singh from AIIMS, New Delhi



Dr. M.C. Gayatri from Bangalore University, Bangalore



Prof. Chauhan, DST, New Delhi sharing his experiences with the faculty members



Prof. P. C. Upadhyay, Chairman, C. G. Private University Regulatory Commission guiding the staff members on key issues



Self Study Report



RECOMMENDATIONS RECEIVED AND COMPLIANCE FULFILLED

The recommendations received from NAAC Peer Team during re-accreditation of our college held during 24-26 March, 2011 and compliance are given below-

Sr. No.	Recommendations by NAAC Peer Team	Compliance fulfilled
1.	The college should try to become autonomous as soon as possible.	College took immediate steps through interaction with staff about getting academic & administrative autonomy. The meeting were held with staff and the inputs obtained were placed before the governing body for further consideration.
2.	Switching over to Semester System and Choice Based Credit System will be a progressive step	All programmes are semester system. B.Sc.- Semester- Credit Based system B.C.A.- Semester - Credit Based system B.Voc.- Semester - Credit Based System M.Sc.- Semester - Credit Based Choice system
3.	The existing vacancies of teachers must be filled with incumbents having Ph.D./and or NET	Vacancies are filled by appointing SET and or Ph.D. candidates.
4.	The Research Advisory Committee should facilitate a research culture in all Departments	Established Research Advisory Committee to facilitate and monitor research in all department. College got recognition as 'Centre for Higher Learning and Research,' 13 students enrolled for Ph.D. and 10 teachers are recognized Ph.D. supervisors. 12 MRPs are completed successfully and 15 National Conference /Seminar are conducted.
5.	Residential facilities for faculty & students especially those engaged in research should be provided	Residential facility is made available to staff and research students at the well-furnished staff quarters of Gondia Education Society.
6.	Pass percentage, irrespective of the University average, should be improved both in UG and PG examinations.	Remedial classes and personal counselling is provided to the slow learners. E-content is made available to them. Pass percentage of students is enhanced progressively. At least one students appears in the merit list of RTM Nagpur university examination. Around 15 UG student shine up in each semester with distinction.



7.	Performance in All India Competitive Examinations must be improved through appropriate measures	Coaching for MPSC, UPSC have been imparted and library has been enriched with needed content.
8.	A good language laboratory is needed for improving communicative skill	CRTs are provided. Professional trainers for writing, verbal skill enhancement are invited periodically.
9.	Biochemistry may be introduced at UG level in the first instance.	It is proposed for governing body approval.
10.	Collaboration with other Industries and Institutions of Research should be extended.	MoUs are established with industries & collaborative courses are initiated. The research collaboration is also attained from several research institutions which is reflected through publication.
11.	Every Department must bring out suitable learning materials in the form of manuals / monographs	Each department uses manuals and learning material. Specific text books for each semester are authored by the faculty with Himalaya Publishing House and G.C. Publication.
12.	Full digitization of Library needed.	OPAC is established, issue and take through bar code scanner - printer facility, e-content development is available online, and many e-resources are made accessible.



Gondia Education Society's
DHOTE BANDHU SCIENCE COLLEGE, GONDIA

College with Potential for Excellence (CPE)
Centre for Higher Learning & Research
UGC Community College
Accredited 'A' by NAAC, Bangalore
(Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)

Principal
Dr. Anjan Naidu

Declaration by the Head of the Institution

I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Place: Gondia

Date: 30.08.2016

Signature of the Head

of the institution with seal:



(Dr. P.A.S. Naidu)

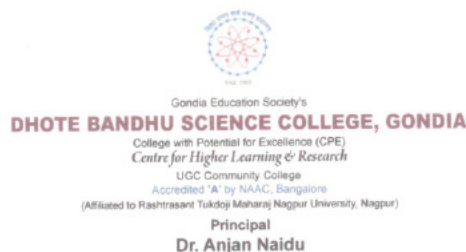
Principal

D. B. S. College, Gondia

Tirora Road, GONDIA - 441 614 (Dist. - Gondia (Maharashtra))
call us : 07182 - 252623, 252467, 09423412712
visit us : www.dbscience.org, mail us : principal@dbscience.org, anjannaidu@gmail.com.



Self Study Report



Certificate of Compliance

This is to certify that Dhote Bandhu Science College, Gondia fulfils all norms -

1. Stipulated by the affiliating University and/ or
2. Regulatory Council/Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc.] and
3. The affiliation and recognition [if applicable] is valid as on date.

In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 29.08.2016

Place: Gondia

(Dr. P.A.S. Naidu)
Principal / Head of the Institution
Dhote Bandhu Science College, Gondia
Principal
D. B. Sc. College, Gondia



Tirora Road, GONDIA - 441 614 (Dist. - Gondia (Maharashtra))
call us : 07182 - 252623, 252467, 99423412712
visit us : www.dbscience.org, mail us : principal@dbscience.org, anjannaidu@gmail.com



Self Study Report



ANNEXURE : A

Ph, 23236351, 23232701, 23237721, 23234116
23235733, 23232317, 23236735, 23239437
UGC Website: www.ugc.ac.in



विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली-110 002
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

F. 1-1/2004 (CPP-I)
September, 2008

15 SEP 2008

The Principal,
Dhote Bandhu Science College,
Gondia,
District Bhandara-441 614 (M.S).

Sub:- **Recognition of Dhote Bandhu Science College, Gondia, District Bhandara (M.S) under Section 2 (f) & 12 (B) of the UGC Act, 1956.**

Sir,

With reference to your letter No. DB/DC/851/07-08 dated 13.03.2008 on the above subject, I am directed to say that the name of **Dhote Bandhu Science College, Gondia, District Bhandara (M.S)** is included in the list of Colleges maintained under Section 2 (f) & 12 (B) of the UGC Act, 1956 under the head Non-Government Colleges teaching upto Post Graduate Degree. The College is also eligible to receive Central assistance under Section 12 (B) of the UGC Act.

Yours faithfully,

(Mrs. Sunita Gulati)
Section Officer



Self Study Report

**ANNEXURE : B****RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY**

Established by Government of Central Provinces Education Department by Notification No.513 dated the 1st of August 1923 & presently a State University governed by M.U. Act, 1994)

Re-accreditation by NAAC 'A' Grade

Office: Department of Board of College and University Development, Administrative Building, Mahatma Jyotiba Fule Education Campus, Amravati Road, Nagpur-440 033 (M.S) (INDIA)

Website: www.nagpuruniversity.org/e-mail : directorbcud@nagpuruniversity.nic.in

Dr. D. K. Agarwal
Director, BCUD

Phone No.2042962

No.RTMNU/BCUD/2016/G/ 992

Date : 30/08/2016

TO WHOM SO EVER IT MAY CONCERN

This is to certify that, **Dhote Bandhu Science College, Gondia, Dist-Gondia (Maharashtra)** is affiliated to the Rashtrasant Tukadoji Maharaj Nagpur University since 1969 and recognized by the University Grants Commission. The following Courses/Subjects are taught in the said college as per approval.

Sr. No.	Courses/Subject	Duration of the course	Affiliation (Permanent/ Temporary)	Validity period
1	Faculty of Science (For B.Sc.I, II III) English, Marathi, Hindi, Physics, Chemistry, Mathematics, Botany, Zoology, Microbiology, Electronics, Computer Science, Computer Maintenance and Environmental Science.	3 Year	Permanent	Permanent
2	M.Sc.- Chemistry, Computer Science, Microbiology, Physics, Botany	2 Year	Temporary	2016-2017
3	B.Sc.-(Additional Section)	2 Year	Temporary	2016-2017
4	B.C.A.	3 Year	Temporary	2016-2017
5	P.G.D.C.C.A.	1 Year	Temporary	2016-2017
6	B.Voc-Food Processing and Engineering	3 Years (Semester)	Temporary	2016-2017
7	B.Voc- Software Development	3 Years (Semester)	Temporary	2016-2017

Yours sincerely,

(Dr. D. K. Agarwal)
Director, BCUD



Self Study Report



Details of Courses

Sr. No.	Course	Affiliation	University permission letter & Dates	Government permission letter & Dates
1.	B.Sc. (Grant in Aid)	Permanent BCUD/R/2001/L/1437, 13-09-2001	क्र.म.वि O/2021 ५-५-१९७०	यु एन फ १४६/७० य
2.	M.Sc. (Computer Science)	2014-15 क्र.म.वि ८५५ दि.१३-११-२०१४	क्र.म.वि O/1145 16 July 2000	शा.नि.क्र. नाविस/१०००/ विस्तार/(१०/२०००) म शि-३ दि.३० जून २०००
3.	M.Sc. (Chemistry)			
4.	M.Sc. (Microbiology)			
7.	M.Sc. (Botany)	2014-15 क्र.म.वि ८५५ दि.१३-११-२०१४	क्र.म.वि 1698/ २१-१२-२००३	नाविस/2003/(10/03) मशि-३ / २७-५-२००३
8.	M.Sc. (Physics)			
9.	B.Sc. (Biotech)			
10.	Bachelor of Computer Application (BCA)	2014-15 क्र.म.वि ८५५ दि.१३-११-२०१४	क्र.म.वि O/316 30/8/06	नाविस/2006/(10/06) मशि-३ / दि.17 जून 2006
11.	B.Sc. (Addnl. Sec.)			
12.	B. Voc. (Software Development) B.Voc. (Food Processing Engineering)			
13.	Ph.D. (in Physics, Botany, Chemistry)	For 5 years	BCUDIRIG/2014/207 Date : 02.04. 2014	---

**Community College Scheme Programme**

S. No.	Certificate/Diploma Course	Approving agency
1.	Advance Certificate in Power plant chemistry	University Grant Commission, New Delhi.
2.	Diploma in Information technology and web technology	(D.O. No. F.1-156/2014 (CC) of Dated May 20, 2014)

Career Oriented Programmes

S. No.	Level of course	COP	Funding agency
1	Certificate course	1. Bio-pesticides and Bio-fertilizer Production* 2. Tissue Culture* 3. e-Commerce Security through Cryptology ^s	UGC, New Delhi * F.No.4-215/2007 (VE/COP); 23 Feb, 2007.
2	Diploma Course	1. Bio-fertilizer and Bio-pesticides Production 2. Tissue Culture	# F.No.4-275/2008 (COP); 27 Mar, 2008).
3	Advance Diploma	1. Bio-fertilizer and Bio-pesticides Production 2. Tissue Culture	\$ F.No.4-127/2010 (COC); 22 Mar, 2010)

Courses running under IGNOU study centre


S. No.	Level of course	Centre activated for
1	Certificate course	1. Food and Nutrition (CFN)
2	Diploma Course	1. Nutrition and Health Education (DNHE)

ANNEXURE : C





Self Study Report



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद
 विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
 An Autonomous Institution of the University Grants Commission

Quality Profile


Name of the Institution : Gondia Education Society's
 Dhote Bandhu Science College
Place : Gondia, Maharashtra

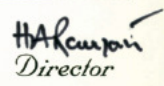
Criteria	Weightage (W _i)	Criterion-Wise Grade Point Averages (Cr _i GPA)	W _i X Cr _i GPA
I. Curricular Aspects	050	3.40	170
II. Teaching-Learning and Evaluation	450	3.00	1350
III. Research, Consultancy and Extension	100	2.45	245
IV. Infrastructure and Learning Resources	100	3.30	330
V. Student Support and Progression	100	3.00	300
VI. Governance and Leadership	150	3.30	495
VII. Innovative Practices	050	3.00	150
Total	$\sum_{i=1}^7 W_i = 1000$		$\sum_{i=1}^7 W_i \times Cr_i \text{ GPA} = 3040$

Institutional Score = $\frac{\sum_{i=1}^7 (W_i \times Cr_i \text{ GPA})}{\sum_{i=1}^7 W_i} = \frac{3040}{1000} = \boxed{3.04}$

Grade = A **Descriptor** = VERY GOOD

Date : September 16, 2011




Director

• This certification is valid for a period of Five years with effect from September 16, 2011
 • An Institutional CGPA on four point scale in the range of 3.01 - 4.00 denotes A grade (Very Good), 2.01 - 3.00 denotes B grade (Good), 1.51 - 2.00 denotes C grade (Satisfactory)
 • Scores rounded off to the nearest integer

EC/56/RAR/04



Self Study Report





Quality Profile

Name of the Institution : Gondia Education Society's
Dhote Bandhu Science College
Place : Gondia, Maharashtra

Criterion	Criterion Score (Ci)	Weightage (Wi)	Criterion X Weightage (Ci x Wi)
I. Curricular Aspects	75	10	750
II. Teaching-learning and Evaluation	80	40	3200
III. Research, Consultancy and Extension	76	05	380
IV. Infrastructure and Learning Resources	78	15	1170
V. Student Support and Progression	78	10	780
VI. Organisation and Management	76	10	760
VII. Healthy Practices	78	10	780
		100	$\Sigma C_i W_i = 7820$

$$\text{Institutional Score} = \frac{\Sigma C_i W_i}{\Sigma W_i} = \frac{7820}{100} = 78.20$$

Arvind
Director



PEER TEAM REPORT
ON
INSTITUTIONAL REACCREDITATION
OF
GONDIA EDUCATION SOCIETY'S
DHOTE BANDHU SCIENCE COLLEGE,
GONDIA, MAHARASHTRA

24 -26 MARCH 2011

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
BANGALORE

DHOTE BANDHU SCIENCE COLLEGE, GONDIA , MAHARASHTRA, REACCREDITATION REPORT



PEER TEAM REPORT ON INSTITUTIONAL REACCREDITATION OF DHOTE BANDHU SCIENCE COLLEGE, GONDIA, MAHARASHTRA	
Criterion I: GENERAL	Information
1.1 Name & Address of the Institution:	Gondia Education Society's Dhote Bandhu Science College, Gondia, Maharashtra
1.2 Year of Establishment:	01-07-1969
1.3 Current Academic Activities at the Institution (Numbers):	
Faculties/ Schools:	Faculties – 0
Departments/ Centers:	Departments – 11
Programmes/ Courses offered:	UG – 09 PG - 05 Others – M.Phil – 01 , COP: Add on courses 09, PG Diploma - 01
Permanent Faculty Members:	Sanctioned – 36, Filled – 26(Permanent) and 33 (Contract cum CHB)
Permanent Support Staff:	Non-teaching – sanctioned – 59, Filled-56
Students:	UG – 764 ; PG – 162; Dip-12 ; Self financed-122
1.4 Three major features in the Institutional Context (As perceived by the Peer Team):	<ul style="list-style-type: none">• A grant in aid, semi urban, co-education college catering to the educational needs of students mostly from backward sections of society.• Introduction of several self - financing courses.• Excellent infrastructure.
1.5 Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	24-26 March 2011 (detailed visit schedule attached)
1.6 Composition of the Peer Team which undertook the on- site visit:	
Chairperson:	Prof. S. N. Hegde (Chairman) (Former VC, University of Mysore) No. 2437, "Vidwath", Near Canara Bank H.J. Double Road, Vijayanagar II Stage Mysore – 570 017, Karnataka
Member Coordinator:	Dr. M.P. Rajan Principal , Special Grade N.S.S. Hindu College, Perunnai, Changanacherry Kottayam Dist. , Kerala
Member:	Dr. G.C. Hazarika Director, Centre for Computer Studies and Director, College Development Council Dibrugarh University Dibrugarh – 786004, Assam
NAAC Officer:	Dr. Sujata P. Shanbhag Assistant Adviser, NAAC, P. O. Box. 1075, Nagarbhavi, Bangalore- 560 072



Section II: CRITERION - WISE ANALYSIS
2.1 Curricular aspects:
2.1.1 Curricular Design & Development: <ul style="list-style-type: none"> • Vision, mission and objectives are clearly stated . • Curriculum design and development as per RTM Nagpur University norms. • Four faculty members are in BOS of Affiliating University.
2.1.2 Academic Flexibility: <ul style="list-style-type: none"> • College offers 09 UG , 05 PG, 02 PG Diploma, 01 M.Phil, 05 Certificate courses, 07 COP and 03 Certificate courses as per IGNOU Community college programme . • Five recognised research guides. • During post- accreditation period ,the college started 02 UG, 01 PG, BCA, PGDCCA, M.Phil and 07 COP courses. • All courses follow annual system of examination as per University norms
2.1.3 Feedback on Curriculum <ul style="list-style-type: none"> • Excellent feedback mechanism exists through stack holders. • Feedback inputs are utilized for improvement of teaching and learning. • Feedback information transmitted to University Bodies.
2.1.4 Curriculum Update <ul style="list-style-type: none"> • Curricula of both UG and PG programmes are revised as decided by the University. • The syllabi are revised once in three years by RTM Nagpur University. • Diploma and Certificate courses' curricula developed by the college.
2.1.5 Best Practices in Curricular Aspects : <ul style="list-style-type: none"> • Launched Finishing School with a training based on "Project Genesis" of Infosys BPO Ltd. Pune. • Job- oriented and need- based courses started under UGC, IGNOU and RTM Nagpur University. • College offers 17 self- financed programmes. • Projects and seminars are integral part of PG programmes.
2.2 Teaching-Learning & Evaluation:
2.2.1 Admission Process and Student Profile <ul style="list-style-type: none"> • Publicity of admission notice through prospectus, institutional website and print media. • Transparent and merit based admission procedures following statutory reservation policies. • Equity ensured for students from disadvantaged community, differently abled students, sports persons, women and economically weaker section.
2.2.2 Catering to the Diverse Needs: <ul style="list-style-type: none"> • Efforts are there to identify slow and advanced learners. • Remedial classes offered for slow learners and project works for advance learners. • Good number of job-oriented courses available. • Tutor-ward system to be strengthened.
2.2.3 Teaching-Learning Process: <ul style="list-style-type: none"> • A comprehensive plan of teaching, learning and the evaluation prepared and executed. • By adhering to the academic calendar, every faculty member prepares annual and monthly teaching plan in the form of Teacher's Diary. • Lecture method coupled with audio visual aids followed in teaching. • Teachers are evaluated by students and good performance of teachers recognized and honoured.



2.2.4 Teacher Quality: <ul style="list-style-type: none">• Faculty members appointed as per UGC norms.• Good number of teachers possess NET, M.Phil and Ph.D.• Faculty members are encouraged to acquire additional qualifications.
2.2.5 Evaluation Process and Reforms: <ul style="list-style-type: none">• Evaluation of student performance is monitored by Evaluation Committee and is put on college website.• Parents kept informed students performance via cell phones.• Grievance redressal mechanism exists.
2.2.6 Best Practices in Teaching-Learning and Evaluation : <ul style="list-style-type: none">• College recognized as Lead College among 48 colleges in the region.• Nearly 80% students get scholarships and freeships.• ICT- enabled teaching-learning process adhered to.• System of visiting faculty is operative.• Periodic and continuous internal evaluation of students.
2.3 Research, Consultancy & Extension:
2.3.1 Promotion of Research <ul style="list-style-type: none">• Research Advisory Committee constituted to promote research.• PG students engaged in research as part of project work.• Minor research projects by faculty are operative.
2.3.2 Research and Publications Output: <ul style="list-style-type: none">• Five faculty members are recognized as research guides for Ph.D and four for M.Phil.• The college has applied to the University for recognition of Research Centre.• Research publications in national and international referred journals are seen.• Major research projects are on the envil.
2.3.3 Consultancy: <ul style="list-style-type: none">• Moderate consultancy service to farmers and community provided.• No income generated through consultancy.• Strong consultancy support system and services, yet to be developed.
2.3.4 Extension Activities: <ul style="list-style-type: none">• Visible extension activities through NSS and NCC in collaboration with NGOs.• College-neighbourhood network is seen.
2.3.5 Collaboration: <ul style="list-style-type: none">• Limited collaboration with industry.• MOU signed with few institutions.• Placement cell interacts with prospective employers.
2.3.6 Best Practices in Research, Consultancy & Extension: <ul style="list-style-type: none">• Research oriented PG training in Microbiology/Biotechnology and Computer Science.• Newly recruited faculty with Ph.D are likely to be engaged in active research.• In the last 5 years, many Ph.D's and M.Phil's were awarded to faculty members.• Good number of publications in international journals and best paper presentation in international conference.
2.4 Infrastructure and Learning Resources:
2.4.1 Physical Facilities for Learning: <ul style="list-style-type: none">• Well furnished class rooms and equipped laboratories including computer facilities,



<ul style="list-style-type: none"> seminar halls / conference hall/auditorium. Infrastructure facilities are upgraded periodically. Sports facilities are available. Infrastructure is optimally used.
2.4.2 Maintenance of Infrastructure: <ul style="list-style-type: none"> All available infrastructure facilities are well maintained. Separate equipment maintenance grant obtained from UGC. Lab technicians and attendants appointed.
2.4.3 Library as a Learning Resources <ul style="list-style-type: none"> Library Advisory Committee exists. Library has good collection of books and journals, CD/DVD's. Internet with broadband and reprographic facilities available. Inter- library borrowing system exists. OPAC and Sikhsan Kranthi Library Software are used for library automation.
2.4.4 ICT as Learning Resources: <ul style="list-style-type: none"> ICT is increasingly used in class-room teachings. All science departments have computer facilities. Departments also have internet browsing facilities. Departments can access central computer facilities.
2.4.5 Other Facilities: <ul style="list-style-type: none"> Ladies waiting room facilities available. Cafeteria and medical assistance are provided. Sports and games facilities are available.
2.4.6 Best Practices in the development of Infrastructure and Learning Resources (If any): <ul style="list-style-type: none"> Student evaluation of teachers. Student feedback mechanism on teaching-learning. Monitoring of student progression. Considerable support from management and stake holders for infrastructure development.
2.5 Student Support and Progression:
2.5.1 Student Progression: <ul style="list-style-type: none"> Percentage of drop-outs is minimal. Parents are kept informed of student performance. Evaluation Committee maintain good record of internal assessment.
2.5.2 Student Support: <ul style="list-style-type: none"> High degree of campus discipline maintained. Incidents of sexual harassment and ragging are nil. Placement cell has started functioning. PG students are sent out for practical training in industries.
2.5.3 Student Activities: <ul style="list-style-type: none"> Student Union is functional. College magazine offers opportunities for creative writing. Cultural activities encouraged. Participation in NSS, NCC, sports and games facilitated.
2.5.4 Best Practices in Student Support and Progression : <ul style="list-style-type: none"> Identification of slow learners. Special thrust for English language.



<ul style="list-style-type: none">• Offering bridge courses to academically weak students.• Online examination for internal assessments.
2.6 Governance and Leadership:
2.6.1 Institutional Vision and Leadership: <ul style="list-style-type: none">• Well spelt out vision and mission.• Responsive leadership and management .• Good governance with able administrative staff.• Principal is the chief motivator and able leader.
2.6.2 Organizational Arrangements: <ul style="list-style-type: none">• The college has well organized Governing Council.• The principal has delegated duties to various sub-committees.• College enjoys good support from management and alumni.
2.6.3 Strategy Development and Deployment: <ul style="list-style-type: none">• Proper planning for teaching is done month-wise and year-wise.• Management Information System exists.• Principal meets the faculty periodically to take stock of various curricular and co-curricular activities.• Departments developed their own perspective plans for teaching and evaluation.
2.6.4 Human Resource Management: <ul style="list-style-type: none">• Career advancement opportunities provided.• Individual research projects encouraged.• Students are asked to take up research oriented project works.• Good performers are identified and honoured.
2.6.5 Financial Management and Resource Mobilization: <ul style="list-style-type: none">• Society that runs the college is resourceful.• College does not suffer from financial stringency.• Self financing programmes are running well.• College accounts are well maintained and audited.
2.6.6 Best Practices in Governance and Leadership (if any): <ul style="list-style-type: none">• Principal enjoys considerable degree of freedom and trust.• Dress codes for students are prescribed.• Encouragement to faculty to grow vertically in academic strength.• The Principal commands considerable confidence and co-operation.
2.7 Innovative Practices:
2.7.1 Internal Quality Assurance System: <ul style="list-style-type: none">• Internal Quality Assurance cell functions well.• Young faculty are encouraged to obtain NET and Ph.D qualifications.• Research and publications are encouraged.• Participation in seminars/workshops are supported by financial assistance.
2.7.2 Inclusive Practices: <ul style="list-style-type: none">• Co-education with greater encouragement for enrolment of girls.• Prevalence of a sense of belonging by the faculty and students to the institution.
2.7.3 Stakeholder Relationships: <ul style="list-style-type: none">• Alumni and parents have expressed satisfaction over the functioning of the college.• Students are happy over life and study in the campus.



<ul style="list-style-type: none"> Faculty and non-teaching staff have excellent rapport with Principal.
Section III: OVERALL ANALYSIS
3.1 Institutional Strengths: <ul style="list-style-type: none"> An institution of higher learning managed by a dynamic and enlightened governing council. Current activities and those projected for the future rendered the college a progressive one. The college has sufficient initiatives to be elevated as an autonomous institutions of excellence.
3.2 Institutional Weaknesses: <ul style="list-style-type: none"> Lack of autonomy and freedom to be innovative in teaching and research programmes. The affiliation system is a hurdle in introducing in semester system and choice based credit system. Three acre campus for a developing college is quite insufficient.
3.3 Institutional Opportunities: <ul style="list-style-type: none"> Considerable opportunities exists for collaboration and outsourcing. Scope also lies for transforming the college into a college with potential for excellence and also an autonomous college. The faculty can try for considerable quantum of grants from external agencies. Introduction of large number of job-oriented courses and strengthening of student placement cell.
3.4 Institutional Challenges: <ul style="list-style-type: none"> Recruitment of competent and qualified faculty. Further up gradation of physical facilities for teaching, research and campus residence. To move RTM University authorities to bring in a change in act to provide autonomous status to deserving colleges.

**Section IV: Recommendations for Quality Enhancement of the Institution**(Please limit to **ten major ones** and use telegraphic language)

(It is not necessary to indicate all the ten bullets)



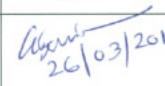
- The college should try to become autonomous as soon as possible.
- Switching over to Semester System and Choice Based Credit System will be a progressive step.
- The existing vacancies of teachers must be filled with incumbents having Ph.D/and or NET.
- The Research Advisory Committee should facilitate a research culture in all Departments.
- Residential facilities for faculty and students specially those engaged in research should be provided.
- Pass percentage, irrespective of the University average, should be improved both in UG and PG examinations.
- Performance in All India Competitive Examinations must be improved through appropriate measures.
- A good language laboratory is needed for improving communicative skill.
- Biochemistry may be introduced at UG level in the first instance.
- Collaboration with other Industries and Institutions of Research should be extended.
- Every Department must bring out suitable learning materials in the form of manuals /monographs .
- Full digitization of Library needed.

I agree with the Observations of the Peer Team as mentioned in this report.

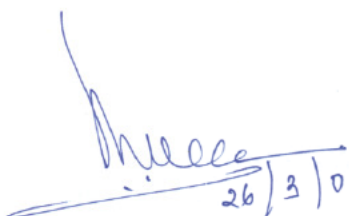
Signature of the Head of the Institution
Seal of the Institution

Principal
D.B. Science College
Gondia

*Signatures of the Peer Team Members:*

Name and Designation		Signature with date
Chairperson:	Prof. S. N. Hegde (Chairman) (Former VC, University of Mysore) No. 2437, "Vidwath", Near Canara Bank H.J. Double Road, Vijayanagar II Stage Mysore – 570 017, Karnataka	 26/3/11
Member Coordinator:	Dr. M.P. Rajan Principal, Special Grade N.S.S. Hindu College, Perunnai, Changanacherry Kottayam Dist., Kerala	 26.03.11
Member:	Dr. G.C. Hazarika Prof. Dept. of Computer Science and director, College Development Council Dibrugarh University Dibrugarh – 786004, Assam	 26/03/2011
NAAC Officer:	Dr. Sujata P. Shanbhag Assistant Adviser, NAAC, P. O. Box. 1075, Nagarbhavi, Bangalore- 560 072	

Place: Gondia
Date: 26/03/2011


26/3/11