

**NILKANTHRAO SHINDE SCIENCE AND ARTS COLLEGE  
BHADRAWATI, DIST. CHANDRAPUR,**

**PIN CODE - 442902**

**MAHARASHTRA STATE**

## **REPORT**

### **ANNUAL QUALITY ASSURANCE REPORT**

**(AQAR)**

**INTERNAL QUALITY ASSURANCE CELL (IQAC)**

**(SESSION - 2010 – 11 )**

# **INTERNAL QUALITY ASSURANCE CELL ( IQAC )**

**( ACADEMIC SESSION : 2010 - 11 )**

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## **Part – A**

### **THE PLAN OF ACTION CHALKED OUT BY THE IQAC IN THE BEGINNING OF THE YEAR TOWARDS QUALITY ENHANCEMENT AND THE OUTCOME ACHIEVED BY THE END OF THE YEAR**

Following are the major points to which the IQAC was planned to set priorities upon towards quality enhancement of the institution at the beginning of the year 2010-2011.

- 1) Involvement of Teachers in Research Activities.
- 2) Recruitment of Contributory Teaching Staff.
- 3) Subscription of New Journals and Books to Enrich the Library.
- 4) Sick Room and Medical Facilities.
- 5) Internet and LAN Facilities, College Website.
- 6) Student Council Committee to Help the Students in Solving Their Problems.
- 7) Bar Codes to the Books in the Library.
- 8) Establishment of Guidance and Counseling Centre in the College for the Benefit of Students.
- 9) Starting other UGC schemes Sanctioned under XI<sup>th</sup> Plan of UGC in the College.
- 10) Submission of Minor Research Projects of the Staff to UGC, Western Regional Office, Pune.
- 11) Organization of National Conference in Physics at N.S.College.
- 12) Establishment of Pandit Nehru Studies and Research Centre at N.S.College.
- 13) Organization of National Seminar on Pandit Jawaharlal Nehru : His Legacy and Modern India.
- 14) Providing Internet Facility to Various Departments of the College.
- 15) Maintenance and Upkeep of the Botanical Garden in the College Premises.
- 16) Renovation of Conference Hall for Conducting Various Programmes from Time to time.



***Details regarding above points are given as under :***

### **1) Involvement of Teachers in Research Activities**

According to the suggestions given by Peer Team of National Assessment and Accreditation Council (NAAC), Bangalore, college has enhanced research activities. Following staff members are engaged in active research now.

***Shri N.V.Harney***, Head, Department of Zoology has submitted his Ph.D. thesis titled “Studies on the Biodiversity and Physico-chemical Status of Three Water Bodies Near Bhadrawati, Distt. Chandrapur (M.S.)” to RTM Nagpur University Nagpur in Zoology in the Faculty of Science, under the guidance of Dr. A. A. Dhamani, Head, Deptt. Of Zoology, N.H. College Bramhapuri and Dr.R.J.Andrew of Hislop College, Nagpur.

Based on this the RTM Nagpur University has awarded Ph.D.Degree to him vide notification no. RTMNU/Ph.D.(Cell)/7/348 dt. 4<sup>th</sup> May 2011.

***Shri N.S.Wadhawe***, Head,Department of Botany is working for his Ph.D. on the topic” Paddy Field Algae of Chandrapur District” under the Supervision of Dr.P.B.Nandkar, Professor and Head, Department of Botany, RTM Nagpur University, Nagpur.

***Mrs.A.B.Dhote***, Head,Department of Chemistry and ***Shri R.S.Hajare***, Assistant Professor Department of Chemistry has registered for Ph.D. Degree at Sant Gadgebaba Amravati University, Amravati under the guidance of Dr.S.R.Aswale of Lokmanya Tilak College, Wani,Distt. Yavatmal in the subject chemistry in the faculty of Science.

***Shri A.D.Dahegaonkar***, Head, Department of Physics is working for his Ph.D.Degree on the topic” Surface Morphology, Dielectric Behavior of Some Conducting Polymer Flyash Composite” under the supervision of Dr.S.B.Kondawar, Associate Professor, RTM Nagpur University, Nagpur and Co-guide Dr.Vilas Tabhane, Professor, Pune University, Pune.

***Shri G.R.Bedare***, Assistant professor Deptt. of Physics has submitted synopsis for Ph.D. registration on topic “ Ultrasonic study of pure bio liquids and binary mixtures under the supervision of Dr.B.M.Suryavanshi and Co-supervision of Dr.V.D.Bhandakkar at RTM Nagpur University from research centre Institute of Science,Nagpur.

***Shri Kartik N.Shinde***, Contributory lecturer working in the Department of Physics has submitted his Ph.D.thesis titled” Development of Rare Earth Activated Phosphate Based Phosphors for Lamp and TLD Applications” to RTM Nagpur University Nagpur under the guidance of Dr.S.J.Dhoble,Associate Professor, PGTD of Physics, RTM Nagpur University and

Dr.Animesh Kumar, Sr.Scientist and Deputy Director, National Environmental Engineering Research Institute (NEERI), Nagpur.

*Shri S.B.Tangade*, Head Department of Marathi has successfully completed his M.Phil on topic "Samaj Prabodhankar Agarkar: Ek Chikitsa" under the guidance of Dr.C.S.Sahare, Associate Professor, S.P.College, Chandrapur from YCMOU, Nashik.

*Shri Pramod D.Sardar*, Head Department of History, is working for his Ph.D. degree under the guidance of Dr. Dr.A.S.Gade of Tompe College Chandur Bazar of Amravati district from SGB Amravati University on topic "Bhartiya rajyaghatnetil mulbhut adhikarawar bouddha tatwadnyanacha prabhav".

### **Research Papers Published By the Faculty Members In : National and International Journals During The Academic Session 2010-2011.**

The faculty members have published many research papers in various national and International Journals the details of which are given in **Annexure 1**.

### **2 ) Recruitment of Contributory Teaching Staff**

Principal Nilkanthrao Shinde Science and Arts College Bhadrawati District Chandrapur (M.S.) has appointed 20 contributory lecturers for undergraduate and post graduate courses during the academic session 2010-2011 for which Nagpur University Approval is taken vide letter No. M.V. 679 C/394 dt. 5/2/2011 ( **Annexure 2** )

### **3) Subscription of New Journals, Periodicals, Newspapers and Books to Enrich the Library**

In the Academic Session 2010-2011 13 new journals are subscribed for enhancing research potential of teachers and 10 periodicals are added in library collection (**Annexure 3**). Total 8 daily news papers are there in the library namely Tarun Bharat, Sakal, Loksatta, Mahavidarbha, Lokmat , Maharashtra Times, Deshonnati and Employment News for knowing the current affairs of the district as well as the whole world. The newspapers will upgrade the knowledge of youngsters.

### **4) Sick Room and Medical Facilities**

The college has provided sick room facility at Shinde Multispeciality Hospital and Research Centre, Bhadrawati which is adjacent to our college for providing medical facilities in case of emergency.



The following team of doctors under the Chairmanship of Dr.Vivek Shinde provided medical service to the students, teachers and non teaching staff members.

The team of doctors for the session 2010-11 is as under :

1. Dr.Vivek Shinde	MBBS, MS, FRSH (London) (Chairman)
2. Dr.(Mrs)Priya Shinde	MBBS, DGO (Member)
3. Dr.Vaibhav Shinde	MBBS, MD,DNB(Medicine) (Member)
4. Dr.(Mrs) Shweta Shinde	MBBS, MD (Member)
5. Dr.Shirish Choudhary	MBBS, MS (Member)
6. Dr.Nilesh Joshi	MBBS,DNB (Ortho) (Member)
7. Dr.V.S.Zullurwar	MBBS, DMRD (Member)
8. Dr.Dhananjay Bokare	MBBS,MS, MCH (Member)
9. Dr.Viral Shah	MBBS (Member)

The above committee of doctors undertake medical check up for all the students enrolled in the college as prescribed by RTM Nagpur University, Nagpur and assist them in solving their medical problems throughout the year as and when needed.

#### **5) Internet and LAN facilities and College Web Site**

The Internet facility is available in the Principals office as well as provided to office administration, LAN system is also connected in the office computers to provide faster accessibility. The Nilkanthrao Shinde Science & Arts college has designed its Website and placed it on the internet for wide dissemination of information.

The website of the our college is [http:// www.nscollege.ac.in](http://www.nscollege.ac.in)

#### **6) Student Council Committee to help the students in solving their problems.**

*Shri Ajay Arunrao Mahadole* is selected as University representative for the session 2010-11. He represented the college students at RTM Nagpur University to solve their problems related to the university work.

#### **7) Bar Codes to the Books in the Library.**

This aspect is still under consideration and do not materialized due to certain technical difficulties.

#### **8) Establishment of Guidance and Counselling Centre in the College for the Benefit of the Students.**

Students are guided from time to time regarding various job avenues under this scheme. Under XIth plan the University Grants Commission has sanctioned a Career and Counseling Cell for the N.S.College for the benefit of students. Dr.Shashikant R.Sitre is appointed as Co-ordinator of this cell for the session 2010-2011. He regularly guided the students regarding various examinations and job avenues available and solve their difficulties through counseling. Various programmes were organized under this centre for upgrading the students knowledge base and their empowerment. Many students were guided and their difficulties solved.

#### **9) Starting other UGC Schemes Sanctioned under XI<sup>th</sup> Plan of UGC in the College**

- UGC Network Resource Centre.
- Career Oriented Course Fashion Designing.
- Career Oriented Course in Computer Application.
- Equal Opportunity Centre.
- Coaching classes for NET /SET for SC/ST/OBC and Minorities.
- Remedial Coaching Classes for SC/ST/OBC (Excluding Creamy layer) and Minorities.
- Coaching Classes for Entry in Services for SC/ST/OBC and Minorities.
- Pt.Nehru Studies and Research Centre

*The details pertaining to all these schemes are provided in PART-B under Point no. 26 in this IQAC report (Finacial Assistance from UGC under XI<sup>th</sup> Plan).*

#### **10) Submission of Minor Research Projects to UGC, Western Regional Office, Pune.**

The following projects were submitted by the staff members to UGC, Western Regional Office, Pune during the XI<sup>th</sup> Plan in the session 2009-2010.

##### **Submitted MRP to UGC Pune:**

1. **Shri S.D.Deo** , Head - Mathematics Department : Some Aspects of Spherical Symmetric Space Time in Bimetric Relativity.



2. **Shri N.S.Wadhawe**, Head - Botany Department : Studies on Algae of Paddy Fields of Bhadrawati Tehsil of Chandrapur District of Maharashtra State (India ).
3. **Dr.P.N.Nasare** , Botany Department : Qualitative and Quantitative Analysis of Eugenol and Methyl Eugenol in *Ocimum sanctum* Linn.
4. **Shri G.R.Bedare** ,Physics Department : The Non Linera Acoustic Characterization of Bioliquids.
5. **Shri A.D.Dahegaonkar** , Head - Physics Department :Development of Flyash/ Polymer Composite for Electronic Material Applications.
6. **Dr. N.V.Harney** ,Head - Zoology Department: Limnological Assessment , Database Prepration and Conservation of Wetlands of Bhadrawati Tehsil of Chandrapur District (M.S.)India.
7. **Dr.S.R.Sitre** , Zology Department : Reducing Environmental Pollution Through Management of Biodegradable Waste by Vermitechnology, Characterization of Vermiwash and its Suitability for Land Application in Rural and Backward Areas.
8. **Mrs.A.B.Dhote (Head)** and **Shri R.S.Hajare** , Chemistry Department : Assessment of Ground Water Quality of Bhadrawati Tehsil of Chandrapur District.

Out of the above 8 submitted Minor Research Projects (MRP) 4 projects were sanctioned by UGC. The staff members who have been sanctioned the projects were Shri N.S.Wadhawe (Botany), Dr.P.N.Nasare (Botany), Shri A.D.Dahegaonkar (Physics) and Shri G.R.Bedare (Physics).

The sanctioned financial assistance for respective Principal Investigators for their Minor Projects sanctioned by UGC is as given below :

Dr.P.N.Nasare	:	Rs. 1.8 Lac
Shri N.S.Wadhawe	:	Rs. 1.8 Lac
Shri A.D.Dahegaonkar	;	Rs. 1.3 Lac
Shri G.R.Bedare	:	Rs. 1.4 Lac

## 11) Organization of National Conference in Physics (NCNMA 2010) With UGC Assistance

Nilkanthrao Shinde Science & Arts College, Bhadrawati district Chandrapur (M.S.) organised a one day UGC sponsored "National Conference on Novel Materials and their Applications (NCNMA-2010)" on December 18<sup>th</sup>, 2010 in collaboration with *Luminescence Society of India (Maharashtra Chapter)* and *Department of Physics, RTM Nagpur University, Nagpur*.

The Conference covered recent development's in the field of physics, chemistry, material science, technology and applications of novel materials. Apart from Invited Talks by leading experts, there was a poster presentation of research papers. Organizing committee invited scientists /engineers, research scholars and students, involved in R & D in the broad area of materials and their applications and related fields, for active participation in the conference.

The NCNMA-2010 was attended by approximately 200 delegates from around the country. The schedule of the conference was divided in few major sessions followed by oral presentations.

Welcome remarks were made by Dr. K.D. Thengane, Principal, Nilkanthrao Shinde Science & Arts College, Bhadrawati followed by Prof. K.N. Shinde, Director , R & D Cell.

### Special Invitees for this function were:

1. Prof. T.M. Karade, Former Vice-Chancellor, Indian University, Raipur.
2. Prof. K.H. Makade, Former Head, Department of Botany, RTM Nagpur University, Nagpur.

On this occasion we are highly privileged to felicitate the following distinguished luminaries who have spent their whole life for a noble cause of education with dedication, commitment, and sincerity. They enriched the knowledge of scientific community and are still shining and striving hard to achieve something good which will benefit the young researchers.

1. Prof. B.T. Deshmukh
2. Prof. C. Mande
3. Prof. S.Rajgopalan
4. Prof. Kamal Singh (Ex VC SGB Amravati University)
5. Prof. M.Apate
6. Prof. Singaru
7. Prof.R.B.Kharat



8. Prof.N.S.Bhave
9. Prof.K.H.Makade
10. Prof. V.B. Sapre

In the Scientific program **Keynote address** was delivered by Prof. B.P Chandra, Former Vice-Chancellor, Pt. Ravishankar Shukla University, Raipur & Director, Research & Academic Development Disha Institute of Management and Technology, Raipur (C.G.).

**Invited Speakers of the function are :**

1. Prof. S.H. Pawar, Vice-Chancellor, Dr. D.Y. Patil University, Kolhapur
2. Dr. K.V.R. Murthy , Head, Department of Applied Physics, M.S. University, Baroda ( President, Luminescence Society of India).
3. Dr.S.P. Lochap, IUAC, New Delhi, India.

Other than this many interesting papers presented (oral) during sessions described the "recent trends and important applications of novel materials in the fascinating field of material science" particularly in the area of structure, synthesis and processing, characterization, advanced-state properties, and applications of materials.

The conference provided the means to make important personal contact with key researchers from all over the world. During the conference many researchers have discussions with Dr. K.V.R. Murthy, Dr.S.P. Lochap and Prof. S.H. Pawar Participation of students and researcher in the NCNMA-2010 was extremely stimulating and provided a good cross section of the international/national research being carried out throughout the world.

The establishment of personal contact with high profile international/national researchers both at the conference and through personal discussions has facilitated the flow of information and research. Knowledge gained through this platform will most effectively be channelled through the enhanced performance by the enthusiastic participants.

## **12) Establishment of Pandit Nehru Studies and Research Centre at N.S.College**

The Pandit Nehru Studies and Research Centre is established in the college under UGC XI<sup>th</sup> Plan grants. Dr.P.N.Nasare ,Assistant Professor, Department of Botany, has been appointed as Director of this centre.

**The Advisory Committee** of this centre is having following members :

- Dr.K.D.Thengane - Chairman
- Dr.Kishor Mahabal - Member
- Dr.(Mrs.) Alka Deshmukh - Member
- Prof. Sunil Adgaonkar - Member
- Prof.M.D.Zoting - Member
- Shri Ashok Kamble - Member
- One UGC Nominee - Member

The advertisement for the post of “Research Associate” is given in the local newspapers for this centre and based on interview Mr.H.P.Madavi is selected by the selection panel for doing research work on Pandit Jawaharlal Nehru.

Also various programmes were organized from time to time by this centre on Pandit Nehru throughout the academic session.

### **13) Organization of National Seminar on Pandit Jawaharlal Nehru : His Legacy and Modern India.**

The National Seminar on *Pandit Jawaharlal Nehru: His Legacy and Modern India* is organized on 28th March 2011 at the conference hall of N.S. College.

The Chief Guest for this function was Dr.V.T.Patil, Former Vice Chancellor of Pondicherry University, Pondicherry. This seminar is sponsored by University Grants Commission, New Delhi. Souvenir of this national seminar is published and distributed to the participants who actively involved themselves in this event. Through this one day conference a large number of students as well as teachers were benefitted. Distinguished illumanaries gave invited talks on this occasion on Pandit Nehru and his works.



#### **14) Providing Internet facility to Various Departments of the College**

The college has provided internet connectivity (Broadband) to department of Mathematics, Physics, Chemistry, Botany, Zoology and Home Sciences for enhancing the knowledge of teaching staff as well as providing assistance to students.

#### **15) Maintenance and Upkeep of the Botanical Garden In the College Premises**

The college premises harbors a beautiful garden housing medicinal and ornamental plants useful for the undergraduate students of botany. The cutting of plants was regularly done and fertilizers and manures are periodically supplied to the plants. The flowers of flowering plants were utilized during various college level functions from this maintained garden.

#### **16) Renovation of Conference Hall for Conducting Various Programmes from Time to Time**

The auditorium hall on 2<sup>nd</sup> floor of the college is converted into a sophisticated conference hall in order to enhance the aesthetics and add a look of modernity. For this purpose the hall is renovated and modern furniture is installed in the auditorium. LCD Projector and projection screen is purchased for carrying out slide shows by eminent personalities and resource persons.

This hall is utilized for conducting various programmes and is a study center of Pandit Nehru Studies and Research Centre.

## **Part – B**

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The following activities are performed at N.S.Science & Arts College, Bhadrawati, District Chandrapur during the academic session 2010-11.

### **1. Activities Reflecting the Goals and Objectives of the Institution**

- \* To Provide Higher Education to the Students of Bhadrawati, District. Chandrapur.
- \* To Induce Rational and Scientific Attitudes in the Students of the N.S.College.
- \* To Build Honest and Patriotic Citizens at the College Level So That They Can Play an Important Role in Nation Building.

### **2. The New Academic Programs Initiated at UG and PG level**

College is always playing an important role in providing higher education to the backward class students of Bhadrawati and adjoining areas.

In the academic session 2010-2011 for B.A.Part-I one section is sanctioned by the Govt. of Maharashtra vide letter no. NGC 2010/226/10 MS 4 dt. 14<sup>th</sup> July 2010.

No new courses were sanctioned for PG department in any of the streams for the N.S.College in the year 2010-11.

### **3. Candidates Qualified NET/SET/GATE**

Till date no student of this college has qualified in the NET/SET or GATE Examination.

### **4. Initiatives Towards Faculty Development Programmes**

In the year 2010-11 many faculty members of our college participated in national and international conferences for enhancing scientific knowledge and their personal development (Annexure 4). Some of our teachers actively participated in Refresher and Orientation Courses. The details are provided in Annexure 5.



## 5. New Collaborative Research Programmes

### Deptt. of Physics:-

- Collaboration with University in South Africa (University of the Free State) – 19<sup>th</sup> July 2010
- Collaboration with Department of Physics – RTM Nagpur University- 13/07/2010
- Collaboration with Department of Physics – Govt.Institute of Science, Nagpur for Ph.D. of Shri G.R.Bedare

### Deptt. of Botany :-

- Collaboration with Hislop College, Nagpur for Research Work of registered students for Ph.D. work.

### Deptt. of Chemistry:-

- Collaboration with SGB Amravati University, Amravati, Department of Chemistry for Ph.D work of Mrs.A.B.Dhote and Shri R.S.Hajare.

## 6. Details of Research Scholars Working Under Staff Members

1.Principal, **Dr.K.D.Thengane** is guiding 3 Ph.D. students in Mathematics and one student in Physics in RTM Nagpur University, Nagpur.

- Mr.A.A.Qureshi (Maths)
- Mr.D.Teltumbde (Maths)
- Ms.Shital Gomkar (Maths)
- Mr.Govardhan Urkude (Physics)

2.**Dr.Shashikant Sitre** is guiding 2 students for Ph.D in Zoology in RTM Nagpur University

- Ms.K.H.Waghmare ( Zoology)
- Mr.S.S.Gandhewar (Zoology)

3. **Dr.Praveenkumar Nasare** is guiding 2 students for Ph.D. in Botany in RTM Nagpur University Nagpur.

- Ms.Archana Junghare (Botany)
- Ms. Manisha Meshram (Botany)

## 7. Honours and Awards to the Faculty

The Following Honors and Awards are conferred to the faculty members during the academic session 2010-11:

### 1.Dr.K.D.Thengane (Principal)

- **Best Principal Award (2011)** : Conferred by *International Institute of Education and Management, New Delhi*.

### 2. Shri P.M.Wasake (Department of Geography)

- **Medal Received** at National Integration Camp from Col.Dinesh Naikwade on 1<sup>st</sup> November 2010 at Gonikopal, Distt. Coorge, Karnataka for representing Kerala and Maharashtra Directorate.

### 3. Shri Kartik N.Shinde (Contributory Lecturer -Physics)

- **IAAM Scientist Award 2011** for notable and outstanding presentation in the First International Congress of Advanced materials -2011 during 13-16 May 2011 at Jinan, China.
- **Cited in Society for Materials Chemistry (SMC) Bulletin**, Vol11, Page No. 56, Dec. 2010.

## 8. Community Services

With the guidance received from Honorable Shri Nilkanthraoji Shinde, Ex MLA and Secretary Bhadrawati Shikshan Sanstha, Bhadrawati the college has always associated itself with certain community activities throughout the year. The activities undertaken during the academic session includes :



- *Programme on Environment* was organized under Environmental studies for Undergraduate students of the college particularly the students of B.A. and B.Sc.Part II .
- *Programme on Literacy Day* was arranged by Population education Club, Women's Centre for education Services, Continuous and Adult Education department.
- *Environment Protection Rally* was Organised for Environmental Awareness through the Bhadrawati streets to sensitize the local people regarding protecting the precious environment of Bhadrawati.

## 9. Teachers and Officers Newly Recruited

In the Academic Session 2010-11 twenty contributory lecturers were appointed in the beginning of the session based on the work load available. Approval of these contributory lecturers were obtained from Mahavidyalaya Section of RTM Nagpur University, Nagpur vide letter no. M.V./ 679 C / 394 dated 5/02/2011 . Please See **Annexure 2**.

## 10. Teaching-Non Teaching Staff Ratio

Following are the details of the teaching and non teaching staff in the college

(a) Full time approved lecturers	:	15	
Principal	:	01	
Lecturers (Permanent)	:	15	
(b) Contract Basis Approved Lecturers	:	NIL	
(c) Contributory Approved Lecturers	:	20	
Total Teaching Staff	:	33	( Includes Permanent Staff also)
Non Teaching Staff	:	16*	

Therefore , the teaching and non teaching staff Ratio is : **33: 16\*** (At the Start of the year)

\* In the mid session – 5 non teaching staff members were transferred to other institutions due to surplus. So the ratio has changed to 33:11 at the end of the session.

## 11. Improvement in Library Services

College library has sufficient text and reference books on all the subjects taught in the college for the benefit of the students. News papers and periodicals are also available in the college library to update the knowledge of students and teachers.

In the academic session 2010-11 we have purchased new books as per the curriculum requirements of RTM Nagpur university, Nagpur and looking into the needs of the students of all the subjects (**Annexure 6**).

LIBMAN software is also made available in the library for making the entries.

## **12. New Books/Journals Subscribed And Their Cost**

In the academic session 2010-11 for enrichment of the college library we have purchased 1252 new text as well as reference books worth **Rs. 1226053.58/**. These books will be useful to students for updating their knowledge as well as pursuing higher studies (**Annexure 6**).

## **13. Courses in which Student Assessment of Teachers is Introduced and the Action taken on Student Feedback**

For the assessment of teachers, feed back is taken from students. On the basis of feedback the principal has given following recommendations for improvement in teaching:

- Conduction of unit test after completion of every unit from time to time.
- Distribution of notes of related topics.
- Conduction of pre university college level examination at the end of course completion.
- To arrange educational tours and field visits to benefit the students by interacting with nature and natural resources.

## **14. Unit Cost of Education**

During the Academic Session 2010-11 total **1072** students enrolled their names for various courses at N.S.Science and Arts College, Bhadrawati, District Chandrapur (Maharashtra) India.

Looking at this the unit cost of education comes to be :

Rs. **3353 = 76/-** Per Student (With Salary)

Rs. **500 = 32/-** Per student (Without Salary)

### **15. Computerization of Administration, Process of Admission, Examination Result and Issue of Certificates**

The administration of the office was fully equipped with Computers and printers and the process Of admission in the college was also done with the help of computers.

All the data related to admissions, scholarships, free ships and other important documents were stored in office computers from time to time. Due to computerization of the office much time of the office staff is saved and work is done speedily.

### **16. Increase in Infrastructure Facilities**

Following measures were taken by the college management to improve the infrastructural facilities in the college premises

- Text and reference Books purchased for increasing the stock in the library in the interest of students.
- Equipments & Chemicals for Experimentation Purchased for various departments.
- Renovation and Modernization of Conference Hall.
- Repair and Renovation of Furniture as per Need.
- Providing Internet Connectivity to Various Departments.
- New Journals Purchased for Enhancing Research Potential of Teaching Staff.
- Purchase of Computers for Network Resource Centre.
- Purchase of Laser Printers and Xerox for Office Administration.



- Books purchased for NET/SET and Competitive Examinations.
- LCD Projector Purchased for Presentation of Experts for Various Programmes.

## **17. Technology Up gradation**

Following measures are undertaken in the college for technology up gradation:

- Use of OHP for teaching to UG and PG classes
- Use of LCD for Power point presentations for PG students
- Up gradation of office and administrative computer systems
- Use of LAN for convenient work for the college
- Up gradation of college website <http://nscollege.ac.in>

## **18. Computer and Internet Access in the College**

Internet access is made available in the principal's office which can be utilized as per need of the administration for communicating to Joint Director office, Nagpur. The office administration is also equipped with computer and internet connectivity for communicating to RTM Nagpur University administration and MKCL.

Also the UGC Network Resource Centre has 6 computers with broadband connectivity for the students usage. Computer Science department has also internet connectivity. Now the college staff is also well acquainted with the latest technology.

## **19. Financial Aid to Students**

College provide various scholarships and freeships to the backward class students and economically backward class students under various government schemes as per government funding ( **Annexure 7** ).

The scholarships are distributed to students through their bank accounts directly. Many students take benefit of these schemes for taking higher education.

## 20. Health Services

The following team of doctors under the Chairmanship of Dr.Vivek Shinde provided medical service to the students, teachers and non teaching staff members throughout the year.

The Team of doctors is as under :

1. Dr.Vivek Shinde	MBBS, MS, FRSH (London)- Head, ENT & Cancer Surgeon
2. Dr.(Mrs)Priya Shinde	MBBS, DGO - Gynecologist
3. Dr.Vaibhav Shinde	MBBS, MD,DNB(Medicine)- Heart & Diabetes Expert
4. Dr.(Mrs) Shweta Shinde	MBBS, MD - General Practitioner
5. Dr.Shirish Choudhary	MBBS, MS
6. Dr.Nilesh Joshi	MBBS,DNB (Ortho)
7. Dr.V.S.Zullurwar	MBBS, DMRD
8. Dr.Dhananjay Bokare	MBBS,MS, MCH
9. Dr.Viral Shah	MBBS

## 21. Performance in Sports Activities

College has sufficient playground to play games such as kabaddi, volleyball, athletics, boxing, power lifting, wrestling and badminton. By playing various games our students maintained fitness and take active part in intercollegiate programmes as well as university level events from time to time. The college also has the facility of fitness health club for students.

In the academic session 2010-11 many of our students participated in sports events and got prizes for their success.

- Our students participated in **Volleyball** held at Vivekanand College,Bhadrawati and got the inter collegiate zone final runner and got second prize.
- In **Athletics** event held at RTM Nagpur University Playground in Oct-Nov. 2010 four students took active part.
- In **Kabaddi** our college is zone final runner and got second prize in the event held at N.H.College,Bramhapuri.
- Our students also took part in **Weightlifting** and **Powerlifting**.

- Our students participated in **Cricket** competition held at Guru Nanak College, Ballarpur District - Chandrapur.

#### **Achievement in Sports:**

In *Kabaddi* Mr.Nitin S.Donge has been included in RTM Nagpur University team and *got Inter University Color Coat*.

#### **22. Incentives to Outstanding Sports Persons**

To encourage the students of the college, the college is promoting various games and sports throughout the year and the sportsmen having very good performance were felicitated by giving certificates and prizes on 26<sup>th</sup> January every year.

#### **23. Placement Services Provided to Students**

Placement cell was formed in the college with a view to provide employment opportunities to students as well as the pass outs of our college. Mr.Shon B.Tangade, Head ,Marathi Department is providing assistance to students in getting suitable jobs in various companies as well as organizations.

#### **24. Best Practices of the Institution**

- **National Service Scheme (NSS)** – Through this activity our students always participate in various programmes arranged for social as well as cultural development events of the college.
- **National Cadet Corps (NCC)** – The students of National Cadet Corps work as volunteers for arranging various camps and other programmes from time to time.
- **Women's Centre for Education and Services** – The Women's Centre for Education and Services is an establishment of Extension Department. The activity aimed at understanding the social and personal problems of women. Mrs.A.B.Dhote, Head,Department of Chemistry is working as Programme officer of this activity at college level.



- **Population Education Centre** – The population education is the activity particularly aimed to spread awareness about the growing hazards of population explosion. Mr.A.D.Dahegaonkar Head,Department of Physics is coordinating this activity at college level.
- **Continuous Education Programme** – This is the activity of RTM Nagpur University, Nagpur. Under this activity Shri N.S.Wadhve is making aware the illiterate people of the society and inspiring to take education for their better life. The main aim behind this programme is to throw light on the life of Rashtrasant Tukadoji Maharaj.
- **Congratulation Committee** – To appreciate outstanding achievements of the staff members college has formed congratulation committee. The committee also organizes felicitation and extends compliments on birthdays of staff members.
- **Health Society** at College level for students and staff
- **Sports Facilities** provided to students.
- Organization of **Annual Prize Distribution Function** to boost the morale of meritorious students.

## **25. Linkages Developed with National / International Academic Research Bodies**

- Principal, Dr.K.D.Thengane is associated with Rashtrasant Tukadoji Maharaj Nagpur University , PGTD of Mathematics and Physics with respect to his Ph.D. students as recognized Guide of RTMNU.
- Dr.S.R.Sitre is a registered guide of Ph.D. for RTMNU and has a linkage with Sevadal Mahila Mahavidyalaya, Nagpur for registering his Ph.D. students as a place of work.
- Mr.Kartik N.Shinde (Contributory Lecturer) Department of Physics has established a linkage with NEERI and RTM Nagpur university for doing his Ph.D. work.
- Dr.P.N.Nasare is a registered Ph.D. supervisor of Botany in RTMNU and is associated with Hislop College Centre for registering his botany students for Ph.D. work.
- Department of Physics- N.S.College has collaboration with *University of Free State* (University of South Africa ) made on 19 th July 2010.

- Department of Physics- N.S.College has collaboration with Deptt.of Physics *RTM Nagpur University*, Nagpur made on 13/07/2010.
- Department of Physics N.S.College has collaboration with Institute of Science for doing Ph.D. work of Mr.G.R.Bedare.
- Department of Chemistry of N.S.College has collaboration with Chemistry Department of S.G.B.Amravati University as a research centre where Mrs.A.B.Dhote and Mr.R.S.Hajare are pursuing their Ph.D.work in subject Chemistry.

## **26. Any Other Relevant Information:**

- **Financial Assistance from UGC Under XI<sup>th</sup> Plan**

Under the UGC XI<sup>th</sup> Plan college has been sanctioned – Merged Schemes, College Development Assistance, Career Oriented Programmes (F.D.and CA) and pandit Nehru Studies and Research Centre and schemes for PG and UG Development during the academic session 2010-11.

### ***Schemes are as under:-***

#### **1. Development Assistance to Colleges Under Merged Schemes of XI<sup>th</sup> Plan of UGC**

##### **A) Catch Up Grant for Young Colleges –**

Under this scheme based on curriculum of RTMNU text and reference books and Journals were purchased. Various instruments were also purchased for Chemistry, Physics, Botany, Zoology and Microbiology departments.

B) Colleges with relatively Higher Proportion of SC/ST/OBC and Minorities – For economically weaker students and Teachers.

C) Special Grant for Enhancement of Initiative for Capacity Building in Colleges- Books and Equipments were purchased for Students and teachers.

D) Establishment of UGC-Network Resource Centre (UGC-NRC). The responsibility to run this centre successfully was entrusted with Dr.Shashikant Sitre, Asst. Prof.Deptt. of Zoolgy, N.S.Science and Arts College. Under this scheme internet connectivity to students and teachers is provided free of cost throughout the year.

E) Equal Opportunity Centre in College - In this scheme under chairmanship of Principal Advisory Committee is established. Advisor of this committee is Kundan D.Shahare and the members are Dr.P.N.Nasare and Shri A.D.Dahegaonkar. This scheme is for college

students only. The main objective behind this scheme is to take a review about SC/ST/OBC and minority students regarding whether benefit is given to them or not and to provide them opportunities so as to equalize them with all.

- F) Remedial Coaching for SC/ST/OBC (Excluding Creamy Layer) and Minorities – Books and equipments were purchased under this scheme. BAI and II students are involved in this scheme. Books were distributed to B.A.Part-I students. Shri A.D.Dahegaonkar worked as co-ordinator of this scheme.
- G) Coaching for NET/SET for SC/ST/OBC (Excluding Creamy Layer and Minorities – In this scheme students were taught in life sciences , Physics, History, Political Science and Sociology. Dr.P.N.Nasare worked as co-coordinator of this scheme. Books are purchased for the benefit of the students under this scheme.
- H) Coaching Classes for Entry in Services for SC/ST/OBC (Excluding Creamy layer) and Minorities. – Competitive examination classes were taken like UPSC,MPSC, Railways, Banks etc. Study centre was established under this scheme and books and magazines were purchased. Dr.P.N.Nasare is appointed co-ordinator for implementing this scheme.
- I) Career and Counselling Cell – Dr.Shashikant Sitre is appointed as Co-ordinator of this scheme for the session 2010-11. Under this scheme Internet and Xerox facility is made available to the college.

## 2) Development Assistance to Colleges for College Development under XI<sup>th</sup> Plan

- Books and Journals purchased
- Equipments – Computers purchased for departments.
- Improvement of Facilities in Existing Premises - In Home economics department under this scheme kitchen accessories were purchased and electrical fittings were done in college.
- Enhancement of Initiative for Competence Building - Under this scheme teachers were deputed for conferences/ seminars and not teaching staff were sent for workshops in other places.
- Examination Reforms – In this scheme the age old system of education has given a change for development for the betterment of students. Under this scheme seminars and home assignments were given and model examination was conducted. Under remedial



coaching classes unit tests were conducted. The subjects taught include history, political science, sociology and botany.

- Education Innovation – Work on Conservation of the Heritage was undertaken for history subject. In this scheme historical sites of Bhadrawati city were studied. Field visits were undertaken and remedies for conservation for them are to be suggested. For this History subject- Shri Kundan D.Shahare and Shri P.D.Sardar worked as co-ordinators.
  - Field Visits/ Tours – Under this field tours were arranged for students – In science stream Tour was organised by Dr.P.N.Nasare at Khindsi in Nagpur district, while in Arts stream Shri P.D.Sardar took the students to Anandsagar at Shegaon. Mrs.R.S.Chahare took Home economics students to Weaver Centre at Nagpur and Ramtek.
  - Extension Activities – Under this scheme Mahila Sashaktikaran, Yuva Sahaktikaran and Paryavaran Bachao rally were organized by the college.
3. **Career Orientation Programme** – Under this scheme Certificate courses in Fashion Design and Computer Application were undertaken in which, in fashion design 20 students took admission while in Computer Application 25 students were registered.
  4. **Pandit Nehru Studies and Research Centre** – The thoughts of Pandit Nehru are spread in masses through students. Under this scheme Essay Competition, Popular lectures, Projects on Nehru were undertaken. Books on Nehru are distributed to students and Dr.Nasare worked as Director of this centre.
  5. **Infrastructure Development for NAAC Accredited College** – Under this scheme PG Laboratories will be established and Equipments were ordered for upgrading the infrastructure of PG laboratories.
  6. **Special Assistance for UG Development** - UG lab. Equipments were purchased and computers are purchased under this scheme for departments.
  7. **Proposed Courses** - For next session include Certificate Course in Human rights, Diploma Course in Computer Application and Fashion Designing.
  8. **Financial Assistance for Construction of Women's Hostel.**
  9. **Financial Assistance for Flood Lighting for Volleyball Court.**
  10. **Financial Assistance for Construction of Indoor Sports Facility.**

## 11. Financial Assistance for Purchasing Sports Equipments.

- **Scholarships Provided to Meritorious Students of the Summer Examination of 2009-2010 Session**

The college management has decided to uplift the morale of the students by giving away various scholarships to toppers of Arts and Science Stream for the session 2009-10. The students and scholarships declared are as under :-

**\* Swargiya Yashwantrao Shinde Smriti Scholarship:**

**B.Sc.I** -(Topper from College)- Rs.1000/-

Ku.Ruchita Ramchandra Hurkat (Computer Science)

**B.Sc.II** – Rs.1000/-

Praful Vinodrao Pidurkar (PCM)

**B.Sc.Final** –

Pooja Moreshwar Goswade – Rs. 1000/-

Megha Ramchandra Dhoke – Rs.500/-

Vaishli Prabhu Petkar- Rs.300/-

**\* Swargiya Matoshree Yamunabai Shinde Smriti Scholarship:**

**B.A.I** – Rs.1000/-

Roshan Omeshwar Mohare

**B.A.II** - Rs.1000/-

Mariyanka Muthyya Dongar

**B.A.Final-**

Mehrunnisa Basmir Sheikh

Anju Dnyaneshwar There

Nisha Kamlakar Dange

**\* Swargiya Punjabrao Yashwantrao Shinde Smriti Scholarship:**

**M.A.I- Rs.500/-**

Khemraj D.Mandhare (Geography)

**\* Swargiya Shrinivasrao Yashwantrao Shinde Smruti Scholarship:**

**M.A.I- Rs.500/-**

Jayshree D.Jadhao (Home Economics)

• **Students Participation in Youth Festival (2010-2011)**

The following students actively participated in Youth Festival organized by RTM Nagpur University, Nagpur .

**Dance**

- Lukesh A Nannaware
- Sainath S.Nannhe
- Jitendra Bhoyar
- Santosh Derkar
- Rahul Pachbhai
- Vishakaha Sherki
- Pranali Iname
- Mamta Yerme
- Shraddha Marboinwar

**Katthak**

- Ku.Snehal Thombre

**Speech**

- Bhuvaneshwari Turke
- Swapnil Mohitkar

**Poem**

- Ku.Mohini Matte

- ***Participation of NCC Girl Cadets in National Integration Camp***

Our enthusiastic NCC girl Cadets went to National Integration Camp at Gonikopal in Coorg district, Karnataka in Oct. 2010.

- ***Participation of N.S.College in Avishkar Festival***

Our enthusiastic students namely *Mr.Amir M.Shah* and *Shri Abhilash S. Deogade* actively participated in Avishkar 2010 held at Rajiv Gandhi Engineering College, Chandrapur and won the first Prize in Poster Competition (UG Level in Science Faculty).

- ***Programme on Women Empowerment***

A day long programme was organized on women empowerment at N.S.Science and Arts College,Bhadrawati on 27<sup>th</sup> June 2011. Chairman of Bhadrawati Shikshan Sanstha Mrs.Nilimatai Shinde presided over the function. Prof. Surekha Deshmukh from R.S.bidkar College,Hinganghat,Distt.Wardha empowered the women through their motivational speech. The programme was conducted by Mrs.Rekha S.Chahare, Incharge of Home Science Department.

- ***Three Day Workshop***

A three day workshop on “Tie and Dye” was organized under fashion Design course for the students during 13/10/2010 to 15/10/2010. Ku.Ashwini Niwalkar guided the participants.

- **Participation of Teaching Staff in Various Events : (Academic Session 10-11)**

**Shri S.D.Deo – Head, Department of Maths**

- Incharge- Student Council.
- Chairman- Prospectus Committee.
- Published 2 abstracts in conference souvenir.
- Participation in Pandit Nehru Conference.
- Paper Published in Nehru Conference.



**Mrs. A.B.Dhote – Head, Department of Chemistry**

- Attended International Conference at Nagpur.
- Judge- Essay Competition Organised by Central School, Bhadrawati, January 2011.
- Chief Guest “Environment Program” held at Gopal Nagar, Chandrapur, August 2010.
- Poster Presentation at –Indira Gandhi Technology, Jaipur
- Attended International Conference at Nagpur.
- Published abstract titled “acoustic behavior of paracetamol at 303.15, 308.15 and 313.15 K”.

**Shri N.S.Wadhawe – Head, Department Of Botany**

- NAAC and IQAC Coordinator of the college.
- Programme officer of Continuous Education Programme at N.S.College, Bhadrawati
- Actively involved in Social activities.

**Shri N.V.Harney – Head Deptt. Of Zoology**

- Co-Ordinator of Environmental Studies Course for B.Sc. and B.A.Part II students of the college
- Head Publicity Department of College.
- Co-ordinator of College for Avishkar-2010 festival of RTMNU.
- Motivated the students Mr.Amir M.Shah and Mr.Abhilash Deogade for participating in District level Inter-collegiate Competition on 10<sup>th</sup> and 11<sup>th</sup> December 2010 and won the 1<sup>st</sup> Prize at Rajiv Gandhi College .
- Published 3 abstracts in conferences.
- Published 3 research papers.

**Shri P.M.Wasake – Head, Geography Department**

- Assisted the Bhadrawati Police Station during “20<sup>th</sup> Road Safety Week”.
- Co-officer Winter Exam of RTMNU at Arts Commerce Science College, Tukum.

- Attended a National Integration Camp at Gonikopal (District Coorg, Karnataka State) in Oct. 2010 and obtained the Medal for representation of the Kerala and Maharashtra Directorate at the hands of Col. Dinesh P. Naikwade on 1<sup>st</sup> November 2010.
- Chairman Volunteer Committee – NCNMA-2010.
- Active member of geo Club
- Paper valuer of military Science subject of RTMNU, Nagpur.
- Co-officer Shri Sai College of Engineering and technology on Summer 2011 exam of RTMNU.

#### **Shri S.B.Tangade- Head, Department of Marathi**

- N.S.S.Programme Officer of the college till January 2011.
- Attended Conference on Pandit Nehru at N.S.College.

#### **Shri Vilas G. Petkar -Department of Marathi**

- Internal Supervisor of RTM Nagpur University (Winter) Examination at Dr.Ambedkar College, Chandrapur Centre No. 502, from 3 Oct. to 9 Dec. 2010.
- Speaker for the function held at Pradnya Vikas Wachnalaya, Milind nagar,Bhadrawati on 12 Dec. on topic “Year 2011 chya jangannet jati nihay janganana awashyak ahe ka”
- Internal Supervisor of RTM Nagpur University Summer Examination at S.P.College, Chandrapur from 6 April to 24 June 2011.
- Master trainer for Census- 2011.
- Attended conference on Pandit Nehru in N.S.College,Bhadrawati.

#### **Shri A.D.Dahegaonkar- Head, Department of Physics**

- Co-ordinator - Remedial Coaching Classes -UGC Sponsored.
- Convener of NCNMA-2010 held at N.S.College on 18<sup>th</sup> Dec. 2010
- Incharge of Population Education Club of College.

#### **Shri G.R.Bedare - Department of Physics**

- Actively participated in NCNMA- 2010.
- Member- Academic Programme Committee- NCNMA-2010.

- Co-Convener NCNMA-2010.
- Officiating Principal- 18/4/11 to 20/4/11 at n.s.college
- Chief Supervisor -Summer 201 Exam. of RTMNU from 18/4/11 to 20/4/11 at N.S.College.

#### **Shri R.S.Hajare - Chemistry Department**

- Appointed as Co-ordinator of National Service Scheme (N.S.S.) from 2011.
- Registered for Ph.D at SGB Amravati University on 15 July 2010 on topic Acoustic study of some antibiotic drug by ultrasonic interferometry.
- Participated in International Conference of Chemistry at Nagpur.
- Participated in Pandit Nehru Conference at N.S.College.
- Abstract Published in conference at jaipur.
- Co-officer RTMNU Exam at Vivekanand College, Bhadrawati during March 2011.

#### **Shri Kartik Shinde - Contributory Lecturer , Physics**

##### **Referee: International Journal ( 5)**

- Journal of Alloys and Compounds, ELSEVIER Publication, USA
- Advanced Materials Letters, VBRI Press , China
- Materials Science & Engineering B, ELSEVIER Publication, USA
- Luminescence, *The journal of Biological and chemical luminescence*, John Wiley & Sons Inc publication, USA.
- Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry ,TAYLOR & FRANCIS, USA.
- Organizing Secretary, UGC sponsored National Conference on Novel Materials and its Applications (NCNMA-2010) Bhadrawati, Dist: Chandrapur (M.S.) in collaboration with Luminescence Society of India (LSI-Maharashtra Chapter) and Department of Physics, RTM Nagpur University, Nagpur.
- Member of Editorial board of *Journal Search and Research* (ISSN-0975-5721), Bhopal, India

#### **Shri S.B.Tangade- Head ,Marathi Department**

- Attended conference on Pandit Nehru his legacy and Modern India at N.S.College on 28 March, 2011.
- Attended Conference of Marathi at Deptt. of Marathi, RTM Nagpur University.
- Attended State Level Seminar at Vivekanand College,Bhadrawati on topic " Indian Constitution and Social Justice on 5<sup>th</sup> Feb. 2011.

#### **Mrs. R.S.Chahare- Home Economics Department**

- Organiser- Women Empowerment Programme on 27<sup>th</sup> January 2011 at N.S.College, Bhadrawati.
- Attended State level Conference – at Rajkumar Kewalramani College, Jaripatka Nagpur on 19/09/2010 on topic “Vartaman sthiti me gruhaarthshastra ki bhumika”
- Attended workshop on “Guidelines on New Syllabus of Under Graduate in Home Economics” on 24 Sept. 2010 held at Anusayabai Kale Hall.

**Dr.S.R.Sitre , Deptt. of Zoology**

- Co-ordinator UGC Network Resource Centre
- Co-ordinator Career and Counselling Cell
- Co-ordinator Certificate Course in Computer Application
- Refree of Indian Stream Research Journal (ISRJ) ISSN - 2230-7850
- Refree of Journal – Golden Research Thoughts (GRT) ISSN - 2231-7850
- Co-Authored a Book Titled “Principles of Aquaculture: Published by Himalaya Publishers, Mumbai
- Participation and coordination of Field Visit – 28 Dec. 2010, Ramtek for B.Sc.students.
- Co-opted Member of Environmental Science Board of RTMNU for Moderation Work of papers set.

**Dr.P.N.Nasare, Deptt. of Botany**

- Director Pandit Nehru Studies and Research Centre of N.S. College.
- Co-ordinator of all the UGC Schemes of the College.
- Co-coordinator for Entry in Services.
- Co-ordinator of NET/SET Centre of the College
- Refree of Indian Streams Research Journal (ISRJ)
- Refree of Journal – Golden Research Thoughts (GRT)
- Organising Secretary of One day National Seminar on “Pandit Nehru : His Legacy and Modern India (March 2011)
- Organised a Field Tour of students of UG B.Sc.I,II and III of Science Stream to Ramtek distt. Nagpur on 28<sup>th</sup> Dec. 2010.



**Shri P.D.Sardar – Head, Political Science Department**

- Co-coordinator of Certificate Course in Human rights
- Organized a field tour of Arts students of the college to Anand Sagar and Shegaon

**Shri Kundan Shahare- Head, History Department**

- Actively engaged in NET /SET Orientation classes
- Taken remedial Coaching classes for students of college.
- Taken Competitive Exam. Classes and MPSC Classes at the college for students
- Paper in conference - 04

**Shri D.L.Bhaware- Head, Sociology Department**

- Taken Competitive Exam. Classes and MPSC Classes at the college for students.

## ANNEXURE - 1

### RESEARCH PAPERS PUBLISHED BY THE FACULTY MEMBERS

#### ACADEMIC SESSION 2010-2011

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#### Shri S.D.Deo – Head, Mathematics Department

- Plane gravitational waves in bimetric relativity (2011). *Journal of Vertical relativity*, 6(2): 1-11.
- Bianchi type –III cosmic strings with background metric (ii) (2011). *Global Journal of Theoretical Mthematical Physics*, 1(1): 13-17.
- Bianchi type –III cosmic string with background metric (2011). *International Journal of Mathematics Research*, 3(2): 133-139.
- Plane gravitational waves with dark matter in bimetric relativity (2011). *International Journal of Mathematical Archive 2* (03): 391-392.
- A cylindrically symmetric in homogenous cosmic string and domain walls in bimetric relativity (2011). *International J. of Mathematical Archive 2* (01): 121-123.
- Non –existence of Bianchi type-I ,V and VI cosmic strings in bimetric relativity (2010). *Ultra Scientific Journal of Physical Sciences 22* : 535-538.

#### Dr.N.V.Harney, Head Deptt. of Zoology

- N.S.Wadhawe, P.N.Nasare,N.V.Harney and S.R.Sitre(2010). Biodiversity of macrophytes in Ghodpeth reservoir at Bhadrawati tehsil of Chandrapur district ,Maharashtra, India, *Bioinfolet* ,7(1): 46-47.
- N.V.harney,S.R.Sitre,N.S.Wadhawe and P.N.Nasare (2010). Check list of birds of ghodpeth reservoir of bhadrawati tehsil in chandrapur district of Maharashtra. *Journal of Ecology and Fisheries* Vol. 3(1): 127-133.
- Harney N.V. A.A. Dhamani and R.J.Andrew (2011). Studies on avifaunal diversity of three water bodies near bhadrawati, distt. Chandrapur (M.S.), *Indian Streams Research Journal*, Vol. I(6): 216-218.

#### Dr.S.R.SITRE –Deptt of ZOOLOGY

- Anant S.Deshpande, Suresh B.Zade and Shashikant R.Sitre (2010). Histopathological study of *Catla Catla* in a polluted Koradi lake, Nagpur, (M.S.),India. *Indian J.of Invertebrate Zoology and Aquatic Biology* Vol. 6(2): 38-44. (ISSN: 0976-9226)
- Bhende A.M, Zade,S.B.,Sitre S.R. and Wasu Y.H.(2010). Evaluation of Physiological stress in college students during examination. *Bioscience Biotechnology Research Communication*. Vol 3(2) : 213-216

- Shashikant R.Sitre, Suresh B.Zade and Sanjeev S.Gandhewar (2011). Benthic Macroinvertebrates in an urban freshwater lake of Nagpur City. *Bioinfolet* Vol 8(2): 160-161. Print ISSN 0971-1431, Online ISSN 0976-4755
- Bhende A.M.,Zade S.B.,Sitre S.R. and Wasu Y.H.(2011). Effect of Yogic Practices on the Management of Hypertension in Working Women. *International Journal of Biomedical and Healthcare Science*. Vol 1 No.1 : pp. i-7
- Swati A. Bande, Suresh B.Zade and Shashikant R.Sitre (2011). Evaluation of Anthropometric and physiological profiles of weight trainer and sedentary control of Nagpur city India. *International Journal of Biomedical and Healthcare Sciences* Vol1, No.1 PP.27-32

#### DR.P.N.NASARE , Deptt. of BOTANY

- P.N. Nasare (2010) Studies on germination and in vitro culture of *Ocimum sanctum* Linn. *Bioinfolet*, Aurangabad MailBox. 7(3): 277
- Manisha Mehsram & P.N.Nasare (2011) Phytoplankton diversity of Futala Lake, Nagpur Maharashtra. *Bioinfolet*, Aurangabad Vol. 8 No.2 : 220
- Manisha Meshram and Nasare, P.N. (2011) Phytoplankton diversity in Futala lake, Nagpur, Maharashtra. *Ecology & Fisheries* Vol. 4 (1) :67-70.
- Nasare P.N. & A.D. Choudhary (2011) Early flowering and high yielding mutants in *Ocimum sanctum* Linn. *Indian Streams Research Journal*, Vol. I, Issue III, : 202-204 (ISSN:2230-7850)
- Nasare, P.N. (2010) Efficiency and effectiveness of gamma rays, sodium azide and ethylmethane sulphonate in *Ocimum sanctum* Linn. *Journal of Genetics and Plant Breeding*,
- P.N. Nasare (2010) Seed coat colour mutants in *Ocimum sanctum* Linn. *Vidarbha Journal of Science*, Vol.5 No.3-4 (ISSN :0973-8932)
- P.N. Nasare (2010) Effect of gamma rays, EMS and SA on pollen fertility in M<sub>1</sub> generation in *Ocimum sanctum* Linn. *Mendel*, Patna (Bihar) (*International Journal*) Vol.27(1-2),11-12
- Darshana Bhosale and P.N. Nasare (2010) Studies on phytoplankton diversity of Sakkardara lake, Sakkardara, Nagpur, Maharashtra state. *Bioinfolet*, 7(4):284-286.
- P.N. Nasare (2010) Semi-male sterile mutants in *Ocimum sanctum* Linn. *Bioinfolet*, Aurangabad (MS). Souvenir & Proceedings, Recent Trends in Bio-geo Science(RTBGS-10)PP:80-81.
- P.N. Nasare (2011) Unbranched type of mutants in *Ocimum sanctum* Linn. *Vidarbha Journal of Science*, Vol.6 No.1:1-2.
- P.N. Nasare and A.D. Choudhary (2010) Effect of physical and chemical mutagens on mitotic activity in root tip cells of *Ocimum sanctum* Linn. *Mendel*, Vol 27(3-4):53-55
- P.N. Nasare & A.D. Chaudhary (2011) Mutants with different branching patterns in *Ocimum sanctum* Linn. *Hislopia Journal Nagpur (MS)* Vol. 3 (2):189-194 (ISSN-0976-2124)

- P.N. Nasare (2011) Tall and dwarf mutants in *Ocimum sanctum* Linn. *Hislopia Journal* Vol.3(1): 77-83, (ISSN-0976-2124).
- P.N. Nasare (2011) Bushy type of mutants in *Ocimum sanctum* Linn. *Search and Research* Vol.III No.(1):90-91(ISSN 0975-5713)
- P.N. Nasare (2011) Late flowering mutants in *Ocimum sanctum* Linn. *Botanique*, Vol.14 (2): 30-39.
- P.N.Nasare (2010). Effect of Physical and Chemical mutagens on biogenetic material to induce bushy mutants in *Ocimum sanctum* Linn. Proc. Of national Conf. on Novel materials and their Applications held at N.S.Science and Arts College, Bhadrawati distt. Chandrapur , pp. 71-72.

### SHRI KARTIK N.SHINDE (PHYSICS)

- I. M. Nagpure, K. N. Shinde, V. K. Dhiman, O. M. Ntwaeaborwa, S. J. Dhoble and H. C. Swart (2010). Combustion synthesis and luminescence investigation of  $\text{Na}_3\text{Al}_2(\text{PO}_4)_3\text{RE}$  (RE=  $\text{Ce}^{3+}$ ,  $\text{Eu}^{3+}$  and  $\text{Mn}^{2+}$  ) phosphor, , **Journal of Alloy and compounds** 492 , 384-388
- K.N.Shinde (2010).An Eco-friendly phosphate based phosphors: A step forward towards new generation lamp phosphors, , **Journal Search and Research** Vo. 03 1-5.
- S. J. Dhoble, V. B. Pawade and K.N Shinde (2010).Combustion synthesis of  $\text{Dy}^{3+}$ ,  $\text{Eu}^{3+}$  activated  $\text{Na}_2\text{X}(\text{PO}_4)\text{F}$  (X=Mg, Ca, Sr) phosphors for lamp industry, , **European Physical Journal Applied Physics** 52 11104.
- K. N. Shinde, I. M. Nagpure, Abhay Fulke and S.J. Dhoble Effect of temperature on intense green emitting  $\text{Na}_2\text{Ca}(\text{PO}_4)\text{F}:\text{Mn}^{2+}$  phosphor , ,**Luminescence, The Biological and chemical luminescence**, Published online in Wiley Online Library (wileyonlinelibrary.com) DOI 10.1002/bio.1242
- K.N Shinde and S.J. Dhoble (2010). One step synthesis of new blue emitting  $\text{Li}_2\text{Sr}_2\text{Al}_2\text{PO}_4\text{F}_9:\text{Eu}^{2+}$  nanophosphor, , **Micro and Nano Letters** 5 340 - 342
- K.N Shinde and S.J. Dhoble (2010). Influence of  $\text{Li}^+$  doping on photoluminescence properties of  $\text{Sr}_5(\text{PO}_4)_3\text{F}:\text{Eu}^{3+}$ , , **Advanced Materials Letters**, 1(3) 254-258

**Research papers published in National Conferences/ Seminars/  
Symposium:**



1. Facile combustion synthesis and intense orange emission in  $\text{SrMg}_2(\text{PO}_4)_2:\text{Eu}^{3+}$  phosphor, **K.N Shinde**, S.J. Dhoble , D.K Burghate and Animesh Kumar ,National Conference on Nano Science and Technology (NCNST-2011) organized by department of Physics, Shivaji Science Colloge, Nagpur dated (21-22 February 2011) 1-4 (Oral presentation)
2. 5d-4f transition in new  $\text{Ba}_6\text{AlP}_5\text{O}_{20}:\text{Ce}^{3+}$  phosphors, **K.N Shinde** and S.J. Dhoble, National Conference on Advanced technologies in material science and their applications (NCATMSA-2011) organized by Department of Physics and Chemistry, Arts ,Commerce and Science college, Aarvi, Dist: Wardha (6<sup>th</sup> march 2011) pp.1-5

### **Shri G.R.Bedare- Deptt. of Physics**

- Molecular interaction study of 2 aliphatic alcohols with 1,4-Dioxane in National conference on Nanoscience and Technology Organized by Institute of Science, Nagpur on 21-22 February 2011.

### **Shri Vilas G.Petkar- Marathi Deptt.**

- Paper published in Souvenir of Pandit Nehu His legacy and Modern India Conference held at N.S.College on 28<sup>th</sup> March 2011.

## Annexure - 2

### CONTRIBUTORY TEACHING STAFF

APPROVED BY RTM NAGPUR UNIVERSITY ( DURING 2010-2011)  
(As per RTM Nagpur University Letter No. M.V./ 679 C/394 dated 5/02/2011)

Sr.No.	Subject	Name of Teacher
1	Physics	Shri K.N.Shinde
		Shri Ashish B.Akojwar
		Mr.A.D.Dahegaonkar
2.	Botany	Ku.S.D.Deogade
		Shri A.B.Akojwar
3	Microbiology	Ku.Shital G.kale
4.	Zoology	Dr.S.R.Sitre
		Ku.Maya B.Potraje
5.	English	Shri M.B.Kendre
6.	Marathi	Shri S.S.Nagrle
		Shri P.P.Kamble
7.	Sociology	Ku.P.R.Sontakke
8.	Fashion Design	Ku.Swati B.Gainewar
9.	Political Science	Shri S.K.Chauhan
10.	Geography	Ku.Kiran M.Gaurkar
		Ku.Kiran A.gaikwad
		Shri Prakash M.ramteke
11.	Home Economics	Ku.Yamini Y.Dhawade
		Sau Rekha S.Chahare
13.	Computer Science	Shrikant S.Date

### ANNEXURE 3

#### Journals Subscribed in the Library in the Session 2010-11

Sr.No.	Name of Journal
1	Pramana Journal of Physics
2	Journal of Astrophysics and Astronomy
3	Proc. Of Mathematical Society
4	Journal of Earth System sciences
5	Bulletin of Material Sciences
6	Sadhana( Engineering Sciences)
7	Journal of Bio Sciences
8	Journal of Genetics
9	Resonance- Journal of Science Education
10	Current Science
11	Applied Science Periodical
12.	ACCSST Research Journal
13.	Journal of Chemical Sciences

## **Annexure 4**

### **List of Conferences Attended by the Faculty Members**

#### **Shri S.D.Deo – Head, Deptt. of Mathematics**

- UGC Sponsored National Seminar on “Solar Activity and cosmic ray modulation 2010” oct. 9-10, 2010 at Satna (M.P).
- UGC Sponsored National Seminar on Pt. Jawaharlal Nehru, His Legacy and Modern India March 28<sup>th</sup> 2011 at N.S.College, Bhadrawati.
- UGC Sponsored State Level Seminar on Recent Trends in Astrophysics and Astronomy, 2011 at Sewagram on March 21, 2011.

#### **Smt.A.B.Dhote- Head, Deptt. of Chemistry**

- UGC Sponsored National Seminar on Pt. Jawaharlal Nehru. His Legacy and Modern India March 28<sup>th</sup> 2011 at N.S.College, Bhadrawati.
- National Symposium on Advanced and Current Development in Chemical Research , 26-27 March 2011 at Jaipur.
- International Conferene on Chemistry for Mankind: Innovative Ideas in Life Sciences (ICCM-2011), Organised by RTM Nagpur University, Nagpur on 9-11 Feb. 2011.
- Modern Concept of Social and political and economic thought of mahatma Gandhi , pandit Nehru and Dr.B.R.Ambedkar at R.S.Bidkar College, Hinganghat on 15 march 2011.
- National Seminar on Advance techniques in Material Sciences and Their Applications at Arts Commerece and Science college Arvi, March 2011.
- National Conference on nano Science and Nano technology at M.G.College, Armori 6 january 2011.

#### **Shri R.S.Hajare – Deptt. of Chemistry**

- UGC Sponsored National Seminar on Pt. Jawaharlal Nehru, His Legacy and Modern India March 28<sup>th</sup> 2011 at N.S.College, Bhadrawati.
- International Conferene on Chemistry for Mankind: Innovative Ideas in Life Sciences (ICCM-2011), Organised by RTM Nagpur University, Nagpur on 9-11 Feb. 2011.
- National Seminar on Advance techniques in Material Sciences and Their Applications at Arts Commerece and Science college Arvi, March 2011.
- National Conference on nano Science and Nano technology at M.G.College, Armori 6 january 2011

#### **Shri A.D.Dahegaonkar**

- National Conference on “ Nano Science and Nanotechnology” Organised by M.G.Arts and late N.P.Commerce College, Armori on 6<sup>th</sup> Jan. 2011

- UGC Sponsored Conference on Pandit Nehru His Legacy and Modern India at N.S.College on 28<sup>th</sup> March 2011.
- National Conference on Novel Materials and Their Applications on 18<sup>th</sup> Dec. 2010 at N.S.College.

### **Shri G.R.Bedare- Deptt. of Physics**

- National Conference on “ Nano Science and Nanotechnology” Organised by M.G.Arts and late N.P.Commerce College, Armori on 6<sup>th</sup> Jan. 2011.
- National Conference on Nano Science and Nano Technology Organised by Science College, Nagpur on 21-22 Feb. 2011.
- UGC Sponsored Conference on Pandit Nehru His Legacy and Modern India at N.S.College on 28<sup>th</sup> March 2011.
- National Conference on Novel Materials and Their Applications on 18<sup>th</sup> Dec. 2010 at N.S.College.

### **Dr.P.N.Nasare – Deptt. of Botany**

- National Conference on “ Life Science Technologies: An Emerging Frontier” Organised by J.B.Science,Wardha on 26 December 2010.
- National Conference on “ Novel Materials and their Applications (NCNMA-2010)” Organised by N.S.Science and Arts College, Bhadrawati on 18<sup>th</sup> Dec. 2010.
- International Conference on “Chemistry for Mankind: Innovative Ideas in Life Sciences (ICCM-2011) Organised by Deptt. of Chemistry RTMNU on 9-11 Feb. 2011 at Tuli Imperial, Nagpur.
- National Seminar on “Recent Trends in Bio-Geo Sciences Organised by Mathuradas Mohota College of Science, Nagpur on 2<sup>nd</sup> October 2010.
- National Conference on “Current Scenario on Global Challenges in Germplasm Conservation and Biodiversity Organised by Botany Deptt. RTM Nagpur University on 7<sup>th</sup> and 8<sup>th</sup> July 2010.

### **Dr.N.V.Harney –Head, Deptt. of Zoology**

- National Conference on “Current Scenario on Global Challenges in Germplasm Conservation and Biodiversity Organised by Botany Deptt. RTM Nagpur University on 7<sup>th</sup> and 8<sup>th</sup> July 2010
- National Seminar on “Recent Trends in Bio-Geo Sciences Organised by Mathuradas Mohota College of Science, Nagpur on 2<sup>nd</sup> October 2010.
- National Seminar Pandit Nehru His Legacy and Modern India held at N.S.college on 28<sup>th</sup> march 2011
- National Symposium on Invertebrates for Biomonitoring Ecosystem Health Organised by Hislop College, Nagpur on 17 and 18 Jan. 2011.



### **Dr.S.R.Sitre- Deptt. of Zoology**

- National Seminar on "Recent Trends in Bio-Geo Sciences Organised by Mathuradas Mohota College of Science, Nagpur on 2<sup>nd</sup> October 2010.
- National Conference on "Current Scenario on Global Challenges in Germplasm Conservation and Biodiversity Organised by Botany Deptt. RTM Nagpur University on 7<sup>th</sup> and 8<sup>th</sup> July 2010
- National Conference on " Life Science Technologies: An Emerging Frontier" Organised by J.B.Science, Wardha on 26 December 2010
- Third International Conference on Biosources, Development and Natural Resources Management for Community Upliftment (ICBRD & NCMRCU- 10) Organised by ICCB & MSET, Ranchi on 13-15 Dec. 2010.

### **Shri V.G.Petkar ,Deptt. of Marathi**

- Yashoda Girls College, Nagpur
- Dept. of Marathi, RTM Nagpur University

### **Shri D.L.Bhaware**

- National Seminar Pandit Nehru His Legacy and Modern India held at N.S.college on 28<sup>th</sup> march 2011
- State level Seminar " Indian Constitution and Social Justice" organized by Vivekanand College, Bhadrawati on 5<sup>th</sup> Feb. 2011.
- National Seminar on 15 Feb. 2011 at J.M.Patel College, Bhandara.
- Seminar Social thought on Dr.Ambedkar held at Dr.H.N.Sinha Arts and commerce college, patur dist. Akola on 19 feb. 2011.

### **Shri P.D.Sardar**

- UGC Sponsored National Seminar " Indian Foreign Policy- Post Cold War Period" at Yashwant College Wardha.
- UGC Sponsored National Seminar " Judicial Activism" at J.M.Patel College, Bhandara.
- UGC Sponsored State Level Seminar ' Indian Constitution and Fundamental right" at Vivekanand College, Bhadrawati.
- National Seminar Pandit Nehru His Legacy and Modern India held at N.S.college on 28<sup>th</sup> march 2011

### **Shri K.D.Shahare- Head, History**

- National Seminar Pandit Nehru His Legacy and Modern India held at N.S.college on 28<sup>th</sup> march 2011.

- Conference “Mahatma Fulyanche Krishivishayak Vichar ani ajcha shetkari” at J.D.Patil Sangludkar Mahavidyalaya, Daryapur dist. Amravati on 5th march 2011.
- UGC Sponsored National Seminar on Relevance of Thought of Dr.Babasaheb Ambedkar on 19<sup>th</sup> Feb. 2011 organized by Dr.H.R.Sinha Arts and Commerce College, Patur, Dist. Akola.

**Shri P.M.Wasake –Head Geography Department.**

- National Seminar at J.M.Patel College Bhandara on 14 Feb. 2011.
- National Seminar on Pandit Nehru His Legacy and Modern India held at N.S.college on 28<sup>th</sup> march 2011.
- National seminar at Shri Jeevanrao Sitram Patel Munghate Arts Commerce College Dhanora Dist. Gadchiroli on 4<sup>th</sup> and 5<sup>th</sup> march 2011.

## ANNEXURE 5

### Refresher/Orientation Courses Attended by the Faculty Members

During the Session 2010-2011

Name of Lecturer.	Course Attended	Place	Date
Shri N.V.Harney (Head, Deptt. of Zoology)	UGC Sponsored <b>REFRESHER COURSE</b>	Academic Staff College, RTM Nagpur University	4/3/2011 to 24/3/2011
Dr.P.N.Nasare (Deptt . of Botany)	UGC Sponsored <b>ORIENTATION COURSE</b>	Academic Staff College, SGB Amravati University	4 <sup>th</sup> October to 30 <sup>th</sup> October 2010
Mrs.A.B.Dhote (Deptt. of Chemistry)	UGC Sponsored <b>REFRESHER COURSE</b>	Academic Staff College, RTM Nagpur University	11 to 30 Oct. 2010
Shri R.S.Hajare (Deptt. of Chemistry)	UGC Sponsored <b>REFRESHER COURSE</b>	Academic Staff College, RTM Nagpur University	11 to 30 Oct. 2010.

## Annexure 6

### Number of Books & Journals Purchased in the Session 2010-11

Sr. no	Subject	No. of Books	Amount (Rs.)
1	Physics	53	133140=64
2	Chemistry	30	158277=00
3	Computer Science	70	39855=25
4	Zoology	75	156021=40
5	Botany	30	46490=50
6	Microbiology	12	28824=55
7	Mathematics	24	58029=40
8	Marathi	89	15294=00
9	English	125	106917=83
10	Economics	82	101291=77
11	History	89	79518=05
12	Geography	33	19481=00
13	Political Science	58	64909=88
14	Sociology	142	50656=55
15	Home Economics	193	66876=55
16	Environmental Science	03	4027=80
17.	Other Books	86	86401=51
18.	Military Science	01	3262=00
19.	Fashion Design	57	6778=30
1.	Journal	20	4790=00
2.	Periodical	2	100=00
3.	Proceedings	4	550=00
	<b>Total</b>	<b>1252</b>	<b>1226053.58</b>

**NILKANTHRAO SHINDE SCIENCE AND ARTS COLLEGE, BHADRAWATI DIST-CHANDRAPUR**

**Annexure-5**

Financial aid to students descriptions of scholarships, free ships and concessions available in college 2010-11

Class	Enrolled Students	EBC	GOI					FREESHIP					PTC	No. of Paying Full fees	Total
			SC	OBC	NT	SBC	ST	SC	OBC	NT	SBC	ST			
B.Sc I	90	19	4	7	--	1	2	20	26	8	--	NA	--	22	90
B.Sc II	63	13	11	7	1	--	4	10	15	--	--	NA	--	2	63
B.Sc III	20	2	8	2	1	--	--	1	3	3	--	NA	--	--	20
M.Sc I	64	--	9	6	1	--	--	13	26	1	--	NA	--	8	64
M.Sc II	6	--	--	1	--	--	--	1	3	--	--	NA	--	1	6
PGDCCA	6	--	--	1	--	--	--	3	2	--	--	NA	--	--	6
B.A.I	389	--	44	83	27	--	42	41	86	22	2	NA	--	42	389
B.A.II	190	--	36	58	12	2	28	12	22	12	1	NA	--	7	190
B.A.III	67	--	16	15	3	2	11	2	7	3	1	NA	--	7	67
M.A.I	114	--	14	29	1	--	4	16	33	6	2	NA	--	9	114
M.A.II	63	--	10	14	4	2	5	9	18	--	--	NA	--	1	63
<b>Total</b>	<b>1072</b>	<b>34</b>	<b>152</b>	<b>223</b>	<b>50</b>	<b>7</b>	<b>96</b>	<b>128</b>	<b>241</b>	<b>55</b>	<b>6</b>	<b>NA</b>	<b>--</b>	<b>99</b>	<b>1072</b>



## **Part – C**

### **Plan for the Next Academic Year (2011-2012)**

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**IQAC has decided following activities for the academic session 2011-12 as under:**

1. To Install Fire Fighting Equipments in the College Building.
2. To Install CCTV Cameras in the Campus as an Additional Safety Device for Monitoring the Campus as a Safety Precaution.
3. To Renovate and furnish PG Laboratories for the Departments of Zoology, Chemistry and Physics on 1<sup>st</sup> Floor of the College.
4. To expand Infrastructure and Construct New floor on the Existing Building in view of Shortage of Class Rooms for Teaching Purpose.
5. To expand infrastructure in the form of Building Additional Toilets/Lavatories for Staff in the 1<sup>st</sup> Floor of Building.
6. Sending Proposals of Minor Projects of staff members to UGC, Western Regional Office, Pune.
7. Sending Proposals of National Conference to UGC.
8. To Start Diploma Courses in Fashion Design and Computer Application.
9. To Start Certificate Course in Human Rights.
10. To Inaugurate PG Department of Physics, Chemistry and Zoology at the hands of respective Chairman of Board of Studies of RTM Nagpur University.
11. To Conduct Elections for Electing New LMC Members from amongst the Teaching and Non Teaching Staff of the College
12. To Purchase and Install Generator for the College in view of Persistent Power Cuts affecting the Practical's of Computer Science Department and Functioning of the office systems with Financial Assistance from UGC.
13. To Conduct Programmes of various ongoing UGC Schemes of XI<sup>th</sup> plan from time to time.
14. Educational Tours for the students of Science and Arts faculty.
15. Numbering the College Rooms for Easy Access.
16. Conduction of National Service Scheme Camp in the Month of December at village Chalbardi in Bhadravati Tehsil of Chandrapur district for the students.
17. Annual Gathering during January 2012.