

ANNUAL QUALITY ASSURANCE REPORT (AQAR)

SESSION 2012-13



**GOVERNMENT E. RAGHAVENDRA RAO POSTGRADUATE
SCIENCE COLLEGE, BILASPUR (C. G.)**

A College with Potential of Excellence

NAAC ACCREDITED B+

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PART – A

To provide quality and value based education in the field of science to the interested, first generation students and backward classes of the society. By promoting the college into an institution of excellence that has to serve the regional youth by providing them easy access to higher education and job opportunities. The college has striven towards integrated personality, growth of rural student in particular and students at large in which special attention is given to their intellectual, moral and cultural development. It has to inculcate discipline, higher levels of culture and time values of life among the youth. With the view of this objectives/mission of the college the plan of action was chalked out in the beginning of the session and the outcome achieved by the end of the session as far possible.

Action Plan for session 2012 – 13:

- ❖ To establish the newly constructed laboratory buildings as appropriate laboratories of biotechnology and microbiology for undergraduate students.
- ❖ To improve the classroom with ICT facilities for undergraduate students.
- ❖ To improve the laboratories with ICT facilities for UG, PG and Research students.
- ❖ To enhance the library facilities including computerization and e-library system.
- ❖ To organize the National Seminars and Conferences by different departments.

Outcome of planned activities achieved in the session:

- The official formalities for undertaking the newly constructed hall for laboratories by local government' agency – PWD was completed and finally taken over.

- The newly constructed hall for laboratories of biotechnology and microbiology had been established for proper use by undergraduate students.
- The Wi-Fi system had been installed in college premises to cover the entire classrooms and laboratories along with departmental chambers.
- The surveillance camera system and biometric attendance system were installed in all classrooms and laboratories to monitoring the academic practices and maintaining the disciplined academic environment.
- Efforts to establish the ICT facilities in library had been made and required software was installed.
- One National Seminar, one National Conference and two National Workshops were organized by the department of Chemistry, Botany, Physics and Mathematics.

PART – B

01. Activities reflecting the goals and objectives of the institution:

Reflecting the goals and objectives of the institution various activities were performed in different manners, where so many activities were common however some was specific and targetable.

❖ Common Activities:

- ✓ To proper execution and performing of all activities, different committees were constituted by college administration and discussion action plan was made at the beginning of the session meeting of the staff-council.
- ✓ An effort to reduce the unit cost of students by increasing student's strength.
- ✓ Academic calendar of the college was prepared including examination period for both annual and semester system courses at UG and PG level respectively.
- ✓ As per academic calendar the entire classes of theory & practical mentioned under time table were conducted and course was completed absolutely.
- ✓ Syllabus of each department/subject was prepared/revised/modified by Board of Studies and finally approved by the Academic council.
- ✓ Organization and inauguration of student's council was done for the current academic session and coordination of annual function of the college celebrated by them.
- ✓ Activities of college's unit of NCC, NSS, YRC and departmental society were performed periodically.
- ✓ Guest lectures, intra-departmental and interdepartmental seminars were organized.
- ✓ Theory and practical examination was smoothly conducted.
- ✓ Efforts for infrastructure up gradation, enrichment of library as well as laboratory up gradation were also made.
- ✓ Faculties' members were variously participated in national & international seminars and also published their research articles in national and international journals.

- ✓ Science day celebration\tour to nearby village area with the object of increasing awareness in science was performed.
- ✓ In order to bring out the latent potential of the students various sports events and Cultural programs were organized.

❖ **Specific Activities:**

- Efforts to construct the laboratory building for Biotechnology and Microbiology undergraduate course was done and official formalities were completed.
- Enrichment of laboratories and library with ICT facilities.

02. New academic programs initiated (UG and PG):

- No any initiation was made, however to start the M. Sc. Biotechnology had been planned.

03. Innovations in curricular design and transaction:

- Minor modifications in course of studies in undergraduate classes have been made by Board of Studies constituted in this Institution.
- Courses of studies for Postgraduate classes have been designed as per semester system. Syllabus of theory and practical papers has made for different department by Board of Studies concerned to the present contest.

04. Inter disciplinary programs started:

- As an 'Add-on Courses' Certificate/Diploma/Advance diploma in Agro Services has been started in this session, whereas such courses in Industrial Chemistry, Industrial Microbiology and Computer maintenance have been continued.

05. Examination reforms implemented:

- Though any examination reforms was not implemented because to introduced the semester system in undergraduate courses was being considered.

06. Candidates who qualified NET/SLET/GATE etc:

- Two students – Mr Viplaw Goswami (Physics) and Miss Varsha Lakra (Botany) had qualified NET.
- SET was not organized by the state government.
- Twenty two product of this college had selected for the post of Asstt. Professor by Public Service Commission of the state and appointed in various government colleges.

07. Initiative towards faculty development programme:

- Faculty members are encouraged to participate in various training and research programs.
- Informative lectures have delivered by senior academicians of national repute on burning topics of interdisciplinary importance.

08. Seminars / workshops etc. conducted:

- **Department of Chemistry:** National Seminar on “Chemistry in Our Lives” was organized in 01-02nd February 2013. Funding agency was UGC, CRO, Bhopal. Vivid variety of 25 research papers were presented by eminent research scholars in technical sessions touching the various fields of chemistry like photochemistry, Medicinal chemistry, chiral chemistry, food, environmental chemistry etc. In Poster session 36 posters were exhibited by research scholars. A team of experts consisting of Dr. S. A. Khan, Dr. P.K. Singh and Dr. Kiran Vajpai reviewed these posters. Invited talks/resource lecture were given by reputed scientist/professors of this state and out of state, as listed below:-
 - Dr. Tarashankar Pal -Professor, Department of Chemistry, IIT, Kharagpur
 - Dr. V.K. Sharma – Bhopal
 - Dr. Sunil Dubey- BITS , Pilani
 - Dr. Indrajeet Kumar – Vinoba Bhave University, Hazaribag
 - Dr. K. Kumar –VinobaBhave University, Hazaribag
 - Dr. Kusum Sharma –M otila L Vigyan Mahavidyalaya, Bhopal
 - Dr. Sharad Bajpai- C. M. D. P. G. College, Bilaspur
 - Dr. V. K. Rai- Guru Ghasidas Central University, Bilaspur
- **Department of Botany:** National Conference was organized in 16-17th March 2013. Funding agencies were UGC, CRO, Bhopal; Chhattisgarh Cost, Raipur, Local organization and Janbhagidari Samiti of the College. Near about 95 research scholars presented their research papers in technical session out of 103 abstract of research articles were received/published and 14 invited talks/recourse lecture were given by reputed scientist/professors of this state and out of state, as listed below –
 - Dr. B. D. Singh, Emeritus Scientist, Prof.& Head, Dept. of Biotech., BHU.
 - Dr. A. Vaishampayan, Dr. A. Vaishampayan, Professor & Scientist, Dept. of Agriculture Science. BHU, Varanashi (U.P.)
 - Dr. Jamaluddin, Dept. of Life Science, R. D. University, Jabalpur M.P.
 - Dr. A. K. Pandey, Chairman, M.P. Private U. R. Commission, Bhopal, M.P.
 - Dr. On. Tiwari, Staff Scientist & PI, DBT & ICAR project, Manipur, Assam.
 - Dr. G. P. Sinha, BSI, Department of Botany, Allahabad University, (U.P.).
 - Dr. Sanjay Sahay, Professor in Botany, Govt. Sc. & Comm. College, Benazir, M.P.
 - Dr. V. K. Kanungo, Department of Botany, Govt. N. PG. Sc. College Raipur.
 - Dr. R.V. Shukla Department of Botany, C.M.D. College Bilaspur (C.G.)
 - Dr. B. N. Tiwary, Professor & Head, Dept. of Biotechnology, GGU, Bilaspur
 - Dr. Anil Kumar. Dept. of Zoology & Biotechnology, Govt. VYT. PG. College, Durg.
 - Dr. Veena Pani Dubey, Department of Botany, C.M.D. College Bilaspur.

- **Department of Physics:** National Workshop on “Computer Applications in Science Teaching, Learning & Research”, Feb. 1-2, 2013. University Grants Commission, CRO, Bhopal – Rs. 1,50,000; C. G. Council of Science & Technology, Raipur – Rs. 50000. Prof. Amit Saxena, Prof. P. K. Bajpei, Prof. S. J. Dhoble, Prof. Sanjay Kumar and Dr. Pushparaj Singh were eminent speakers.
- **Department of Mathematics:** National Workshop was organized in 1-2 February 2013. Funding agencies were UGC, CRO, Bhopal; Chhattisgarh COST, Raipur of the College. Near about 140 research scholars participated in technical session and 16 invited talks/recourse lecture were given by reputed mathematician/ professors of this state and out of state.

09. Research Projects:

- a) **Ongoing** – Two Minor Research Project under the department of English and Mathematics..
- b) **Completed** - One Minor Research Project under the department of Physics.

10. Patent generated if any:

- No any

11. New Collaborative research programs:

- Faculty members have performed their research work with collaboration of other research centers / department / institution or research laboratory.

12. Research grants received from various Agencies:

- Rs. 3.0 lac from CRO, UGC, Bhopal and CG COST, Raipur.

13. Details of Research Scholars:

- Three Research Scholars have been registered for Ph. D. degree in the department of Botany and Physics, whereas seven registered Research Scholars were continuing their research work in the department of Physics, Botany and Zoology.

14. Citation index of faculty members and impact factor:

- ✓ Citation range – 0 to 53
- ✓ Impact factor range – 0 to 1.7

15. Honors /awards to the faculty national/international:

- Faculty members had been honored as resource persons at different National seminars/conferences/workshops.

16. Internal resources generated:

- To generate the internal resources, teaching of professional subjects like Computer Science, Biotechnology and Microbiology in undergraduate course has adopted under self-financing scheme.
- As the internal resources total input – Rs. 5369000=00

17. Details of departments getting assistance / Recognition under SAP, COSIST, (ASSIST) / DST, FIST and other programmes:

- Assistance of Rs. 80000=00 and Rs. 220000=00 has been received by the department of Physics and Botany respectively against the Minor Research Project in favor of the faculty members of concern department.

18. Community services:

- Free Medical Camps held in neighboring village twice by combined efforts of NSS And Red Cross unit of the college.
- Plantation yojana and blood donation camp organized by NCC cadets.
- NCC cadets supported the Health workers and City traffic in Pulse Polio-Vaccination and traffic control respectively.
- Blood Donation camp and Nasha Mukti Abhiyan organized in neighboring village and College campus by Red Cross unit of the college, whereas Nasha mukti Abhiyan has also been organized by NSS unit in other neighboring village.
- Visit to rural school and village organized under National Science Day celebration was organized and activities was based on theme - GM food.

19. Teachers & officers newly recruited:

- ✓ The guest teachers were appointed on contractual basis by college' committee following the regulation and criteria made by the Government.
- ✓ Guest teachers appointed for – Biotechnology – 02, BCA – 02, Computer Sc. – 02, Information Technology – 02 and Microbiology – 03.

20. Teaching & Non-Teaching staff ratio:

- Teaching Staff – 26 and Non-Teaching Staff – 32.
- Ratio - 0.81 (1 : 1.2)

21. Improvement in library services:

- Computerization of library services for college' students and teachers.
- Efforts towards the establishment of Reading room.

22. New books/Journals subscribed and their value:

- 1680 books of Rs. 217000=00 undertaken by the Library.
- 18 Journals concerning different departments (Mathematics -12, Physics -9, Chemistry -3, Botany -5, Zoology – 8 and Microbiology -1) costing Rs. 71000=00 (approx) have been subscribed by the Central Library.

23. Courses in which student assessment of the teachers is introduced and the action taken on the student's feedback:

- Feedback of students was taken just before the completion of the session and action was taken accordingly and confidentially, especially regarding the completion of syllabus under class teaching schedule.

24. Feedback from the stakeholders:

- 21 stakeholders submitted the feedback with their comments and suggestions.

25. Unit cost of education:

- Rs. 97346.9, (Including Salary of Staff)
- Rs. 301.97(Excluding Salary of Staff)

26. Computerization of administration and the process of admissions and examination results, issue of certificates:

- Computerization of examination work has adopted by the autonomous examination cell for examination results and issue of certificates:

27. Increase in the infrastructural facilities:

- Efforts for the following additions and extensions were made during the year in building and Equipment by the Institute.
- Boys Hostel – Proposed and efforts have made for Renovation.

28: Technological Up-gradation:

- As per PG practical courses the laboratory concerned were upgraded.
- To teach communicative language a language laboratory consoling 30 student line with cable & connectors has been established.
- Solar cell generator and Diesel generator had installed.

29. Computer and Internet access and training to teaching, non-teaching staff and students:

- Yes, such facilities and training were provided to students, teacher and Class-III staff by the department of Computer Science as per their need.

30. Financial aid to students:

- Scholarship of various categories has provided the students concerned as per the norms and scheme of state government.

31. Activities and support from the alumni Association:

- Suggestion sought from Alumni members on various occasions

32. Activities and support from the parent teacher Association:

- Such association was not functional

33. Health services (by Red Cross unit):

- Yes, Health services has provided to the students and faculty members periodically by Red Cross unit.

34. Performance in sports activities:

- At College level the outdoor and indoor games were organized in which 143 students have been participated.
- At inter-college level total 57 students have been participated from this College.
- At Regional/State level 21 students have participated in Chess women, Badminton women and Cricket.
- Some notable achievements were as below -

Avinash Rathore	Selected for TCS, New Delhi
Bhushan Kashyap	Participated in Special NIC, Nagaland
Bhushan Kashyap	Participated in Tracking Camp (Deharadun)
Ritu Jaiswal	Participated in NIC Sambalpur
Jyoti Kaushik and Shweta Shukla	Participated in NIC (Maihar), RDC, TSC
Arnav kant Choudhary Purnakant Sahu, Keshav Prasad Chandra, Sourabh Tiwari and Khovendra Sahu	Army Attachement Camp (Gwalior)
Arnav Kant Choudhary	Advanced Leadership Camp (Bhuj)
Vikash Vishwakarma And Dipali Bhagat	Awarded Best Cadets by NCC Headquarter at Vrindavan auditorium Raipur on 24-11-12

35. Incentives to outstanding sports person:

- As per government norms.

36. Students achievements & Awards:

- Students were performed well in sports, hence they have been selected for University and State level games.
- One NCC cadets selected as Best cadets and attended IMA training course,
- NCC cadets were awarded CWS scholarship.
- Some remarkable achievements has been mentioned.

Achievements & Awards of NCC cadets		
1.	Avinash Rathore	Selected for TCS, New Delhi
2	Bhushan Kashyap	Participated in Special NIC, Nagaland
3	Bhushan Kashyap	Participated in Tracking Camp (Deharadun)
4	Ritu Jaiswal	Participated in NIC Sambalpur
5	Jyoti Kaushik and Shweta Shukla	Participated in NIC (Maihar), RDC, TSC
6	Arnav kant Choudhary Purnakant Sahu, Keshav Prasad Chandra, Sourabh Tiwari and Khovendra Sahu	Army Attachement Camp (Gwalior)
7	Arnav Kant Choudhary	Advanced Leadership Camp (Bhuj)

8	Vikash Vishwakarma And Dipali Bhagat	Awarded Best Cadets by NCC Headquarter at Vrindavan auditorium Raipur on 24-11-12
Achievements & Awards of NSS cadets		
1	Bhuwan Sahu	Awarded Indira Gandhi Puraskar by Honorable President of India Mr. Pranav Mukherjee
2	Ravishankar Patel	Participated National Level Camp at Ranchi
3	Vishwajit Patel and Ravishankar Patel	Selected for District Level RDC

37. Activities of the guidance and counseling:

- Proper guidance has provided to the students for various state & National level competitive examinations by faculty members.

38. Placement services provided to the students (following students got placement this year):

- Placement services has been provided to the students by the Placement Cell, whereas three private firms of state level organized selection procedure in the College and 04 students got placement by Bharat Aluminum Company Ltd., Korba (C.G.)

39. Development program for non-teaching staff:

- Non-teaching staffs have availed the development programs as per instructions from the government.

40. Good practices of the institution:

- Intercollegiate seminar, quiz, debate, Visit to rural area and school under National Science Day Celebration (2013) for popularization of science and Genetically Modified food.
- The following activities were performed by the students, teachers and non-teaching staffs of the college –
 - Community services
 - Plantation programs
 - Public awareness
 - Health care services

41. Linkages developed with national/international/ research bodies:

- At national level the linkage has developed by faculty members individually concern with their research work.

42. Action taken report on the AQAR of the previous year:

- The IQAC had been constituted in this session on 12th December, 2012, however no more significant activities had been performed.
- As the plan was previously made and mentioned in the AQAR of the previous year Had been performed and executed.

43. Any other relevant information the institution wishes to add:

- Nil

PART – C

The plan of action as proposed at the beginning of the year was achieved. Good results and performance of the students has attracted many other students also they have enrolled themselves. As the excellent performance in teaching system of the college had shown by student' result in this session –

- Postgraduate programs – 98.4%
- Undergraduate courses (Bio Group) – 100%
- Undergraduate courses (Maths. Group) – 97.01%

PART – D

Plans of the college for the next academic session was –

- Efforts to introduce the semester system in undergraduate courses.
- Examination reforms at PG level and Change Question Paper pattern at PG levels.
- Enrichment of laboratory and advancing the classrooms.
- Provide the ICT facilities.
- To motivate more and more students to enroll in this college.
- Provide the proper guidance to students to achieve their goals.
- To complete the previous balance



(Dr. B. L. Goyal)
Principal



(Dr. D. K. Shrivastava)
Coordinator IQAC

Date: 27/12/2014

Place: Bilaspur