THE ANNUAL QUALITY ASSURANCE REPORT (AQAR) OF THE IQAC

Name of the Institution: Bharathidasan University, Tiruchirapalli 620 024, Tamil Nadu

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Year of Report: 2007-2008

<u>Part-A</u>: 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

- 1. The infrastructure and research laboratory facilities were improved.
- 2. Research in new frontier areas were initiated.
- 3. New teaching programmes were started.
- 4. Scientific meetings in emerging areas were organized.

Part-B

1. Activities reflecting the goals and objectives of the Institution:

- Organisation of conferences, workshops and seminars by various departments.
- Updating syllabus of various courses.
- Improving infrastructure facilities.
- Starting research in frontier areas.

2. New academic programmes initiated:

Total number of programmes initiated: 5

Details: 1. Ph.D. (Biomedical Science)

- 2. M.B.A. (Finance Management)
- 3. M.Phil. (Computer Science)
- 4. M.Phil. (Microbiology)
- 5. M.Phil. (Marine Biotechnology)

3. Innovations in curricular design and transaction:

- > The syllabus of various courses are revised.
- More choices in the elective courses are introduced.

4. Interdisciplinary programmes started:

Nil

5. Examination reforms implemented:

- Question paper pattern is designed to test the understanding of basics.
- > Evaluation of answer papers is made more transparent.
- 6. Candidates qualified: NET/SLET/GATE etc.

NET/SLET/GATE : 11

7. Initiative towards faculty development programme:

- Orientation programmes and refresher courses on specific topics are organized regularly in the Academic Staff College of the University to improve the teaching and research qualities of young faculty members.
- Also faculty members are encouraged to attend orientation programmes and refresher courses organized outside the institution.
- Faculty members are encouraged to attend research conferences and workshops in India and abroad.

8. Total number of Conferences / Seminars/Workshops conducted/organized:

33

9. Research projects:

(a) Newly implemented:

No. of Projects: 23

Total outlay : Rs.1215.05 lakhs

(b) Completed:

No. of Projects: 13

Total outlay : Rs.164.64 lakhs

10. Patents Generated:

Nil

11. New collaborative research programmes:

Research collaborations

National Yes ✓ No

If yes, how many?

Overseas Yes ✓ No

If yes, how many?

12. Research grants received from various agencies:

No. of Projects: 23

Total outlay : Rs.1215.05 lakhs

13. Details of Research Scholars:

Nature of Registration	On Roll	Newly Registered	Degree Awarded
Full-time/	276	48	20
Part-time			

14. Citation Index of faculty members and Impact factor:

- (i) Some of the research papers published by few faculty members have good number of citations.
- (ii) Science faculty members normally publish their research papers in reputed international journals with high impact factor.

15. Honours/ Awards to the faculty:

- A.C. Banerjee Memorial Lecture Award of National Academy of Sciences -2007 Prof.M.
 Lakshmanan
- Ramanna Fellowship, Department of Science and Technology Prof.M. Palaniandavar
- INSA Programme to visit Universitat Erlangen Nurnerg Erlangen, Germany Prof.S. Arunachalam

- Ramanna Fellowship, Department of Science and Technology, New Delhi 2007-2010-School of Chemistry
- CRSI Bronze Medal, IIT Mumbai-School of Chemistry
- INSA-DFG Overseas Fellowship, Max-Planck-Institute Polymer Research, Mainz, Germany,
 2006-School of Chemistry
- Elected as Vice President for the Society of Science and Environment, Jalgaon 2007 2008 -Prof.M. Krishnan
- Elected as Fellow of Society for Science and Environment, Jalgaon Prof.M. Krishnan
- Nominated as a Member, Scientists Expert Committee for R & D of TN Universities Government of Tamilnadu (Higher Education Department), Tamil Nadu, 2008 - Prof.M. Krishnan
- Nominated as an Assessor by NAAC, Bangaluru Prof.M. Krishnan
- Environmental Management Award 2006 by the Department of Environment, Government of Tamil Nadu Dr.Babu Rajendran .
- Brain Pool Fellow-Dr.A.Ganapathi
- Young Investigator Award from DBT,India- Dr.Sivaramakrishnan
- Professor Probir Chatterjee Memorial Lecture Award 2008, University of Culcutta, Kolkotta-Dr.N.Thajuddin.
- DBT Associateship for Specialised Training of Young Scientists in Niche areas of Biotechnology - Dr.K.Natarajaseenivasan
- Member Indian Council of Historical Research, Ministry of Human Resource Development, Govt. of India, New Delhi - Prof.N. Rajendran
- General Secretary Tamil Nadu History Congress Prof.N. Rajendran
- Biography of Dr. S. Selvaraj is selected for inclusion in Marquis "Who is Who in Asia" First Edition, 2007
- Heiwa Nakajima Foundation Visiting Fellowship, Japan Dr. G. Archunan.
- Nominated as Expert Member in CAPART Regional Executive Committee, the Ministry of Rural Development, Government of India for 3 years (2007-2010) - Prof.K. Parthasarathy
- Best Teacher Award, 2008 Prof.K. Parthasarathy.
- Citation for the contribution made to the cause of Life Enrichment Education (LEE) from TNBCE at Tiruchirappalli - Dr.S.Karuppaiyan

16. Internal resources generated:

Rs.15,90,91,038/-

17. Details of Departments getting SAP,COSIST (ASSIST)/DST-FIST etc. assistance/recognitions:

UGC – SAP: School of Chemistry(Contd.), School of Physics(Contd.), Animal Science(New). DST – FIST: School of Physics(Contd.), Department of Animal Science(Contd.), School of Chemistry(New).

18. Community Services:

- Awareness Programme on "Sexual Harassment at Workplace" On 19.12.07
- Health camp on "Reproductive Health and Menopause Issues" on 05.03.08
- Tissue cross matching test for Tissue & organ Transplantation for samples coming from hospitals in and around Tiruchirapalli
- Civil Service training consultancy for rural youth

19. Teachers and officers newly recruited:

18

20. Teaching Non-teaching staff ratio:

1:4

21. Improvements in the Library services:

New books at the text book level and also advanced books based on the requirement and current trend are added.

22. New books/ journals subscribed and their cost:

(a) Central Library

Number of books added : 4500 Journals subscribed :189

(b) Department Libraries

Number of books added : 2,109

Cost of the books : Rs.12,90,716/-

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

Feedback about all the courses and the course teachers are obtained from the students and the comments made by the students are discussed with the concerned faculty members for improvement.

24. Unit cost of education:

Approx.: Rs.5000/-

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

The examination system has been fully computerised with the in-house developed software, specially suiting to the requirements of the affiliated college programmes. The processing of results, DTP printing of Certificates/Degrees etc. are all done without delay.

In the University Departments the admission process including entrance examination, preparation of rank, selection, waiting list is fully computerized which makes the admission very efficient. Also, the conduct of examination and publication of results apart from routine administration are computerized.

26. Increase in the infrastructural facilities:

- Furnitures for class rooms and faculty rooms, book shelves for library and air-conditioners for Research laboratories were added to several departments under the UGC – Non-SAP Programme.
- Bio-State Biological Safety Cabinet, Distillation Apparatus, Bacteriological Incubator, Single Beam Digital UV-VS, UV Transilluminator were added to the Biomedical Sciences.
- The Women Studies department was equipped with Xerox Machine 1, still Camera- 1, Handycam -1, voice Recorder-1, LCD-2,OHP -1, Laptop-1
- PCR Master Cycler ,Gel Documentation System,-70°C Freezer were purchased for the Department of Biotechnology.
- Cell Culture Facility was installed at the Department of Animal Science.
- Insect farm House is constructed and maintained to enhance the research in Insect Biology at the department of Biotechnology.
- The Seminar Hall of the Department of Tamil was equipped with the following: Dais -01, Podium 01, Mike set 01, Black board 02.

27. Technology upgradation:

- Campus-wide network in the Khajamalai campus was established with Optical Fiber backbone and 4 Mbps bandwidth internet connectivity. Wireless network was established to all the Departments.
- A new computer laboratory with 20 Terminals and with few workstations was established at the School of Physics under the UGC-SAP programme.
- Sophisticated advanced equipments to the tune of several crores of rupees to work in different research areas were purchased and added to the research laboratories in the schools of Physics and Chemistry under the UGC SAP and DST-FIST programmes.
- GIS Lab of the Department of Geography has been upgraded with Leica Photogrametry Suite (LPS) and Bently V8 software.
- LAN Internet Connection for all Faculty Rooms in the Department of History.

28. Computer and internet access and training to teachers and students:

Computer and Internet access have been provided to both teachers and students. No training is given. Faculty members are provided with individual desktop with internet facility. The Informatics Centre of the University has a bandwidth of 64 kbps for internet connectivity.

29. Financial aid to students:

The Post Graduate Students belonging to Backward, Most Backward and Schedule Caste and Tribes are getting scholarships from the State Government of Tamil Nadu. Research Scholars receive fellowships from different agencies such as UGC, CSIR, DST, DBT, ICMR, DAE, Bharathidasan University etc.

Total amount of Scholarship : Rs.65,49,447/-Total amount of Fellowship : Rs.72,48,175/-

30. Support from Alumni association and its activities:

Several Alumni from various departments have regular contact with the faculty members, scholars and students and take part in the welfare of the departments.

31. Support from Parent-Teacher Association and its activities :

There is no formal Parent-Teacher Association in the University. However, all the departments conduct Parent-Teacher Meet on the first day of the programme in the academic year and various issues related to the teaching programmes and students are discussed.

32. Health Services:

The University's Health Centre was established in the year 1993. The Health Centre is located in a building with 300 sq.ft. area, which is very close to the Administrative Building, Hostels and to the Staff Quarters. The Health Centre has physical facilities such as bathroom, toilet, wash basins, fans, lights, drinking water, etc. The health centre has First-aid medicine, IRR Lamp, Electrocardiogram and other basic equipments. The working hours of the Health Centre is from 9.00 a.m. to 5.00 p.m. The Centre has link with all the major hospitals in the city. The health centre has the following medical personnel.

The Health Centre is managed by a qualified part-time Doctor and a qualified full-time nurse.

33. Performance in sports activities:

- Men Hockey team secured first position in South Zone tournament.
- Men Basketball team secured fourth position in South Zone tournament.
- Women Netball team secured third position in South-West tournament.
- Men Ball Badminton team secured silver in TamilNadu Inter-University tournament.

34. Incentives to outstanding sports persons:

Special prizes were given to Hockey (Men) and Basketball (Men) teams for finishing first and fourth in the respective South Zone tournaments.

35. Student achievements and awards:

- V. Tamilmani, School of Chemistry was awarded Swiss Federal Comission Fellowship
- Dr. J. Krishnamurthi School of Chemistry was awarded JSPS fellowship, Japan.
- Mr.V. Krishnakumar, School of Physics was awarded Indo-German (DAAD) Sandwitch Fellowship.
- R. Chandraseker, Department of Environmental Biotechnology won the Microscopist
 Award of Korean Society of Science, Korea
- R. Bhuvaneshwari, Department of Environmental Biotechnology won the EKO AWARD, Mumbai
- Ms. Ilavarasi, Qualified NET in Women's Studies
- Ms.T. Poongathai, Department of Women Studies was recognized as best gender trainer by Rajiv Gandhi National Institute for Youth Development.
- Mr. Sathish Kumar, Department of Biochemistry Qualified NET
- Few Research Scholars from the Department of Microbiology won awards for the Presentation in conferences.
- Mr.R. Ramesh was awarded Prof. K.R.Hanumanthan Endowment Medal
- Mr. Vignesh (M.Sc. 2005-07), Department of Bioinformatics secured admission in the Master's program at the University of Winnipeg, Canada.
- Dr. S. Selvakumar, Department of Animal Science received Post Doctoral Fellowship, at the University of Burgundy, Dijionh, France.
- Ms.T. Kumuthavalli, Department of Lifelong Learning was awarded the National Rajiv Gandhi Fellowship

36. Activities of the Guidance and Counselling Cell:

Each department has appointed mentors among faculty members to different classes to provide academic, career and personal guidance and counseling to the needy students whenever required.

37. Placement services provided to students:

The University does not arrange common placement programme for the students. However, each department, through their contacts with other institutions and companies in India and abroad, helps the students to get good employment. Also, the students get placements through their own contact if they do their project work outside the University. Similarly, research scholars get

placement through their contact during the post-doctoral programmes outside the University. Further alumni help their juniors. Several students get teaching positions in colleges.

38. Development programmes for non-teaching staff:

Common development programmes for non-teaching staff are organized rarely. However, noteaching staff who are interested in pursuing higher qualifications through distance education mode are encouraged by the institution. Also, inhouse training is provided to non-teaching staff of the University at regular intervals.

39. Best practices of the institution:

- General decisions in the Departments are being taken through the Departmental Committee Meeting.
- Establishment of Apparel training Centre(Tailoring training for Rural Unemployed Youth)
- Providing Library hour to encourage reading habit among students
- Exposing students to literature studies through seminars and paper presentations
- Choice Based Credit System is adopted in all the Departments.
- Motivational Training to the students
- Curriculum update: Curriculum is updated according to the teachers and students opinion.
- Students are taught moral values.
- Earn While you Learn Programme for the students.

40. Linkages developed with national / international , academic / research bodies :

School of Physics:

- MRC, IISc., India
- Postdam Inst. For Climate Impact Research, Germany
- Saha Institute of Nuclear Physics, Kolkata
- Departamento de F´ısica Te´orica, Facultad de Ciencias, Universidad de Zaragoza, 50009
 Zaragoza, Spain
- Departamento de F´ısica Te´orica, Facultad de Ciencias, Universidad de Valladolid, 47011
 Valladolid, Spain
- Area de Matema´ tica Aplicada, ESCET, Universidad Rey Juan Carlos, Madrid, Spain
 Departamentode Matem´aticas, Universidad de Salamanca, Salamanca, Spain
- Department of Mathematics, University of British Columbia, Vancouver, Canada
- Dipartimento di Matematica ed Informatica, Via. A. Doria 6, I-95125 Catania, Italy
- Institute of Theoretical Physics, State Univ. Sao Paulo, Brazil.

School of Chemistry:

- Prof.(Dr.) M.P.Kaushik, Associate Director, DRDE, Gwalior, M.P Synthesis of novel natural product hybrid molecules as anti-HIV agents
- Prof.Dr. Gernot Frenking, Philipps-University, Hans MeerweinStrasse, Marburg D-35032,
 Germany
- National Institute of Technology, Tiruchirappalli.Tamilnadu.
- Prof. K. H. Ahn, POSTECH, S. Korea
- Dr. Y. Liu, University of Zurich, Switzerland
- Prof. Dr. Dr.h.c. Rudi van Eldik, University Erlangen-Numberg, Erlangen, Germany
- Eringathodi SureshAnalytical Science Discipline, Central Salt and Marine Chemicals Research Institute,Bhavnagar 364 002, India

Environmental Biotechnology:

- Tamilnadu Newsprint and Papers Ltd.,(TNPL), Kagithapuram, Tamilnadu
- Sharmila Pharma -Sharmila Institute of Medicinal Products Research Academy (SIMPRA), Thanjavur

Remote Sensing:

• Remote Sensing in Mineral exploration with Govt. of Iran

41. Any other relevant information:

Nil

<u>Part - C</u>: Detail the plans of the institution for the next year

In the next year,

- Scientific meetings in emerging areas will be organized.
- Faculty strength will be increased to meet requirements in teaching and research.
- New teaching programmes on interdisciplinary topics will be introduced.
- Linkages and Collaborations will be improved.

Name and Signature of the Coordinator/Director, IQAC

Name and Signature of the Chairperson, IQAC