Preparation of Perspective Plan for Pt. Ravishankar Shukla University, Raipur

Draft Report

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CHAPTER 1

INTRODUCTION

Pt. Ravishankar Shukla University, Raipur (C.G.) was established on May 1, 1961, by the then Govt. of Madhya Pradesh under Pt Ravishankar Shukla University Act No. 13 of 1963 in response to the growing need and long standing expectations of the people of Raipur region. The university became operational from June 1964. The University enjoys a peaceful and scenic natural landscape campus of about 208 acres.

The university is established as a residential cum affiliating University, having jurisdiction in Raipur and Baster Division. The University covers almost all spectrum of higher education; it has 23 University Teaching Departments, 132 plus affiliated colleges, 7 autonomous colleges and 48 recognised research institutes / centres. The University recently started new professional/ job oriented courses. The details of the various courses of study leading to University certificates / diploma / degrees are given below:

Programmes	Number
Certificate Course	3
Diploma	4
UG	5
PG Diploma	8
PG	24
M.Phil	5
Ph.D.	24
Post Doctoral fellowship	0
Any other (specify) D.Lit / D.Sc.	23
Total	**96**

1.1 SCOPE OF THE WORK

The scope of the present work relates to preparing a perspective plan and vision document for the university.

1.2 TERMS OF REFERENCE

The specific Terms of Reference for the preparation of perspective plan include the following:

1. Detail out the vision/ mission for the university, in the light of the vision/ mission stated by the university.
2. Detail out the academic plan with faculty(ies)/ departments/ center(s) of study with subjects/ disciplines major areas and their sub-divisions.
3. Detail out academic programme (s) of study at various levels (graduate, post-graduate, doctoral and post-doctoral levels), and uniform academic calendar for the university.
4. Prepare broad course framework for the new courses to be introduced in the university academic departments.
5. Prepare manpower and financial plan for the university.

1.3 APPROACH & METHODOLOGY

Ed.CIL constituted a Project Advisory Group (PAG), comprising the following specialists:

1. Prof. K.L. Chopra - Educational Visioning and Governance Expert
2. Prof. P.B. Sharma - Academic Planning Expert
3. Prof. Aslam Mahmood - Institutional Planning Expert
4. Dr. R.K. Suri, HOD (TA), Ed.CIL's – Planning Expert & Coordinator

CHAPTER 2

PRESENT STATUS AND FUTURE PLAN OF PT. RAVISHANKAR SHUKLA UNIVERSITY

2.1 INTRODUCTION

Pandit Ravishankar Shukla University, named after late Pandit Ravishankar Shukla, the first Chief Minister of Madhya Pradesh after reorganization of the state in 1956, was added to the list of Indian University during the Third Five Year Plan period when Madhya Pradesh Act No. 13 of 1963 came into force on the first of May 1964. It thus started functioning from the 1st June 1964. Late Smt. Indira Gandhi inaugurated the postgraduate teaching departments of the University on the 2nd of July 1965, and Shri Narsimharao Dixit, the then Education Minister, inaugurated the classes on the 10th of November 1965. On 1st November 2001, when Chattisgarh was carved out from Madhya Pradesh as a new political entity, it became one of the leading Academic Institutions of the new State.

The University at present caters to the educational needs of one of the major tribal region of India. Its jurisdiction, which includes Bastar, Mahasamund, Dantewara and Kawardha districts, extends over an area of 80,036 sq.km. In Baster and the southern parts of the other seven districts lie the tribal heartlands of the country. The university is essentially rural in character and is expected to work for the education and welfare of rural tribal masses of Chattisgarh.

Bastar division alone is bigger in area than the entire Northeastern region comprising of 7 independent states. The tribal population of Baster and other districts of Chattisgarh region is more than any other known tribal areas / regions of this country. This makes Pt. Ravishankar Shukla University a University for tribes in the true sense, notwithstanding its location in an urban-rural area. Therefore, this university, which has been active for the upliftment of tribes since its inception in various domains, has carved out a special niche for itself at the National level. The university deserves a special status for its endeavour in educating the tribes of Chattisgarh region.

Pandit Ravishankar Shukla University, with its headquarters located in the western part of the Raipur city, the capital of Chattisgarh, presently caters to the educational needs of the people living not only in all the districts of Chattisgarh but also the boarder areas of other States, namely Madhya Pradesh, Maharashtra, Orissa, Jharkhand and Andhra Pradesh.

The local culture of the region is relates to Eastern Hindi of Ardha-Magadhi historically, and tribal dialects of Bastar, viz., Bhatri, Halbi (both of Indo-Aryan family) and Dorli, Parji, Maria, Muria (Dravidian).

2.2 AN OVERVIEW

2.2.1 University Teaching Departments (UTD) or Schools

As per the information given in NAAC report, the university has 23 University Schools of Studies, i.e., University Teaching Departments (UTD), with 132 affiliated colleges. The University has more than 1.20 lakh students registered in UG, PG programmes in affiliated colleges; 1900 are registered with the university teaching departments. More than 2 thousand students have registered for post-graduate courses of the university. About 287 students are registered for Ph.D. and 5 for D.Litt / D.Sc.

The faculty of the university undertakes sponsored research funded by major national and international institutions such as DST, CSIR, UGC, CCOST, NCERT, ICHR, ICPR, ICSSR, UNESCO, DRDO, DBT, ISRO etc. In addition to these, the University also provides research support to the teachers to participate in national and international seminars, conferences, symposia and workshops.

The University has several centres, namely, Biomass Research Center, IGNOU Study Center, NSS, Entrepreneurship Development Cell, Centre for Regional Studies & Research, Pt. Sunderlal Sharma Peeth and Women's Centre.

2.2.2 Teaching Faculty & their Qualification

The University has 103 teaching staff, 390 administrative and 60 technical staff. Of the 103 teaching staff, 40 are Professors, 45 Readers and 18 Lecturers.

The qualifications of the teaching faculty are as follows:

Qualifications of Faculty	
D.Litt / D.Sc. as the Highest Qualification	3
Ph.D. as the highest qualification	
Male	56
Female	21
PG as the highest qualification	
Male	19
Female	4
Total	**103**

2.2.3 University Infrastructure and Learning Resources

a. Land & Building

The University augments the existing infrastructure through grants from the State Government and University Grants Commission. For maintenance of the infrastructure, it relies on block grant from the State Government. Total built up area of the University is 43225 sq.m., which includes classrooms covering 15226 sq.m. and laboratories covering an area of 8932 sq.m. and the total campus land area of 207.5 acres.

b. Library Infrastructure

University library is one of the best libraries of the region so far as its services, collection, staff and readers are concerned. It was established in 1965 and since then it has covered a long distance to reach this position. The university library provides all conventional services, which a library of this standard must provide to the satisfaction of readers ranging from under graduate students to eminent scholars. This library has facilities of microfilm reader. Computer network facility with VSAT connectivity has been sanctioned and is being installed.

Pt. Sunderlal Sharma library is housed in a four-storied functionally independent building. Details of the library are:

The total area of library is 1989 sq mt, with 640 sq mt area of reading room and 908 sq mt carpet area of stack room. The library has a total of 320 seating capacity presently, housed on four floors of library with two independent reading halls for 'textbooks' and 'research periodicals' respectively.

More than 100 world's most important encyclopedias and about 15 best indexing and abstracting periodicals are available in the library. Presently Library has 94569 books procured by the University in addition to 23429 gifted books, 7006 World Bank Publications, 19585 theses and dissertations. The library is remitting current subscription for nearly 500 Indian and foreign research publications. This library has been selected as one among eleven University libraries in India for computerization and automation under INFLIBNET programme of UGC in 1991.

In the current year, the University library has been selected to participate in the first phase of UGC-INFONET. Under this programme, this library will be given VSAT connectivity for utilization of e-resources under UGC-Infonet consortium, which is providing databases and full text access to journals and e-books. The library has also been receiving the World Bank Publications free of cost directly from Washington under their very few-selected 'Depository Library Programme'.

A proposal for establishment of a 'Digital Documentation Centre' in the library to provide online service of UGC-Infonet through INFLIBNET and to utilize 'library consortia' of UGC has been put for further action in this direction. This will be a major initiative for transforming the university library into a modern knowledge base for higher learning.

Table 3.1

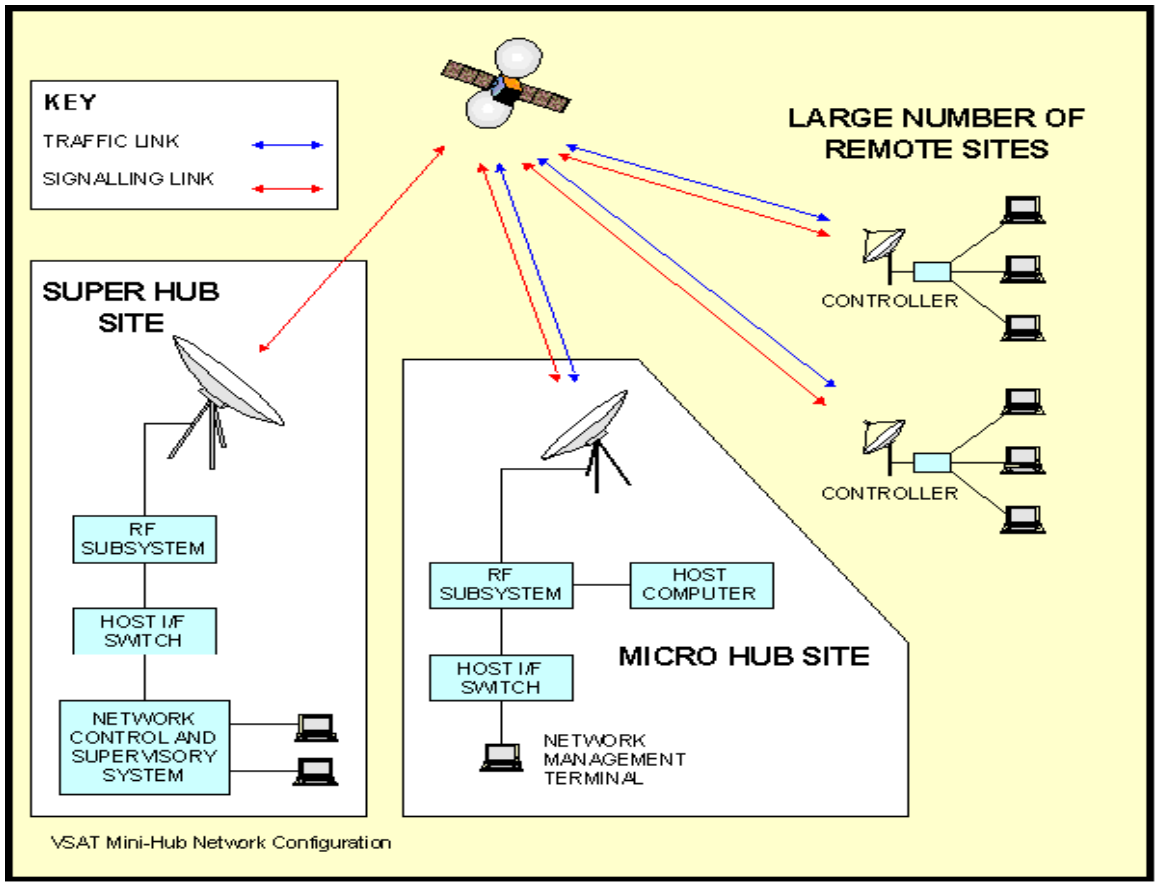
Book, Journals & Research projects in the Library

Particulars	Number
Books	1,44,588
Journals / Periodicals	500
• International	125
• National	375
Thesis & Dissertation	19585
Bounded Vol. of Periodicals	19922

c. LAN and Network Infrastructure

University has installed 512 kbps VSAT for uninterrupted Interface connectivity & free subscription of more than 100 National & International research journals under a special arrangement with INFLIBNET. This facility is now outdated and requires major update The VSAT connectivity is very significant source for academic community & Univ. Campus wide LAN (Project cost Rs. 25 lakhs) is being installed by the University to bring the advantages of VSAT connectivity to all 26 Schools of Higher Studies and Research Pt. RSU Teaching Depts.

VSAT Connectivity under UGC Infonet Program



d. Other Support Facilities

The University has a Health Centre that provides free medicines to the students through an Out Patient Department. A full-time Medical Officer and a lady-doctor who work part-time supervise the Health Centre. There is a full-time nurse and a compounder.

The followings are the support services of the University:

- Computer center
- Health center
- Stadium
- University Press
- Central Workshop
- Boys & Girls Hostels
- University Guest House
- Faculty & Staff Housing
- Canteen
- Non-Resident center
- Gymnasium
- University Science and Instrumentation Centre (USIC)
- Bank
- Post office
- Railway Reservation Centre in Campus
- e-Journals downloading under UGC Infonet

e. Sports Facilities

For physical education facilities, the university has a fairly large stadium with grounds for football, kho-kho, and lawn tennis. The university has a gymnasium, and facilities for table tennis and badminton. The university sports departments is preparing a track for athletics along with a basketball court. The university provides its sports man and women track suits every year and a blazer every two years. Winners of zonal, inter-zonal and national events get cash awards. They also get preference at the time of admission on the basis of performance in sports.

f. Hostels

Hostel facilities for students are available for a limited number of students. There are 2 boys' hostels with single and double rooms and 2 women's hostel. Another women's hostel is being constructed and will be made functional from the academic session-2005. The hostels are equipped with television, telephone, indoor games and canteen facilities.

2.2.4 Research, Consultancy and Extension Activities

The faculty of the university undertakes sponsored research funded by major national and international institutions such as DST, CSIR, UGC, CCOST, NCERT, ICHR, ICPR, ICSSR, UNESCO, DRDO, DBT, ISRO etc. In addition to these, the University also provides research support to the teachers to participate in national and international seminars, conferences, symposia and workshops

The faculty members of the University Teaching Departments are engaged in Research and Development and Supervising Ph.D. and M.Phil scholars and teaching at PG levels. Currently there are a number of ongoing research projects sponsored by Government and non-Government agencies. The total outlay amounts to Rs. 195.45 lakhs. The faculty has published about 357 papers in last five years in national and international journals. Two School of Studies in Chemistry and Biosciences have been awarded Funding for Information Technology (FIST) scheme of DST. Both the departments are engaged in active research and have a potential to grow in R&D areas of natural resources. Departments like Physics, Geology and Anthropology are also engaged in some research work. Bioscience department is having research facilities like tissue culture HPLC, Computerized instruments such as Chronocubicles. But it lacks in some other major equipments such as NMR, High Speed Centrifuge, Specialized Incubators, etc. The Department of Chemistry is equipped with Atomic Absorption Spectrophotometer and Flow Injection Analyzer. The Department of Anthropology is equipped with PCR instruments. The infrastructure of the various schools needs to be modernized to face the challenges of advances in R&D.

The University is undertaking some consultancy work. Departments like Bioscience, Chemistry, Anthropology, Adult Education, Geology, Computer Science, Management and Pharmacy are working in this direction. However, a lot needs to be achieved, and the university has to establish structures and mechanism necessary to foster industry-institution synergetic partnership.

The Adult Education department has also done some work in the area of Extension, services and in the promotion of self-help group for empowering rural women. The department has made contribution to literacy movement in the state.

2.2.5 Financial Assistance to Research Scholars

To support the research facilities in the campus, financial support to students is presently provided in the form of:

- National scholarship
- Merit scholarship
- M.Phil scholarship (University Scholarship)
- Ph.D. scholarship (Univ)
- UGC / CSIR / ICSSR, ICHR, ICPR, SAI, CGCST (obtained by the selected candidates directly from funding agency)
- CSIR / UGC (PDF AND RA) (obtained by the selected candidates directly from funding agency)
- SC / SC scholarships as per state norms.

Special support is also given in the form of information to students on the employment opportunities, guidance to students of the university for training / summer placements of MCA students for placement in IT and related industries.

2.2.6 University Infrastructure

The University augments the existing infrastructure through grants from the State Government and University Grants Commission. For maintenance of the infrastructure, it relies on block grant from the State Government. Total built up area of the University is 43225 sq.m., which includes classrooms covering 15226 sq.m. and laboratories covering an area of 8932 sq.m. in a total campus land area of 207.5 acres.

2.2.7 Grievance System

Grievance redressal mechanisms for the students of the institution work through a Proctorial Board. For the teaching staff, the Vice Chancellor looks directly at the

grievances. For the non-teaching staff, the Registrar and Vice-Chancellor are responsible.

2.2.8 Student Progression

The university has student's strength of 1709 in addition to 268 students from other states. The proportion of students from outside the state comes to about 15%. The University publishes a Prospectus annually (Vivaran Patrika). From the prospectus and a university website (www.rsuniversity.com), the prospective students get information about criteria, rules and regulations and other facilities. Annual Youth Festival is organized every year.

The Employment Bureau located in the University campus provides career counseling, information and guidance to the students of the university and affiliated colleges about job opportunities and entrepreneurship prospects. Placement Officer in the School of Studies in Computer Science provides training to final year MCA students to help them get placement in different industries. The students of MCA and M.Lib (Automation) also avail of the opportunities in the placement cell. The range of activities of the Employment Cell need to be widened so as to include all other departments and facilities. In fact it should ask as a training and job clearance bureau so that at can organize campus placements and act as a dynamic active link between the world of work and the world of learning.

The university has a plan to offer academic and vocational courses through Distance Education mode in the near future.

2.2.9 Extra Mural

The following activities for external linkage are noteworthy:

1. Department of Life Science, Anthropology, Chemistry, Physics, Mathematics, History have national and international linkages.

2. The University organizes various extension activities through the Department of Adult Education and Extension.
3. Promotion of self-help groups (SHG) in rural areas for socio-economic empowerment and preservation of tribal art and craft is being undertaken by the Centre.

2.2.10 Teaching Learning and Evaluation

The University is working for 267 / 268 days in a year out of which 196 are teaching days. University has full time and part time teachers (Ratio 1.5: 1). The University has total budget allocation for academic programmes upto the extent of 27.8%. Admissions to various academic programmes are through merit and entrance tests. Many faculty members attend Refresher courses, National and International Seminars, Conferences and Workshops as participants and resource persons. In a few of the science departments teaching is supported by audio-visual methods, but in Arts and Social Science Departments traditional methods are followed.

The University has annual and semester system of examination. In some courses central evaluation is being practiced. Internal assessment of students is being done in some professional courses having semester system. Orientation Course, National and International seminars, conferences, workshops, SOS in Computer Science and Information Technology departments extend facilities to provide training to other departments also. The institution follows self-appraisal method to evaluate teachers on teaching and research. The university invites visiting fellows / professors under UGC unassigned scheme. Departments like Life Science, Anthropology and Chemistry have International linkages for research.

2.3 UNIVERSITY FUTURE PLANS (AS ENVISAGED BY THE UNIVERSITY)

The task of educating the youth for gainful employment and enabling them to play catalytic role in the state's economic development, the university has to reformulate a new visionary agenda for its continued and relevant contribution to the state. The university is trying to strengthen the teaching learning process with future plans as:

1. Computerization of the university and central administration
2. Computerization of the Library and networking
3. Purchase of textbooks to be increased in the library. Textbooks in Hindi medium to be procured particularly to help B.P.Ed. and M.P.Ed. students.
4. All students passing out the University should have working knowledge of computer. The computer science department may plan and facilitate this aspect.
5. Component of Field training / Industry training is to be enhanced and is to be built in the curriculum. Attempts for MOU's with local industries is under process.
6. Mechanism for students fee-back is under process.
7. The Alumni Association formulation is in progress.
8. More placement cells and effective career counseling are under formation.
9. Functioning of College Development Council needs to be urgently overhauled for Quality improvement programmes focusing on need-based and subject-based requirement of the college teachers of the affiliating undergraduate colleges.
10. Skill up gradation training for Non-teaching staff and rotation of jobs with a proper Human Resource Development policy under consideration.
11. Plan to establish Linkages by the department in the University through MoU's at national and international levels.
12. Plan to Attract foreign students particularly from SAARC countries is to be considered.
13. Plan to encourage larger participation of students in sports and cultural activities.

CHAPTER 3

STRENGTH AND WEAKNESS ANALYSIS OF SCHOOL OF STUDIES OF THE UNIVERSITY (UNIVERSITY TEACHING DEPARTMENTS)

3.1 FACULTY OF SCIENCE

3.1.1 School of Studies in Chemistry

The School of Studies in Chemistry, formerly known as the Department of Chemistry, was established in June 1972. The Chemistry Department during 33 years has excelled in its academic commitment to PG Studies and Research. The Department started with postgraduate teaching and research facilities in Analytical Chemistry. In 1978, three more specialization namely Inorganic, Organic and Physical Chemistry were added. The school now offers a post-graduate programme in M.Sc chemistry with specializations in Analytical, Inorganic, Physical and Organic Chemistry and Post-Graduate Diploma in Environmental Chemistry. Doctoral level research leading to Ph.D. degree is carried out in frontal areas of Chemistry. The school has 8 teaching faculty (3 Professors, and 5 Readers) 8 technical staff and 5 office/administration staff to assist in various academic activities.

Infrastructure

The total built-up area of the school is 833 sq.mt. The department has sufficient research facilities with support of grants from different GOI organizations. The modern IT era has necessitated computer facilities & computer connectivity through LAN and Internet to provide state-of-art teaching-learning resources. Modernization of department for computer aided learning materials, overhead projections, and multimedia LCD projectors is the need of today.

Future Plans

The future plan of school of chemistry as envisaged by the University authorities is as under.

- Job oriented courses
- Linking with leading University in India and abroad
- Creating Alumni Association for the benefit of the Department
- Frequent interactions with industries
- Emphasis on Research Work of Local Industrial Needs
- Campus Placement
- Creation of Modern Equipments facilities for Teaching & Research
- Establishment of Central Instrumentation Facility
- Modernising the Old Building
- Consultancy on industrial and environmental issues of private & public sectors
- Creation of facilities for on-line sampling and analysis of pollutants, keeping human & vegetation health as prince importance
- On-line and continuous dissipation of information through TELEMOMETRICS for the citizens of Raipur

STRENGTHS AND WEAKNESSES
Strengths: 1. A team of dedicated teaching faculty. 2. Good research output. 3. Good research facilities. ***Weaknesses*:** 1. Faculty shortage. 2. Moderate to low strength of students 3. Poor Industry Interaction / Response 4. Paucity of space and sophisticated instruments

3.1.2 School of Studies in Computer Sciences

The school of studies in Computer Science was established in 1992. The school has 1 professor, 4 lecturers and 12 visiting faculty to assist the academic activities. The faculty is supported by 11 technical and administrative staff. The school offers three Post-Graduate Programmes viz, Master of Science in Computer Applications, Master of Science (Information Technology), Master in Computer Management (MCM); it

offer Post Graduate Diploma in Computer Applications and it also offer Graduate Programme – Bachelor of Computer Applications, with total annual intake of 150 students.

Infrastructure

- *Built up area around 573 sq.m. area*
- *Academic infrastructure such as classrooms, tutorial rooms, seminars halls, drawing hall, library, computer lab, and workshop.*
- *The school has adequate equipment and laboratory facilities (50 Pentium Computers with 2 Servers with V-SAT Connectivity, 8 Novell Netware 3.11) and peripherals such as scanners and printers etc.*

Future Plan

The school has ambitious plans to develop research group / collaboration in mobile communications, data mining and bio-informatics, and to extend internal connectivity to all teaching departments of the university. Protocols for e-journals for teaching and research community under INFLIBNET Programme are also proposed.

STRENGTHS AND WEAKNESSES
Strengths: 1. Provides networked environment in the campus, teaching and learning e-classes to the students and others by broadening network connection linking with IIT-Kanpur 2. Advance satellite communication device V-SAT installed for high speed internet connection and virtual classroom facility ***Weaknesses*:** 1. The school lacks in adequately qualified teaching manpower 2. State of Art workstations, CAD lab and advanced computational facility is needed 3. Need for an undergraduate programme

3.1.3 School of Studies in Geology and Water Resource Management

This Department offers PG Diploma in Water Resource Management, M. Sc., M. Phil. and Ph. D. There are 32 students enrolled in the department. The teaching faculty includes 1 Professor and 3 Readers. Besides, there are 2 project investigators.

Infrastructure

- The school is housed in its own building with a carpet area of 750 sq.m.
- Facilities exist for office, laboratories, workshop, museum etc.
- The laboratories exist for Hydrogeogology, water quality testing kit, water level inculcators, Petrology, Geochemistry, Remote Sensing and Photo geology, Geophysical and Geological survey, school computational facility and audio-visual for teaching learning.
- The Department has its own library apart from central library.
- It has a number of laboratories equipped with necessary instruments. There are two computers in the department. A well-organized museum gallery containing well-documented mineral, rock, and fossil specimens from all over the country is one of the important features of the department.

Future Plan

During the past one and half decade, this school has developed into a premier Earth Science Centre of the State. Further, the Chattiagrah State being a mineral rich state, the role of an Earth Science Department in the development of its mineral resources is important. Therefore, it is essential to develop modern scientific facilities at this center along with the strengthening of the existing facilities.

Keeping in view the future demands of the State, it is proposed to start following need based programmes:

1. PG Diploma in Remote Sensing and GIS
2. PG Diploma in Mineral Exploration.
3. Three level courses is Gemology.

STRENGTHS AND WEAKNESSES
Strengths: 1. Qualified Teachers and Supporting Technical Staff 2. Well-developed infrastructure, housed in own building 3. Well-equipped Laboratories ***Weaknesses*:** 1. Moderate to low student strength 2. Poor industry interaction.

3.1.4 School of Studies in Mathematics

The school of studies in Mathematics offers academic programmes in M.A/M. Sc. and Ph. D. in mathematics. The total intake of students is 38. One Professor and one lecturer are the faculty of the department.

Future Plan

The department has envisaged following future plans:

1. To offer programmes for study and research in finite mathematics with applications.
2. To develop new avenues in the field of non-linear analysis

STRENGTHS AND WEAKNESSES
Strengths: Experienced teaching faculty Computer lab having 10 computers with electronic communication facility ***Weaknesses*** 1. Poor teacher-student ratio 2. Moderate student strength

3.1.5 School of Studies in Physics

The school of studies in Physics was established in 1972. The school offers M.Sc with specializations in (i) solid state physics and (ii) Astro-physics. The school also conducts Ph.D programme in solid-state physics.

The school has 7 faculty members. The school has completed over 17 projects sponsored by DST, UGC. INSA, CSIR, MPLOST, CCOST, with 300 research publications and 10 books in the relevant area. The school has produced around 45 doctoral scholars. The school has encouraged inter-university and intra-university learning environment through exposure of student in frontline research areas in leading research institutions such as BARC, TIFR etc. Post-Graduate students are exposed to summer schools in leading institutions such as PRI, IUCAA, UPSO, and National Physical Laboratory, etc.

The school has teaching learning resources in electronics, optics, telescopes for astronomical observations, and facilities for studies in luminescence, photo conductivity solar cells, nano particle effect and super ionic solids. The facilities are, however, poor and outdated to a great extent and require major facelift. The department has plans for setting up laser lab for study of nano particles multiphase ISM in elliptical galaxies.

The school has attached with it the University Science Instrumentation Centre (USIC), a central instrumentation facility for university research departments / schools and its affiliated colleges. The USIC was supposed to provide facilities for design and fabrication of research equipment, maintenance and repair of science instruments, conduct training programmes, seminars, workshops on related topics. However at present it is limited to glass blowing and a workshop, which are of little interest to any department.

USIC has plans to undertake the following expansion in near future for better services to research in the university.

(i) Facility of x-ray diffraction x-ray fluoroscopic and scanning electron microscopic studies.

(ii) Establish school of studies on instrumentation useful to university teaching schools affiliated colleges, industries and organizations in the related areas of instrumentation.

STRENGTHS AND WEAKNESSES
Strengths: 1. Faculty members are involved in research ***Weaknesses:*** 1. Poorly maintained department and laboratory facilities 2. Laboratories for teaching and research are poor, and require modernization. *3. USIC is a primitive facility and need modernization*

3.1.6 School of Studies in Statistics

The School of Studies in Statistics, established in 1977, offers M.Sc. in statistics and Ph.D. program. There are 38 students enrolled in the department. The School has four teaching faculties (Professor-02; Readers-02).

Infrastructure

- Classrooms
- Computers (10)
- OHP (01)

STRENGTHS AND WEAKNESSES
Strengths: 1. Good academic performance ***Weaknesses:*** 1. Poor teacher-student ratio 2. Very little consultancy work is being undertaken

3.2 FACULTY OF LIFE SCIENCE

3.2.1 School of Studies in Biosciences

The department was established in 1977. The built space of the department is 1265 sq.m. It offers programmes of PG, Ph.D. and D. Sc. in Bioscience, Microbiology and Biochemistry. The total strength of student is 67. There are 13 teaching faculty, 4 Professors, 6 Readers and 3 Lectures. The ratio of student to teacher 16:3.

The school has good infrastructure facilities- Tissue Culture Laboratory (1), Animal House (1), Net and Mesh House (1each), Glass House (1) and a Central Instrumentation Lab. It has 30 computers. It has several sophisticated equipment including:

- UV- Spectrophotometer
- HPLC
- A.O Histostat
- Angus Event Recorder
- Microprocessors based data logger

STRENGTHS AND WEAKNESSES
Strengths: Experienced teaching faculty Adequate land area for the planting of experimental materials Good number of NET qualified student during Ph.D. Adequate Post Doctoral Fellows in Department. The faculty has published 100 publications in last 5 years. ***Weaknesses:*** Inadequate funds for books, journals, and instruments Inadequate number of teaching and non-teaching staff Shortage of built-up space Lack of Financial autonomy Only few students from out of state are studying.

3.3 FACULTY OF SOCIAL SCIENCE

3.3.1 School of Studies in Ancient Indian History, Culture and Archaeology

The school offers academic programmes of M.A and Ph.D. The strength of student is 29. The department has one Professor, one Reader and one Lecturer. The posts of Reader and Lecturer are vacant. The department has two classrooms. The total built space for the Arts building is 4238 sq.m.

Future Plans

The department has following future plans:

1. To start a museum
2. To start excavation

3. To start PG Diploma in Museology
4. To start PG Diploma in Archaeology

STRENGTHS AND WEAKNESSES
Strengths*:** Interdisciplinary approach ***Weaknesses: 1. Shortage of teaching staff 2. Practical classes/field work needs to be strengthened

3.3.2 School of Studies in Economics

The school was established in 1971. The school is housed in Arts Faculty building.

The academic programmes of the school include M.A, M. Phil and Ph.D. in economics. 56 students are enrolled in different programmes of study. The six faculty include 3 Professors, 2 Readers and 1 Lecturer .

The department has two classrooms and five faculty rooms. It has 03 computers, 01 Overhead Projector and 01 Slide projector.

Future Plans

The Department is planning to start the course in Master in Business Economics and Diploma in Population Studies.

STRENGTHS AND WEAKNESSES
Strengths*:** 1. Adequate number of students ***Weaknesses: 1. Lack of infrastructure 2. Inadequate financial assistance for purchasing statistical programmes / tools

3.3.3 School of Studies in Geography

The school offers the following post-graduate level programmes:

- Master of Arts in Geography
- Master of Philosophy in Geography
- Doctor of Philosophy in Geography

There are 7 teaching faculty for school's academic activities, along with 5 administrative, technical and class IV staff.

Infrastructure

- The physical infrastructure in school houses facilities for classroom cum lab.
- Space for staff and teaching faculty.
- The school has facilities for computers, soil testing, survey, maps, satellite data products, GIS and denial photographs. The support arrangements include photocopier, and overhead projectors as teaching and learning equipments.

Future Plans

The future plans of school include establishing remote sensing lab, computer lab, soil lab, research scholar's lab, geographical museum, and department library and staff room. Equipment such as LCD, colored photocopier and large size scanners are required in the near future.

STRENGTHS AND WEAKNESSES
Strengths: 1. Dedicated teaching faculty. 2. Good examination results. 3. Active research output. - **Weaknesses** 1. Poor student teacher ratio. 2. Equipment like LCD, Colored Photocopier, Large size Scanner required 3. Inadequate faculty

3.3.4 School of Studies in History

The academic programmes of the school include M.A, M. Phil, Ph.D. and D. Lit. in History. The department has four teaching faculty; three Professors and one Reader. The strength of students is 52.

The department has three classrooms, one seminar hall, four faculty chambers and one office. The teaching-learning materials currently available to the department include maps, charts, and audio-visual facilities like projector, DVD etc.

Future Plan

To develop the department as a compact department having specialization in all branches of History

STRENGTHS AND WEAKNESSES
***Strengths*:** 1. Active research output 2. Good employment rate among the pass outs ***Weaknesses*:** 1. Decreasing strength in terms of enrollment of students 2. Poor English literacy among students

3.3.5 School of Regional Studies and Research

The school of Regional studies offers PG Diploma and Ph.D. in Regional Planning and Development. The Department has one faculty. The total number of student is eleven (PG Diploma Course -1 and Ph.D. courses-10).

Future Plan

The Department has following future plans:

- To develop this institute to national level and to prepare and conduct standard university courses leading to appropriate qualifications.
- To start M.A in Regional Planning and Development.
- To conduct quality interdisciplinary researchers in the fields of Regional Development.
- To extend help and assistance to the Government and Non-Government organizations working in the field of Regional Development and associated fields.
- To conduct workshops and seminars in Regional Development and its related fields.

STRENGTHS AND WEAKNESSES
***Strengths*:** 1. The discipline has much scope for research and training ***Weaknesses*:** 1. Shortage of teaching faculty 2. Inadequate infrastructure facilities 3. Poor strength of students

3.3.6 School of Studies in Psychology

The school offers the following degree and post-graduate Diploma programmes:

1. Master of Arts in Psychology (2 year duration)
2. Master of Philosophy in clinical Psychology (2 year duration)
3. Post-graduate diploma in Personal Management and Industrial Relations (1 year duration)
4. Post-Graduate diploma in Psychological guidance and Counseling (1 year duration)
5. Doctor of Philosophy

The School is supported by 2 professor(s) and 4 readers and sufficient infrastructure such as classroom, office space, stores and laboratories, and teaching learning resources such as slide projectors, overhead projectors and research journals.

The infrastructure includes the following:

1. Class Rooms. (20'x25')
2. One P.G Lab
3. One Research Lab (20'x30')
4. One Departmental Library (20'x25')
5. 10 Teacher's Room (10'x15')
6. Laboratory (10'x12')
7. One Seminar Hall (50'x30')
8. Office (10'x15')
9. Head's Chamber (20' x 30')
10. Store Room (20'x30')

Total area = Approximately 12000 sq. feet

Future Plans:

New courses proposed are:

1. Diploma in School Psychology
2. Diploma in Human Resource Development
3. Diploma in Rehabilitation of Mentally Retarded Children
4. Diploma in Marital Counselling
5. Diploma in Psychological Resources of Tribals

The School also plans to establish the folowing :

- Centre for Psychotheraputic counseling cell
- Departmental Library
- Updated laboratory

STRENGTHS AND WEAKNESSES
Strengths: 1. A team of professionally qualified faculty members 2 Providing Guidance and Counselling Services. 3. Organizing Personality Development Programmes. 4. Research in the subject and collaboration with other related subjects (Education, Physical Education, Life Science, Home Science, Management, Sociology, Anthropology). 5. Project works. ***Weaknesses:*** 1. Lack of Human Skills Lab. 2. Lack of Departmental Library 3. Lack of Testing and experimental Labs. 4. Lack of Teaching Learning Aids.

3.3.7 School of Studies in Sociology

This is one of the oldest departments of the University. The department offers M.A, M.Phil and Ph. D. in Sociology. The strength of students numbers around 40. There are five teaching faculty.

Future Plan

The department plans to introduce following courses in future:

- Industrial Sociology
- Rural Sociology
- Master of Social Work

STRENGTHS AND WEAKNESSES
Strengths*:** Good number of Students ***Weaknesses: 1. Lack of Infrastructure 2. Inadequate financial assistance to meet the requirement of the Department

3.4 FACULTY OF ARTS

3.4.1 School of Studies in Comparative Religion and Philosophy

The School of Studies in Comparative Religion and Philosophy offers certificate course in Yoga, PG diploma in Yoga, M.A, M. Phil and Ph.D. The department has 5 teaching faculty - 01 Professor, 03 Reader and 01 lecturer. Total number of students enrolled in different courses of the department is about 44.

Future Plans

Following are the future plans of the Department:

- To introduce new course at PG Level in Yoga Science and Philosophy
- To develop the department as a Research Centre of Comparative Religion, Political Philosophy and Applied Philosophy
- To establish a departmental library

STRENGTHS AND WEAKNESSES
Strengths:
1. Experienced and Research Oriented Teachers
Weaknesses:
1. Decreasing number of students

3.4.2 School of Studies in Library and Information Sciences

The school of studies was established in 1971 with the following academic programmes:

- Bachelor in Library and Information Science

- Master's in Library and Information Science
- Master's in Library and Information Science (2 year part time programme)
- Master of Philosophy
- Doctor of Philosophy

The school has 3 full time teaching faculty (1 professor and 2 lecturers). The school utilizes the central library facility for its academic related experiences to teach the students at various levels of programmes.

STRENGTH AND WEAKNESSES
Strength: 1. Academically active school ***Weaknesses:*** 1. Does not have its own building 2. No computer facility in library 3. Lack of permanent faculty

3.4.3 School of Studies in Literature and Language

The School of Studies in Literature and Languages serves as a nucleus mainly for the maintenance and development of languages and literatures through teaching, research and project. The school has been constantly engaged in training the youth in translation and European languages for their practical purposes.

The school offers a number of courses, which are as follows:

- D. Litt.
- Ph.D (Ling/English/Hindi
- M. Phil in English
- M. Phil in Hindi
- M. Phil in Linguistics
- M.A in English

- M.A in Hindi
- M.A in Linguistics
- P. G Diploma in English
- P. G Diploma in Russian
- P. G Diploma in French
- P. G Diploma in German
- Certificate in Translation

The school has 4 permanent and 8 part-time teaching faculty. The strength of student is 185. The department has sufficient rooms with furniture. The teaching-learning materials available to the school include audiocassettes, overhead projector and computer.

Future Plans

The school plans to introduce following new courses:

- Diploma in Functional Hindi
- Diploma in Communicative English
- Diploma in Communicative Chhattisgarhi

STRENGTHS AND WEAKNESS
Strengths: 1. A wide range of disciplines 2. Sufficient learning and teaching materials 3. Research in regional dialects 4. Research oriented teachers and students ***Weakness:*** 1. Shortage of teaching faculty

3.4.4 School of Studies in Adult, Continuing Education and Extension

The department offers PG diploma in Adult Education and Extension and Ph.D. There are only 20 students in school at present. The department has two teaching faculty-one Professor and one Reader. The built-up over of the department is 167 sq.m. The department has following infrastructure/equipment facilities:

- 16 mm Projector with screen
- Colour T.V
- Tape Recorder
- Overhead Projector
- Slide Projector
- Computer with printer and scanner
- White Boards

STRENGTHS AND WEAKNESS
Strengths: 1. Extension Service Oriented Staff 2. Involvement of Community through Literacy and continuing education courses 3. Effective rapport with the UGC, NLMA, SLMA, ZSS and NGO 4. Multidisciplinary approach ***Weakness:*** 1. Irregular release of grant.

3.4.5 School of Studies in Anthropology

The school was established in 1965. It is housed in Arts building. The built-up space of the Arts building is 4238. It has a small museum. It offers MA / M.Sc., Ph.D. and D.Sc. / D.Lit programme. There are 44 students at PG level and 6 students at Doctoral studies. There are 5 full time teachers, 4 administrative and technical staff beside 2 class IV staff. There are 4 ongoing research projects with an outlay of Rs. 13.55 lakhs. There are 4 NET qualified scholars. the ratio of students to teacher is 16:3.

STRENGTHS AND WEAKNESSES
Strengths: • The school has qualified faculty. • The faculty is carrying out good quality research. ***Weaknesses:*** • Lack of inter disciplinary research. • Limited Space.

3.5 OTHER CENTERS/INSTITUTES

3.5.1 School of Studies in Physical Education

The department offers B.P. Ed. and M.P. Ed. It has two Reader's post. The number of total students is 84.

Infrastructure

The department has the following facilities:

- Playground with track - 400m
- Cinder Tracks
- Basketball court
- Hockey field
- Football ground
- Handball Court
- Volleyball Court
- Kabbadi Field
- Gymnasium-2

STRENGTHS AND WEAKNESSES
***Strengths*:** 1. Research in the field of sport psychology ,Sports nutrition, Sports medicine, Exercise Physiology, and Sports anthropometry ***Weaknesses*:** 1. Lack of faculty 2. Lack of modern infrastructure

3.5.2 Institute of Pharmacy

The institute offers B. Pharm. M. Pharm. (proposed from 2005) and Ph.D. The institute has 64 students in total. There are three teaching faculty (01-Professor; 01-Reader; 01-Lecturer). The institute enjoys good infrastructure facilities as per the norms of AICTE and PCI.

STRENGTHS AND WEAKNESSES
***Strengths*:** Proving hub for medicinal plant research Equipment and teaching learning material as per PCI & AICTE ***Weaknesses*:** Paucity of teaching faculty

3.5.3 Institute of Management

The institute offers academic programmes in MBA, PG diploma in Marketing management and Ph.D. Programme. The department has the facility of five teaching faculty 01-Professor; 01 Reader and 03-Lecturers. The total intake of students is 134.

***Infrastructure*:**

- Own Building
- Computers (18)

- Audio/Video (05)
- OHP
- Slide Projector

Future Plans

- To start Executive Development Programmes for executives and Government officials in the region
- To create Research Centre for Entrepreneurship Development in the region
- Evolving strategy and mechanism through research to promote the products produced in tribal regions of the state
- To create Indoor Auditorium in the institute premises
- To develop a separate library for faculty and students with research focus
- To strengthen the IT specialization.

STRENGTHS AND WEAKNESSES
Strengths: 1. Independent Building 2. Permanent Core Faculty 3. Location in the Capital town of the state, well connected by road, rail and air facility 4. Creation of independent and adequate infrastructure facilities to impart quality management education 5. Emerging image in the reputed business house 6. Cent percent placement of previous batches of MBA 2003 and 2004 7. Positive and favourable image among the public and the students to join the MBA programme in the institute 8. Industry support for training, industry visits and research for the students and faculty 9. Existence of capability and facility to start consultancy and EDP Programmes in the institute 10. Strong Alumni Association network through Alumni Association ***Weaknesses:*** 1. Need a separate Institute Library 2. Need more specialized faculty in IT and finance 3. Inadequate supportive staff to support the future plans

3.5.4 University Institute of Technology

This is a newly created institute in the University Campus. It was established in 2004. The intake capacity of the institute is 240 as per AICTE norms. The Institute has got 16 teaching faculty approved. However, at present, there are only 6 full time teaching faculty.

Vision of the Institute

The proposed University Institute of Technology dedicates itself to impart technical education of the highest standard. It further pledges to uphold the highest tradition of educational ethics to generate maximum technical skills, managerial capability and creating employability for its students.

Mission of the Institute

The institute has set before it the following tasks:

1. Planned and coordinated development of technical education by ensuring world-class standard through accreditation.
2. Facilitating world-class technical education through (a) emphasis on developing high quality institutions, academic excellence and innovative research (b) networking of institutions for optimum resource utilization; (c) Promoting industry-institute for developing new products, services and patents and (d) inculcating entrpreneurship.
3. Making Indian Technical Education globally acceptable.

STRENGTH AND WEAKNESSES
***Strength*:** 1. Demand for self financed professional course ***Weaknesses*:** 1. Lack of infrastructure - building, equipment, learning material 2. Shortage of teaching and non-teaching staff 3. No interaction with Science and Humanities Departments of the University

3.5.5 Institute of Tourism and Hotel Management

The Institute of Tourism and Hotel Management offers PG Diploma in Tourism and Hotel Management. There are about 21 students pursuing this course. At present there is no permanent teaching faculty. Three guest faculty is used to conduct the academic activities.

Infrastructure

1. Classroom (01)
2. Lab. (01)
3. Computer
4. Kitchen
5. Micro oven

Future Plan

- To start BIM

STRENGTH AND WEAKNESSES
Strength:
1. Good placement ratio among pass outs
Weaknesses:
1. Absence of teaching faculty 2. Shortage of Classrooms

3.5.6 Institute of Biotechnology

This is very recently established institute and it offers UG and PG programme in Biotechnology. The institute has is lacks basic infrastructure. It runs a self-financed course. The core faculty is only one at Reader level. The institute make use of guest faculty for teaching.

STRENGTH AND WEAKNESSES
Strengths: 1. Self financed course is practical and job oriented ***Weaknesses:*** 1. Poor teacher student ratio 2. Shortage of infrastructure - building, equipment, staff, etc.

Table 3.1 : Synoptic View of Infrastructure, Student Intake, Faculty Strength, etc.

Departments	Year of Establish-ment	No. of Students (Currently enrolled)				Faculty Status		Shortage of Faculty	Required	Built-up Area	Computer	Research Grants
		UG	*PG*	*M.Phil*	*Ph.D.*	*Current*	*Sanctioned*					
SOS in Chemistry	1972	0	64	0	20	6	11	5	8	833	6	41
SOS in Computer Sciences	1992	56	189	0	0	1	0	0	25	573	30	0
SOS in Geology & Water Resources	1984	0	14	0	6	4	7	3	2	750	4	6
SOS of Mathematics	1991	0	40	0	6	1	1	0	5	700	3	3
SOS in Physics	1972	0	48	0	12	5	11	6	6	832	8	0
SOS in Statistics	1977	0	22	0	6	5	7	2	3	0	3	12
SOS in Biosciences	1977	0	76	0	16	8	14	6	9	1265	9	25
SOS in Ancient History	2001	0	18	0	0	2	0	-2	2	0	0	0
SOS in Economics	1971	0	36	0	22	5	8	3	6	4832	3	0
SOS in Geography	1965	0	89	29	5	7	9	2	12	0	2	38
SOS in History	1971	0	28	10	17	4	6	2	6	0	1	0
SOS in Regional Studies & Research	1993	0	10	0	0	1	0	-1	1	250	0	0
SOS in Psychology	1965	0	40	0	6	6	9	3	5	0	2	1
Law	1982	0	48	0	1	2	2	0	5	700	1	0
SOS in Sociology	1965	0	25	11	8	3	10	7	4	0	2	0
SOS in Comparative Religion and Philos.	1985	0	9	2	10	2	5	3	2	0	1	0
SOS in Library & Information Science	1971	27	13	0	4	1	3	2	2	0	0	0
SOS in Literature and Language	1965	89	83	33	25	4	7	3	14	0	1	0
SOS in Adult Continuing Education	1984	0	20	0	0	2	0	-2	2	167	0	0
SOS in Physical Education	1972	39	59	0	6	2	2	0	7	0	2	0
Institute of Pharmacy	2000	64	0	0	0	3	3	0	0	4000	0	0
Institute of Management	1993	12	96	0	0	4	6	2	10	1130	1	0
Institute of Technology	2004	240	0	0	0	6	64	58	0	0	0	0
Anthropology	1965	0	44	0	6	5	5	0	5	0	3	13
Electronics	1984	0	52	0	4	3	4	1	6	260	10	0
USIC	1978	0	0	0	0	0	0	0	1	200	0	0
Tourism and Hotel Management		-	22	-	-	-	-	-	-	-	-	-
Biotechnology		-	-	-	-	-	-	-	-	-	-	-
Total		**527**	**1145**	**85**	**180**	**92**	**194**	**103**	**145**	**16492**	**92**	**140**

CHAPTER 4

QUALITY ASSURANCE IN HIGHER AND TECHNICAL EDUCATION

4.1 INTRODUCTION

Since the beginning of human civilisation, quality of education has been a matter of serious concern for both education providers and education receivers in all parts of the globe. In ancient times, knowledge and skill transfers were carried out through one-to-one interaction between the teacher (*guru*) and the taught (*shishya*). While the motivation for learning was the pupil's intense desire to acquire knowledge/skill, quality was ensured through the selection of the teacher from only those who were endowed with very high degree of competence in knowledge and skills and possessed a flair for imparting the same to others. The *Guru-Shishya parampara* was a highly disciplined system with the *guru* having a say in the selection of his pupils, in the manner and process of knowledge and skill transfer, in the monitoring of pupil's progress and in the evaluation mechanism for ensuring that the pupil was endowed with the right characteristics. The teacher was given the highest place of honour in society, often even higher than that of the ruler or the king.

With massification of education, rules of the game had changed. Educational attainment was no longer seen as an endowment for the personal development of the privileged few, but was considered by society as a necessary instrument for providing expertise in governance, services, business and commerce as well as for promoting creation and dissemination of knowledge and skills. Quality control of education became the responsibility of organised society and was enforced through rules and regulations covering all aspects of the educational process. The purpose of the control was to ensure for the citizen a systematised and quality conscious methodology for imparting organised instruction and for differentiating between high, medium and low levels of academic achievements.

Quality assurance grew out of quality control when customer satisfaction became the necessary focus for marketing products and services. During the last two decades manufactures have started assuring their customers that the products they are marketing satisfy the specified quality standard when in continuous use, and that the variations in quality of individual units in a batch or mass production have been kept to the absolute minimum. Such an assurance of quality requires total control of quality starting from the material used in manufacture, the process employed, the fabrication, the assembly, testing and validation of design specifications, packaging, marketing, and sales, and includes customer support services. Total quality Management (TQM), ISO 9000, Zero Defect System, etc., have come in prominence in the last decade to satisfy customers that enough care has been used in the design and manufacture of the product or system so that it would give satisfactory service over its life period. The quality assurance *mantra* has gradually been extended to the services sector including education and the public today expects the educational system to ensure that the quality of educational services offered meets the required benchmark.

4.2 OBJECTIVES OF QUALITY ASSURANCE

The basic objectives of Quality Assurance in the educational system are:

a) To ensure that the output of the System meets the desired and declared characteristics,

b) To ensure that all components of the educational system, including human resources, educational infrastructure, and educational processes satisfy the specified benchmark quality for producing the desired output,

c) To satisfy the public in general that the quality of education and training offered is of the right national/international standard,

d) To assist management in taking the right decisions on investments in procuring human and physical resources appropriate to the quality level desired, and

e) To satisfy the policy planners that human resource development is on the right track and is meeting the aspirations of the people and the needs of the economy.

4.3 INSTRUMENTS USED IN QUALITY ASSURANCE

The instruments used for measuring satisfaction of the above objectives are:

a) Benchmarks for various components of the educational process,

b) Rules and regulations to ensure compliance in satisfying benchmarks,

c) Internal monitoring of the educational process,

d) External inspection and review,

e) Achievements of alumni and tracer studies,

f) Impact of outputs on the system and the community, and

g) National and international recognition.

4.4 QUALITY CONCERNS OF EDUCATION IN HIGHER AND TECHNICAL EDUCATION IN CHATTISGARH

The higher and technical educational system in Chattisgarh consists of degree colleges in arts, science and commerce, teacher training and law; and the technical education level polytechnics and, pharmacy and engineering colleges and university. Although the quality concerns at these levels vary only marginally, they need to be listed separately for giving an individual yet holistic outlook.

4.4.1 Quality Concerns at the Higher Education Level

These concerns include:

a) Relevance of the curricula,
b) Adequacy of infrastructure,
c) Regularity of academic session,
d) Teacher competence both in subject area and teaching skills,
e) Research culture and creation of new knowledge,
f) Availability of learning resources including books, journals, audio-video packages, computer-assisted learning packages, and access to web-based learning materials,
g) Development of creative and innovative skills,
h) Training in communication, entrepreneurship, and employable skills,
i) Transparent and fair evaluation mechanism,
j) Modern teaching/learning methodologies including interactive lecture, tutorial and laboratory sessions, challenging assignments, problem-solving and creative endeavours,
k) Training in co-operative and competitive working in academic, sports and cultural activities,
l) Interaction with society and community and involvement in community service,
m) Interaction with other institutions of similar vocation,
n) Active faculty participation in national and international seminars of interest, and in faculty development workshops,

o) Participation in policy making studies for the State Government, and

p) Performance of graduates in national competitive examinations and in seeking employment or admission to courses of further study.

4.4.2 Quality Concerns at the Technical Education Level

These concerns include:

a) Relevance of the curricula,

b) Competence of the faculty and technical supporting staff,

c) Academic infrastructure including laboratory equipment, computing facilities, learning resources, scientific and technical journals, access to international data banks and Internet,

d) Interactive teaching learning methodologies,

e) National accreditation status,

f) Challenging assignments designed to promote development of innovative and creative abilities,

g) Developing desirable output characteristics of graduates in knowledge, skills and attitudes,

h) Participation in design and problem solving exercises and competitions,

i) Developing life-long learning attitude and ability,

j) Training in co-operative and group working, trouble shooting and fault diagnostics,

k) Developing quality consciousness, concern for productivity, and appreciation of international competitiveness of goods and services,

l) Training in environmental impact analysis of engineering activities,

m) Interaction with industry and the community,

n) Fair and transparent evaluation system,

o) Developing entrepreneurial ability,

p) Training in modeling and simulation of engineering systems,

q) Institutionalized faculty development schemes and opportunities for faculty participation in national and international seminars and conferences.

r) Faculty and student involvement in research and technological innovations, and creation of new knowledge,

s) Performance of graduates in national and international level competitions both for employment and for seeking admission to higher education,

t) Providing academic assistance and counselling to students, and

u) Grievance settling mechanisms.

4.5 SETTING UP A QUALITY ASSURANCE SYSTEM

In view of the growing concern about the quality of the educational services being offered by the education system as listed above, the development of a quality assurance mechanism becomes a matter of primary concern for the Government. This has become more important since the state is no longer the sole provider of education and training, liberalisation having opened up private investment in higher and technical education, education other, and the motivation for such investment could vary from philanthropy at one end to pure commercial interests at the other. With Chattisgarh's growing emphasis on promoting private initiatives in setting up educational institutions of high quality, it is essential that quality be regularly monitored to ensure satisfaction of norms both by the public and private institutions. As the State reduces its role in financing higher and technical educational development, its role in enforcing quality becomes even more important and critical.

Since Chattisgarh State with vast natural resources has limited institutional resources, it should endeavour to integrate various required functions of quality monitoring and assurance in existing educational structures. It should synergise efforts of Department of Higher and Technical Education, and all the State Universities such as HRSU Raipur, GGS Bilaspur, University in both setting up standards and in monitoring performance of individual institutions. The Quality Assurance System would have to function at three levels, the State level, the district level, and the institutional level. The functions at the three levels would be different but would need co-ordination and integration.

4.5.1 Quality Assurance Functions at the State Level

a) To benchmark quality requirements for human resources, infrastructure, teaching/learning processes, and management of institutions at all levels,

b) To specify output characteristics of students on completion of a stage of education, e.g. higher secondary, degree, and professional education,

c) To ensure relevance of curricula at all levels,

d) To provide incentives and competition for quality endeavours,

e) To identify and monitor critical parameters and develop a grading system for institutions based on their performance and achievements,

f) To set up external review of institutions individually or stage-wise (higher, professional, etc.) at specified periodic intervals, and

g) To set up rules and regulations to be followed by all institutions to meet quality specifications.

4.5.2 Quality Assurance Functions at the District Level

a) To monitor critical parameters as decided by the State level organisation for all institutions in the district,

b) To send inspection teams to individual institutions to verify their performance claims and check on educational processes and delivery,

c) To assist review teams of external experts sent by the State organisation,

d) To advise institutions in the district on compliance of quality parameters, and

e) To send reports to the State level organisations on the performance of all institutions in the district.

4.5.3 Quality Assurance Functions at the Institution Level

a) Internal monitoring of critical parameters,

b) Liasing with management and district and state level QA organisations for compliance of benchmarks, fulfilling training needs of teachers, and removing infrastructural deficiencies, and

c) Advising teachers, students, and management on best educational practices and promoting both individual as well as group efforts in achieving excellence.

Many of the functions listed above are currently being performed by the Directorate of Higher and Technical Education through inspection teams The QA system would try to institutionalise these in a flexible and holistic manner. The assistance of institutions of higher learning would be needed in both identifying critical parameters at various levels of education and in setting up standard benchmarks. The Quality Assurance Division in the Directorate of Higher and Technical Education should delegate some of its responsibilities to these organisations while playing the role of a co-ordinator and policy maker. At the institution level, the responsibility for quality monitoring be vested in the Principal / Vice Chancellor of the University with adequate infrastructural support. The desirability of establishing an electronic network both for information flow and monitoring performance of institutions be considered.

4.6 CONCLUSIONS

Quality assurance of the educational process is seen to be a major responsibility of the State so as to ensure that both public and private investments in education and training are meeting the objectives of educational development. Since human resource and natural peaceful ambience are the strong assets of the State, setting up enabling mechanisms for the development of quality institutions of education, training and research should become a policy priority.

A viable and strong Quality Assurance mechanism would not only equip state residents with the highest quality of education and training but would also encourage private investors to establish quality institutions in the State in those areas where there is unsatisfied national/international demand. Growth in the number of such institutions would bring prestige and economic prosperity for the State.

CHAPTER 5

VISION, MISSION, OBJECTIVES AND STRATEGIES

5.1 VISION STATEMENT

On the basis of the discussions with the key officials such as Hon'ble Minister, Education Secretary, Vice Chancellor, Deans and Registrar of the University, the Vision Statement of the University reads as:

"To transform the University as a world class knowledge enterprise which would promote a very high level of educational achievements. Thus, it strives to develop in an Educational Center of Excellence in the areas of Engineering & Technology, Science, Medicine, Home Sciences, Applied Sciences, Humanities, Arts, and Applied Arts etc. at par with international standards for meeting the fast growing needs of the Chaitsgarh State of India in particular and world at large".

The system of education envisioned would meet the current and future needs by creating a system for intimate industry - university partnership where in the organizing research activity in the emerging areas of science and technology shall be pursued with mission orientation and targeted to the needs of the society and the industries. Technical education in particular, and higher education in general and applied sciences has to contribute significantly to development of the society and should be a driver for creation of wealth, an aspect which can not be over emphasized keeping in view the rapid development of the State of Chattisgarh and the National needs.

5.2 MISSION STATEMENT

Based on the Vision, the Mission and Goals of the University may be stated as:

"To ensure high quality of higher and professional education to all the deserving students of not only Chattisgarh but of other states of India and also from aboard; to meet the growing demands of educated and skilled manpower for the economic development of the state; to act as a driver for transformation of knowledge in the prosperity of the state and engage in the pursuit of search for scientific enquiry leading to development of a scientific culture and technology temper in individuals at various level".

Thus, it strives to conduct programmes of education and research of the highest standards, so as to provide world-class professionals to meet needs of the industry, business, government, non-governmental agencies and research institutions.

5.3 OBJECTIVES

The University may consider all or some of the objectives

(i) Provide for and otherwise promote education and research in the fields of Technology, Science, Humanities, Industry, Business and Public Administration and to collate and disseminate in such fields, such effective ideas, methods, techniques and information as are likely to promote the material and industrial welfare;

(ii) Undertake, pursue, develop, help or carry on all kinds of scientific research as well as to undertake sponsored research and scientific work in various disciplines such as environment, energy habitat, materials, manufacturing industry, management and such other disciplines in Engineering, Technology, Management, Home Science, Applied Science, and Arts, as the University may deem fit;

(iii) Create and maintain facilities and environment conducive for pursuit of scholarship and advancement of knowledge;

(iv) Train young men and women able and eager to create and put into action such ideas, methods, techniques and information;

(v) Evolve and adopt methods of instruction calculated to convert students with appropriate latent talents into men and women of the class described in (iv) above;

(vi) Establish and maintain Chairs, lectureships and similar other teaching posts in Technology, Home Science, Applied Science, Humanities, Business Administration and other allied subjects;

(vii) Provide equipment and buildings for the University / College, maintain suitable libraries, laboratories, and/or workshops and conduct and carry on training, experiments and research;

(viii) Become one of the important centres of applied and industrial research and to encourage the discovery of and investigate and make known the nature and merits of inventions, improvements and process, materials and designs and to acquire any patents or licences relating to any such inventions, improvements or processes and to acquire and register design and standardization marks whether for general or specific purposes;

(ix) Prepare, edit, print, publish, issues, acquire and circulate books, papers, or works periodicals, circulars and other literary works bearing upon any field of science and technology or any industry or trade or any of them, form or maintain museums, collections, libraries and collections of literature, statistics, scientific data and other information relating to any field of science and technology or industry or trade or any of them;

(x) Collaborate with industry for promoting the cause of education, research, extension and for mobilizing resources for the objects for the University;

(xi) Participate in and co-operate with, as far as possible, such recognized institutions as may exist or may be founded in the future for cognate objects; and

(xii) Do all such things as are incidental, necessary or conductive to the attainment of all or any of the objects of the University.

5.4 STRATEGIES FOR ACHIEVING THE OBJECTIVES

The following activities need to be under taken to achieve the objectives

1. Propose changes in organizational, administrative and governance structure to empower the Vice Chancellor and his Deans / Heads to run the university autonomously.
2. Undertake Strength, Weakness, Opportunities and Threat(SWOT) analysis of the Academic Centres and Administrative Structure.
3. Create more open and flexible education structure with "cafeteria approach".
4. Revamp curricula to reflect the need for national development with international benchmark.
5. Encourage innovations in Laboratory teaching.
6. Harness the creativity of teachers, research fellows, students and external experts to develop multimedia teaching material.
7. Establish electronic communication network for sharing of academic resources.
8. Harness ICT for enhancing the quality of teaching and research.
9. Invest in undergraduate education through enhancement of appropriate facilities.
10. Establish autonomous organisation to manage affiliated colleges. Allow PG programmes in only those colleges which have excellent faculty and facilities. Ph.D. programmes should be restricted only to the University departments.
11. Create framework for combining the strengths of scientific laboratories, private initiatives and universities to start Advanced Institutions for Undergraduate & Postgraduate Science Education.
12. Increase understanding for social change and enhance perception for human values through outreach activities.
13. Reinforce Universities role of service to society through interdisciplinary and interdisciplinary approach.
14. Support sports and personality development activities.
15. Focus on faculty development and rewards.
16. Inculcate appreciation for internal academic audit and external peer review.
17. Invest in basic and utility-oriented research and promote interdisciplinary research in all the subjects and all the disciplines.
18. Encourage twinning with R&D institutions and industries for symbiotic R&D programs.

19. Create opportunities for faculty for spending more time on research thorough 'joint-employment' opportunities in R&D institutions and industries and promote cross flow of teachers / scientists through interchange between universities and diverse research laboratories at national / international level.
20. Promote "Quality" consciousness and monitor performance of academic departments.
21. Nurture Entrepreneurship Development Cell in the University.
22. Expand links with international educational & research institutions for enriching the students and faculty.
23. Expand study abroad opportunities for foreign students. Focus on exporting of the Higher Education.
24. Create independent financial support structure for venture capital for academic initiatives and student education loans.
25. Carefully examine and create ways to change tuition and other fee structure that will, without burdening the students from poorer - social and economic - backgrounds, sustain the system.
26. Devise a mechanism for proactive efforts to attract students from disadvantaged group in the main stream of higher education.
27. Enhance opportunities for mobilizing and optimizing financial resource base.

CHAPTER 6

PROMOTING ACADEMIC EXCELLENCE

6.1 GENERAL OBSERVATIONS

Pt. Ravishankar University Raipur is an important University of Chhatisgarh. It has considerable potential of becoming a leading university of the region. It has almost all the important departments a good university should have. Sprawling campus, some impressive buildings housing several Schools of Studies, wide roads interconnecting various facilities, good library, play grounds etc. are the salient features of the University. The University lacks boundary wall on account of which some encroachment has taken place over the year. The repair and maintenance of several building and roads, is needed. The equipment and teaching material is good in some departments, but is obsolete or inadequate in other departments.

In spite of conducive and active academic environment and a good history of its past performance, the University has not been able to enhance its image. It has already started showing signs of complacency and lack of dynamism due to its inability to cope up with the fast changing professional scenario. The waves of globalization and privatization have reached almost all the corners of the world and Chhatisgarh is no exception in this regard.

The University should be able to take strides so as to become a partner in progress of the newly created state. The **Advantage New** must therefore, be the major plank on which the future perspective growth of the University should be envisaged, planned and executed.

The major role, which the Pt. Ravishankar Shukla University is required to play, is to **provide academic and professional leadership** so that the advantage new for the State of Chattisgarh could be transformed into rapid track progress and prosperity of its people. The University was founded in the year 1964 and thus by now has a

standing of 4 decades of its functioning. It is important therefore that the future perspective plan for the university should seriously be pursued with a view to re-engineering and re-vitalizing its academic and administrative structures. In this quest the University should take up major innovations in its academic and administrative functions.

Taking an overall view of the weaknesses in the various departments of the University, the following remedial points need serious consideration on institutional basis.

1. Almost all Schools / Departments are short of permanent faculty. The process of recruitment for the appointment of the faculty (which started around 1992), is vary sluggish and has aggravated the problem.
2. Lack of competent faculty in most departments, especially Humanities and Social Sciences, has affected the efficiency of the teaching and research in a big way. This poses a serious problem of facing a stiff competition by various private colleges and universities offering similar demand driven courses.
3. Due to increasing demand of employment oriented professional courses in the emerging globalized market driven economy, some departments, in particular belonging to Social Sciences and Humanities, are not attracting sufficient number of students and are thus facing the threat of survival. Clearly, traditional courses need to be modified to incorporate applied and job related aspects. Poor enrollment of students in some of the schools of studies is certainly not a desirable thing. Promotion of entrepreneurship of the faculty and reorganization of the courses to make them more attractive, innovative and applied are essential.
4. In many of the schools of Studies in the faculty of Social Sciences it has been found that, both the faculty strength and the enrollment are very low. In some of the cases, in spite of the good infrastructure in the university, the strength of the students in the colleges in much higher than the University School of Studies. Such a peculiar situation requires a re-look into the university educational system and its reorganization vis-à-vis the college education.

   In this regard it is suggested that University should have a uniform policy of not having School of Studies below a minimum number of students and

faculty. There is no point in having a School of Studies with just one or two faculty members for years together. Such schools of studies will also have smaller strength of the students also. For an example, the School of Studies in Regional Studies has only one faculty member and has no master's programme. It has 10 doctoral students and one student is given training in the diploma course in Rural Planning by the same department. Similarly, in School of Ancient Indian History and Tourism there is only one professor and 2 posts are vacant. There are 14 students at Masters level and 20 students in tourism and 5 doctoral students. There seems to be a very heavy burden on the faculty. It would be a better idea to shift M.A. programme in ancient **Indian History to the School of Studies in Modern Indian History**.

On the contrary, we have other Schools of Studies where we have good number of faculty but not sufficient students. In the School of Studies in Comparative Religion and Philosophy there is one Professor, three Readers and one Lecturer but only two students took admission this year. Similarly School of Sociology, which had the status of the Department of Special Assistance by UGC in 1983, has a faculty strength of 5: one professor and four lecturers. The department could admit only six students in MA programme this year and in MA final the number was also only 9 out of the approved strength of 60 in each year. In School of Languages and Literature also the number of the faculty is four but few admissions. In School of Studies in Geology there is one professor and four readers but only five students are there in their M.Sc. programme. The department started a diploma course in Water Resources in 1984, this year they have no student in it.

The above discussion does not aim at showing that in general University schools of studies are not able to attract students in Social Sciences and Humanities. It simply points out to the fact that some of the Schools of Studies have not been able to attract students in spite of the available strength of the faculty and good record in the past. However, some other departments in Social Sciences like Geography, Anthropology, Economics and Modern Indian History have good number of students intake, obviously due to better infrastructural facilities and good initiative from the faculty.

5. During the last 40 years, the University has expanded much. At present, it has 23 Schools of Study (that is, University Teaching Departments (UTDs)

catering to 21000 students, including 287 students registered for Ph.D. degrees in various departments for Postgraduate and Research Programmes. Some UTDs have a few students while others have very few faculty numbers. Faculty strength of 103 for all the UTDs is obviously inadequate to handle 2,000 students. Whether it is the lack of a critical number of students and faculty, teaching-learning process becomes hopelessly inefficient. This situation is further aggravated if sub critical UTD have overlapping academic interests and yet have little or no academic collaboration with each other. Therefore, there is an urgent need to re-engineer and re-structure academic programmes, as also the UTDs.

6. Semester and credit (with grades) system, and continuous evaluation of students are well-established teaching processes throughout the world, including some of the premier academic institutions of the country. The University should take appropriate steps to gradually shift to such a system for both UG and PG programmes.

6.2 DEPARTMENT-WISE SUGGESTIONS FOR PROMOTING ACADEMIC EXCELLENCE

6.2.1 School of Studies in Chemistry

The School of Studies in Chemistry is one of the important departments of the University. It has a relatively good number of teaching faculty and enjoys good infrastructure facilities. However, the department is faced with a number of problems, which pose severe threat to the department. One of the most important concerns for the department is to attract students, as the strength of student is quite low. For this to happen, there is a need to introduce job-oriented courses. In general, students of today are more attracted towards the courses/programmes promising job or having good job prospects than in the traditional courses. There is a broader scope within the domain of Chemistry to offer courses, which have greater potentiality to provide jobs to the students. Interactions with the industries would also prove immensely helpful in this regard.

Time is fast changing and so is the level of technological development. New technologies/equipment are fast pouring in. The department has to replace old and obsolete equipment with new ones so as to enrich the teaching and

The University Department of Chemistry should consider covering the following research areas of relevance to the State of Chattisgarh:

1. Polymeric materials and composites (jointly with Physics Department).
2. Herbal and Medicinal Chemistry (jointly with Institute of Pharmacy).
3. Bio-Chemistry and Industrial Chemistry (jointly with Biosciences SOS).
4. Drug Design (based on indigenous medicines) (jointly with

research materials. The need of sophisticated equipment is strongly felt by the department.

6.2.2 School of Studies in Computer Sciences

The School of Studies in Computer Sciences enjoys comparatively good infrastructure facilities including classrooms, seminar hall, own library and computer lab. It has been broadening its network and getting connected with IITs. Also, it has fairly good strength of students (150).

Although the school has good number of students, it does not have sufficient number of teachers. The poor teacher-student ratio is adversely affecting the academic activities of the department. Thus, the recruitment of teachers in this department is filled immediately.

The school should strive to develop R & D capabilities in the following area:

(i) Numerical Analysis, Real Time analysis,

(ii) Embedded Systems,

(iii) Bio-informatics,

(iv) Networking,

6.2.3 School of Studies in Geology and Water Resource

This school enjoys good infrastructure facilities including its own building, library and labs. But the department, like others, is facing the problems of paucity of students and shortage of teaching faculty. The department started a diploma course in Water Resources in 1984 and this year there are no students it. The department should hold a consultative meeting with the expert in this area and try to find out means to develop it. As the region is full of geological resources and water resources, the department has to play an important role. Thus the major task before the school/department is to attract students as well as to recruit dynamic and competent teaching faculties.

Introduction of new courses, which have relatively good demand in the job market, is essential to attract the students. These courses may include Remote Sensing and GIS, with Research focus be on Minerals, geomorphologic studies, etc

6.2.4 School of Studies of Mathematics

The School of Studies in Mathematics is also faced with the problems of moderate student strength and lack of teaching faculties. Also, the School has not revised the curriculum since long. Given this, there is a need for recruitment of teaching faculties and the revision of existing curriculum so that new avenue could be developed. The faculty of this department should be utilized for Institute of Technology. The multi-disciplinary researches with Physics, Chemistry, Biotechnology and Engineering need to be encouraged.

6.2.5 School of Studies in Physics

The major problems of the School seem to be (a) moderate to low strength of students; (b) outdated laboratories and (c) lack of facilities for international level research. The school must focus of researches in areas of materials science, Nan technology, potencies, energy, etc.

For example, School of Studies in Physics should develop the following centres:

(a) **Centre for MEMS and Embedded Electronics**. This newly proposed Centre should have a strong interface with School of Engineering especially with engineering departments of Electronics & Communication, VLSI Design & Material Sciences.

(b) **Centre for Photonics**, again with strong linkages with Dept. of Electronics and Communications and material sciences.

(c) University Science Instrumentation Centre which is a central facility and is attached to the Department of Physics must in fact house a world-class

instrumentation facility to support research and development in the above three centres and other Departments of the University.

(d) The Department of Physics should focus on physics of commonly found local materials and technologies utilized by the tribal people. These include herbs and medicinal plants, bamboo and other pulp materials (for building and biomass applications).

(e) The primitive USIC should be revitalized as a university level Sophisticated Analytical Facility for teaching and research and also a testing facility for instructions and industries in the State of Chattisgarh.

6.2.6 School of Studies in Statistics

The School of Studies in Statistics offers PG and Ph. D programmes to 38 students currently enrolled. Four teaching faculty conduct the academic activities. The School has been able to demonstrate good academic performance.

However, the School requires more faculty . It is difficult for the four teaching faculties to manage 38 students enrolled in different programmes. Hence, recruitment of faculty is the immediate need. The faculty needs to develop multi-disciplinary research areas with economics, biosciences, sociology, etc.

6.2.7 School of Studies in Biosciences

The School of Studies in Biosciences is among those Schools having good infrastructure facilities. Also, the School has good number of students.

The School, however, faces the problem of shortage of faculty and space for constructing new labs. It is also strongly felt by the School that there is no adequate fund for purchasing books and journals. Thus, financial requirement of the school has to be met in order to ensure the smooth functioning, teaching, and research activities.

The present areas of research on life sciences be further strengthened and consolidated.

6.2.8 School of Studies in Regional Studies

The diploma course in Rural Development of School of Studies in Regional Studies, which deals with tribal planning and in which only, one student was admitted this year against an intake capacity of 10, should be renamed as “Diploma in Tribal Planning”. In the absence of this it may be confused with the Diploma in Regional Planning given by Schools of Planning and Architecture, dealing mainly with physical and economic planning. However, the existing diploma in Tribal or Rural planning is also very relevant for this tribal dominated area and should be continued.

The department is working in close collaboration with the department of anthropology. It is suggested that the department should also expand its area of collaboration with other departments such as geography, geology and economics. Courses on regional geography, urban and social geography and regional economics, after incorporating the necessary changes, can be integrated with the course on “Master of Regional Planning”. Such a restructuring may help the school of regional studies to achieve its professed goal of developing into an Institute of Regional Development / Studies. The respective Schools of Sciences can use these courses also. Such a restructuring of the courses will provide synergy to each of these departments as well as increase their scope and demand also.

The school has only one faculty, thus, the recruitment of faculty should be the first priority of this school.

6.2.9 School of Studies in Literature and Languages.

School of studies in literature and languages has good faculty strength but few students. In order to make it more functional, the school of studies should take the responsibility of providing the bridge courses in English language, which are in big demand. The school should serve as a resource center like library and the computer

center. There is a general complaint that students from remote areas and tribal students are no able to compete due to their poor standards of English when they go out of Chhatisgarh. The department has M.A. level and certificate level courses in English. Such bridge courses can be added to their existing programme. It should also take up the responsibility of popularizing the subject. In the modern era when public sector has to compete with private sector, it is not acceptable to say that there is no demand. If one has to survive, one has to become indispensable by creating the demand for itself. The SoS can start a course in Journalism also, both in English and Hindi.

6.2.10 School of Studies in Sociology

School of Studies in Sociology also has to be revitalized. It could admit only six students this year as against the sanctioned strength of sixty in their Masters programme in sociology. The SoS has very poor infrastructure – not even a computer exists in the SoS. *The very first step the SoS should take is suggested to improve its infrastructure, diversify its academic activities and promote studies in allied fields such as population studies, social work and also formulates projects in the area of population and health care and take the advantages of financial fundings available with the Ministry of Health and Family Planning, United Nations Fund for Population Activities (UNFPA)United States Agency for International Development (USAID) and Population Council etc. The SoS is an ideal place for locating Population Research Centre (PRC) of the Ministry of Health and Family Welfare. The Ministry has a policy to locate least one PRC in each state and it seems that Chhatisgarh state has no PRC so far. The University should definitely work in this direction. Chhatisgarh being the new state can easily negotiate with the Central Government. The SOS can also take up the responsibility of many of the evaluation programmes related to Anganwadi and Balwadi programmes of the Ministry of Social Welfare, Mother and Child Care programme and Family planning Programmes of the Ministry of Health and Family Welfare and Ministry of Social Welfare. The SOS has strong potential to provide training to different NGOs also.*

6.2.11 School of Studies in Geography

This is the age of Geographic Information System (GIS) and therefore, the SOS in Geography should also develop courses in Remote Sensing Techniques, Computer Cartography, GIS and Aerial Photography. *Large amount of grants are available for this purpose in the Department of Science and Technology DST, Indian Space Research Organization ISRO, and UGC etc. SOS, however, has to formulate schemes for it and apply for the grant through the appropriate agency.*

6.2.12 School of Ancient Indian History and Tourism

The department started a diploma in School of Ancient Indian History and Tourism. There is only one professor and 2 posts are vacant. There are 14 M.A. students and 20 students in tourism and 5 doctoral students. There seems to be a very heavy burden on the faculty.

It would be a better idea to shift M.A. programme in Ancient Indian History to the School of Studies in Modern India in School of Ancient Indian History and Tourism.

6.2.13 School of Studies in Modern Indian History.

The school is doing well and has good faculty. It has organized important Seminars and has taken the challenge of writing the history of all the 36 local constituents of Chhatisgarh. However, all the three branches of History namely Modern, Medieval and Ancient should preferably be at one place for a better package on the courses in History. The faculty recruitment needs to be done on priority basis, after re-organising the school.

6.2.14 School of Studies in Psychology

The School of Studies in Psychology is one of the prestigious departments in social sciences. It has relatively good facilities.

However, the school still lacks in sufficient infrastructure. It will be more demanding in near future as the department plans to expand itself. A number of new courses are about to be launched. At present, the department is in need of Human Skill labs, Testing and experimental labs and departmental library. The courses of the school be re-drafted based on the national and state need. The research and development activities in the department needs to be strengthened in the cognitive sciences and organizational behaviour.

6.2.15 School of Studies in Comparative Religion and Philosophy

This School of Studies offers a number of academic programmes, including diploma programmes. It has relatively good number of students. However, in recent years the strength of students is on the wane which is a major cause of concern for the department. Thus, for the department attracting students is a big challenge. Ways and means have to be found out to check declining trend of enrolment in the department. The school should develop multi-disciplinary research projects. The research grants from the national and international agencies be explored. The faculty skills should be upgraded to meet the challenges due to globalisation.

6.2.16 School of Studies in Library and Information Sciences

The School of Studies in Library and Information Sciences offers both full time and part-time programmes. Although it was established way back in 1971 and despite having good number of students, the department does not have its own building. Also, the department suffers from acute shortage of teaching faculty. Despite being a job-

oriented department, it lacks in basic facilities like availability of computers with new packages and books/journals for research work. The school should carry out research in information compilation and dissemination. The school should be major source of information base and service to other schools.

6.2.17 School of Studies in Adult Continuing Education and Extension

This School offers academic programmes of PG diploma and Ph.D in adult education and extension services.

Although the School enjoys good infrastructure facilities, there are only few students enrolled in the department. Poor strength of students has perhaps led to fewer number of teaching faculty. At present, there are only two teaching faculty. What thus appears to be the need of hour is to make the courses attractive by linking them with job market and practical relevance. The school should offer community out-reach programme.

6.2.18 School of Studies in Physical Education

The School has a good number of students enrolled. It also enjoys required infrastructure to impart physical education.

The biggest problem of the school seems to be the shortage of teaching faculty. The department has two teaching faculty for about 85 students. Addition of teaching faculty is must for smooth functioning of the department. The school should identify the talented sports persons in the region and develop them.

6.2.19 Institute of Pharmacy

This is one of the reputed self-financing departments of the University. A good number of students are enrolled. Also, the institute enjoys all infrastructure facilities as per the norms of AICTE. It has been demonstrating good academic performance over the years.

However, the institute does not have sufficient number of teaching faculty. Currently, there are only three teaching faculty to conduct the academic activities. The focus of the school should be on identification of local medicinal plants, pharmacognosy, and pharmacology.

Some of the areas of relevance for pharmacological research with the department should focus (in collaboration with Chemistry SOS):

1. Develop a world class Drug Design Laboratory and carry out cutting edge R&D activities in drawing design and drug delivery systems with special relevance to herbal drugs and lab of medicines in which the state of Chattisgarh has a competing advantage over other states in the country.
2. Develop a world class Drug Testing Laboratory to support the R&D as also to provide industrial consultancy to pharmacological industry in the state and the country.
3. Start Post Graduate & Research programme in the area of Medicinal Chemistry, Pharmacology and Drug Design.

6.2.20 Institute of Management

The institute offers PG and Ph.D programmes. The total intake of students is 134. Thus, it is one of the largest departments/institutes of the University. It has created necessary infrastructure for conducting academic programmes. Also, the institute claims to achieve hundred percent placements for pass-outs. It has strong alumni association network that provides feedback to the institute.

The major problems of the institute include lack of separate institute library, lack of more specialized faculty in IT and finance and lack of non-teaching staffs to support the academic activities. These problems are such that they have to be addressed quickly so that academic activities are not affected adversely. The Institute of

Management should carry out sectoral programmes in *Tribal Welfare of Management-Entrepreneurship, Information Technology. Carry out MD/EDP programmes and provide consultancies to Industries*

6.2.21 University Institute of Technology

The University Institute of Technology has been created recently in 2004. Since the institute is still in the making. It has every opportunity to develop world-class infrastructure and academic environment for cutting edge technologies and create support services resources to value add both cultivation of knowledge and enhance value and worth of R&D efforts. However, it has to offer attractive programmes of studies, recruit quality faculty in adequate numbers and to create necessary academic and professional infrastructure.

6.2.22 The Department of Biotechnology

The institute of biotechnology has been established recently. It offers UG and PG level course. Since the Department of Biotechnology is being established and infrastructure is yet to be created, it would be prudent to redefine its curriculum and develop it at par with national standards.

The focus of this department should be on:

(i) Food Technology
(ii) Biotechnology (specializing in areas consistent with infrastructure and faculty interests)
(iii) Act as the information house of Biodiversity and Gene Pool

6.3 RESTRUCTURING AND CONSIDERATION OF UTD

As already pointed out, sub critical size of students or faculty is not conducive to an healthy and effective teaching learning process. It is, therefore, in the interest of each UTD to do an internal exercise to see how academic programmes can be restructured so that the students an attracted, and, further, as to how different related departments with overlapping academic instructor can work together, academically and administratively, to make the best of available facilities of the university. There is no doubt that many departments can benefit considerably by working together. However, established departments invariably oppose this process. Therefore, there is a need for initiating a dialogue process in a suitable committee, with some members invited form outside institutions. The clustering is best done if the affected departments choose to work together voluntarily at different levels in some formal manner so that the cluster could share and collaborate in academic functions.

A suggested clustering of some departments in the form of working dynamic clusters is given in the following. The cluster could be called a School, Institution, Faculty, or a Division.

- Faculty of Technology: It should emphasis the Engineering & Technology, Computer Science, Electronics / Biotechnology, etc.
- Faculty of Mathematics & Statistics: It should include Mathematics, Statistics, etc.
- Faculty of Science: Physics, Chemistry, Bio-Science (Earth Sciences-Geography), USIC, etc.
- Faculty of Arts and Social Sciences: It should include Sociology, Psychology, Religion & Philosophy, Geography, Regional Studies, Ancient History, Modern History, etc.
- Faculty of Pharmaceutical Science.
- Faculty of Management and Applied Economics: It should include Management, Economics & Commerce.

The Institution of Technology of the University should also aim to foster an inter-disciplinary approach so that departments grouped under the cluster work in close

cooperation with the Science Departments. The science-base of modern engineering is as important today as is the technology orientation of scientific pursuits so that the effort invested in the academic departments while enriching the knowledge base results in fostering innovations and innovative products for the benefit of the industry in the State and in the country at large. Each Engineering Department should run PG programmes in areas of relevance to the industries.

It may however be mentioned that the University has only form this year (2004-2005) has started a University Institute of Technology (UIT) within its campus. This Institute is currently housed in the makeshift accommodation and its laboratories and support facilities are highly inadequate. It is recommended that while establishing the laboratories for various academic departments in this institute, a careful exercise must be carried with the expert support so that the laboratories are modeled along the requirements of 21st Century, which entails that the focus must be on developing laboratories to showcase the latest instruments and equipments and test-setups exhibits use of latest technology and processes. This requires that the experimental setup should be innovative in their design and the experiments carried out should go beyond mere demonstration and routine testing. In fact, it is absolutely essential to create an environment of research in the undergraduate laboratories so that the students are given a chance to think and respond to the new challenges in the respective areas catered by their curricula. It would be desirable that most of the test-setups promote computer aided testing and analysis and experiments are design as open ended experiments to give an opportunity to the students to explore some hidden dimensions usually not covered by tailor-made experimental setups. It may also be added that a world-class laboratory design should cater for stimulated experiments and virtual experimentation along side with live running physical setups so that the simulation and modeling capabilities could be inculcated during the laboratory exercises. The laboratory, if not all, at least some which have direct relevance to the industrial needs of the area, should be established as world-class test houses so that the expensive equipments are utilized for industry relevant research and consultancy by the students and faculty.

6.4 NEW DIMENSIONS FOR ACADEMIC GROWTH

Pt. Ravishankar Shukla University being one of the oldest universities in the State of Chattisgarh, is expected to propel new innovations in its academic and research programmes so as to empower Chattisgarh is emerging areas of science and technology. In a knowledge age where knowledge and technology base is changing at a unprecedented rate, it is important for the university to seriously pursue the path of knowledge and innovation management. For this purpose, new structures are to be created in fact, the Universities of today which are primarily engaged in human resource development should be transformed into knowledge enterprises of tomorrow. So that, the intellectual pool and knowledge wealth in the university is transformed into the prosperity of the people in the right earnest. To make this happen it is proposed that the university should set up the following inter-disciplinary centres for advance studies and research:

(i) **Centre for Knowledge and Innovation Management** - the Centre should have idea bank, knowledge management cell, intellectual Property Rights Cell and technology incubators to foster innovative and creative work being carried out in the university UTDs and affiliated institution sand act as a facilitator to the innovative minds such that the intellectual property is created and to the extend possible transformed into techno-entrepreneurial initiatives. The idea is also to facilitate the transformation of laboratory level research into commercial viable products, technology and know-how.

(ii) **Centre for Advance Studies and Research in Indigeneous Medicines -** This Centre should focus on the rich herbal and tribal medicines base in the State. The state of art laboratories of the Centre should work in close collaboration with the bio-tech and medicinal chemistry departments of the University. Innovative drug design based on indigeneous and local herbs and plants should be the focus of research and development in this Centre.

(iii) **Centre for Advance Materials -** The Centre should focus on R&D in areas of current and future relevance such as, Development of Smart materials, intelligent materials, biomaterials based new material and composites.

(iv) **Centre for Photonics -** This centre may deal with modern optics, integrated optics, opto-electronics, etc.

(v) **Centre for Tribal Empowerment Studies** - The centre should deal with ways and means to empower tribals for utilizing natural resources and talents for wealth creation.

(vi) **Centre for Bioinformatics** - This centre will concentrate on developing IT based activities for bioscience, bioengineering and biotechnology.

(vii) **Centre for Energy and Environment Management -** This centre will deal with energy resources in state, use of biomass for energy and the effect of energy sources in environment.

(viii) **Jagdalpur Campus - Centre for Tribal Art and Culture (Satellite / Virtual Campus):** It should start at the earliest. The emphasis should be to start PG programmes in Forestry, Wild Life, Tribal Studies, Bio Sciences and Biotechnology, Tribal Language and Region Development.

(ix) **Post Harvest Technology Centre.**

(x) **Science and Technology Entrepreneur Park / Technology Incubator.**

Each of the above centres should be established from the point of view of providing not only higher education and research facility but with a strong interface with the industries. In fact, the University should partner these centres with the selected industries in the state and in the country right from design state to their functioning so that relevance of research and development could be assured while creating a specialized manpower base for the industries.

In social sciences, however, the existing departments are facing stiff competition in the wake of professionalization. It is therefore suggested that instead of opening new schools of studies, the existing programmes should be revitalized by reorganizing the on the lines already suggested.

CHAPTER 7

INSTITUTIONLISING GOOD GOVERNANCE SYSTEM

7.1 GOVERNANCE OF THE UNIVERSITY

7.1.1 Revision of Acts and Statutes

Knowledge is increasingly becoming the engine of economic growth of globalized economics of the world. It is in the interest of all civilized nations to par a heavy emphasis on the generation, diffusion and assimilation of created knowledge among its citizens. Universities being temples of knowledge, it is only proper to empower universities to perform their functions effectively. This demands flexibility, transparency, dynamic responsiveness and accountability on the part of the University administration. An autonomous university can only nurture these characteristics. The IITs, IIMs and some of the Central Universities have established their academic reputation worldwide is largely due to their liberal and autonomous governance. system. It should be noted that the autonomy enjoyed by the MITs is significantly higher than that of IITs. In sharp contrast, all state universities, have very restricted autonomy and little academic and administrative flexibility. Further, there is considerable political control and interference in the overall governance of the state universities. The Chattisgarh state universities are no exception. In fact, compared to many other state universities, Chattisgarh universities are more constrained and restrained by the State government procedures. As a consequence, most state universities in the community are academically and administratively not very healthy. Imagine the head of the university, namely the Vice Chancellor, having no power to select his own administrative officers, or his faculty. To expect the VC to deliver good governance and to nurture faculty to create knowledge under the present rules of governance would be wrong.

In view of the preceding observations, it is suggested that the state government sets up a high-powered committee of distinguished academician to advise on the formulation

of a new Act and Statutes considered with the demands of a Knowledge Republic. The act and statutes of IITs and Central Universities can provide suitable guidelines.

7.1.2 ERP Initiative

The governance system for a university provides a self regulatory mechanism provided the bodies of the university work as dynamic systems constantly improving both the efficacy and effectiveness of the services provided by them. Take for example, the most common problem relating to the neglected curriculum up-gradation at regular intervals. The Boards of Studies in Indian Universities are supposed to be taking care of this aspect. However, in the absence of a feedback mechanism and a well-defined system of curriculum update the course curriculum remains unchanged, thus making the curriculum outdated. Likewise, the examination system, which is headed by the Controller of Examination of the University, does little or no research on examination system in the university. Similarly, a large number of other administrative and professional functions of the university lack the support of modern managerial techniques. It is therefore, proposed that Pt. Ravishankar Shukla University should develop a model for ERP (Enterprise Resource Planning & Management) along the lines of a corporate system wherein various administrative structures interact between themselves to provide the vital information for effective planning and management of the university.

7.1.3 New initiatives

The following initiatives are suggested in this regard:

(i) The University should develop an **e-governance** model for its administrative and academic functions.

(ii) The **University network** connecting its various departments in a wire as well as wireless mode is required for this purpose.

(iii) The University network should then be connected to its affiliating institutions for online transaction of information and data.

(iv) Many of the services including the examination papers can be safely and effectively transacted using the modern IT network; such an endeavour shall promote **e-learning, e-examination and e-management**.

(v) The University governance system requires a major overhaul so that both the academic and management functions are efficiently and effectively transacted. In this respect, the university should create Bureau of Curriculum Innovation and Examination Reforms, Bureau of Corporate Collaborative Research, Bureau of National and International Collaboration.

7.2 UNIVERSITY COLLEGE INTERFACE

The affiliated institutions of a university usually get little or no attention of the university except, the examinations, which are conducted, by the university. In order to improve the university college interface, the university should have a College Development Council, headed by a Dean of Colleges who should focus on improving the quality of academic and professional services in the affiliated institutions in addition to providing solutions to their problems. The Dean's office should be empowered with reasonable autonomy (academic and administrative) to act as a major support to the growth of academic and professional excellence in the affiliated institutions.

The IT-enabled managerial system employing a carefully developed network supported by an University Educational Management Information System, UMIS would provide the necessary support to the Dean of Colleges to provide efficient services to the affiliated institutions.

The University has special responsibility and privilege of monitoring the academic standard and values towards its affiliating colleges and providing the synergy by integrating the system. The University can achieve all this by:

1. Establishing a well defined academic structure relating to "Schools of Studies" and "Faculties" of the University and its affiliated colleges.
2. Establishing a system of upgrading the courses and reorganizing their modules in response to the market forces.

3. Ensuring that the changes made in academic ordinances / statutes are brought to the notice of the School of Studies and the colleges and there are strictly followed.

7.3 FINANCIAL RESTRUCTURING

The budget estimates of the university is given hereunder:

The Revised Estimate 2003-04

(Rs. in lakhs)

Sr. No.		Income	Expenditure	Deficit	Percent
1.	General Fund Account	2021.27	2133.74	-	-
2.	Development Fund Account	275.80	210.75	-	-
Total		**2297.05**	**2344.49**	**47.44**	**2.06%**

Budget Estimate 2004-05

(Rs. in lakhs)

Sr. No.		Income	Expenditure	Deficit	Percent
1.	General Fund Account	1782.14	1975.24	-	-
2.	Development Grant Account	173.54	173.54	-	-
Total		**1955.68**	**2148.75**	**193.10**	**9.87%**

It has been noted that university at present is dependent primarily on fund from State Government.

Thus, State University system in India has largely functioned so far with the support the state government and the UGC. The funding from the state and the UGC is not adequate to meet the growing requirement of expansion of academic and research facilities in the universities. Lately, some of the universities in India have started self-financing courses specially, in the areas directly relevant to the job market. This has provided the necessary financial model to support the growth and expansion of the academic and research activities. Pt. Ravishankar Shukla University should also

carefully plan itself financing courses both at UG and PG levels so that, these can meet the requirement of emerging new technologies and new job opportunity in the industry at home and abroad. The strategies for resource generation have been spelt out in Chapter 9.

7.4 CREATION OF VARIOUS POSTS OF DEANS

There is need for creation of several posts of Deans (Research, Consultancy and Resource Generation). In addition there is need for creation of Dean (Planning) for undertaking the planning as well as implementation of the plan.

CHAPTER 8

NETWORKING WITH INSTITUTES OF HIGHER LEARNING / R&D

8.1 INTRODUCTION

We live in an era of globalized economy which is affecting every decision undertake. Both time and space have shrunk. The Physical boundaries have either collapsed or loosened and lost significance. Gone are the days of inhibitions and restrictions. The advances of knowledge and technology, among other things, has been faster than ever. All these have ushered in an age of knowledge inter-dependence.

Today frontiers of nations and their economy are open to private initiatives, and tertiary education is no exception. The forces of market and globalization have led to cropping up of private institutes in higher education. The private institutions have grown in importance so much so that according to the estimate about 80 percent of students in post-secondary education are enrolled in private institutes. Thus private institutions exist and are growing at the expense of public institutions. In fact, the impact of private institutions in higher education is quite complex. However, in this section on attempt is made to assess the challenges before the government institutions due to springing up of private universities.

8.2 IMPACT OF PRIVATE AND FOREIGN UNIVERSITIES

The State of Chattisgarh, despite being new, has in the past few years promoted a sudden growth of private universities. Many of these may not survive but some of them, which are backed by strong industry houses, have come up with large number of courses offered in a number of campuses in the country. The State University established by the Government such as, Pt. Ravishankar Shukla University, shall be challenged by some of the private universities in respect of quality of academic services and relevance of the academic programmes. It is therefore, absolutely essential that the opportunity be taken in the right earnest by the university so that it is able to create a self-financed system for conduct of high quality and relevant courses having market needs in the focus.

With its maturity and scholastic traditions the university can respond to this challenges provided it improves the efficacy of its academic and administrative functioning and envisions for itself a bright future in its academic and professional endeavours. It is here that it requires a visionary leadership firmly committed to the growth and advancement of the university towards a world-class academic and research system. The faculty for various courses should also be selected on merit and proven scholastic aptitude so that they are in a position to safeguard the academic and research interest. The existing faculty requires mentoring and alignment to the current world trends in academics and research. This shall improve their competence to embark on curriculum innovation while at the same time equip them with the good laboratory practices, for their academic and research laboratories and centres. The faculty need to be oriented towards ever increasing use of information and communication technologies in creating an IT-enabled environment and a technology-savvy campus. In the age of easy-access to available knowledge and information about world-class universities it should not be difficult to create such competence and caliber in the faculty. It is proposed that the investment in faculty development be regarded as the investment in laying the sound foundation for creation of a world-class academic and research environment in the University.

The foreign universities have already begun to make inroads in this country. Some of the best universities in the world will set up their offshore campuses in India and will also work in collaboration and cooperation with some of the well established institutions and universities in the country. The opportunity for Pt. Ravishankar Shukla University is to work out its collaborative arrangement with some of the leading universities in the world so that it benefits from the best practices adopted in these universities in curriculum design and in the delivery of academic and research services.

It may not be out place of to mention that if the universities in the state such as, Pt. Ravishankar Shukla University do not make the necessary preparedness to the challenges posed by foreign universities in India, such universities will take away the talented students who presently seek admission in the Indian State Universities leaving behind the second rate school leavers to join our programmes. This will cause

a devastating blow to India's human resource competence as those studying in foreign universities are likely to be trained for foreign jobs and for the requirement of the multinationals. However, on the other hand, if our universities encash the opportunity thrown open by globalization of higher education, they would emerge as world leaders in selected areas of academic and research endeavours. The foreign students would then find it lucrative to take admissions in Indian universities while our own bright students currently looking for foreign universities would have a larger attraction to study in the India universities provided we are able to create a bias for quality and relevance in our academic programme. Pt. Ravishankar Shukla University should in our opinion, take this opportunity as a challenge and prepare itself to greet this challenge.

The essence of privatization among other things is competition. Larger the number of private players or keepers greater the competition between private players on the one hand and between public and private on the other hand. Thus, the stage is set for the survival of the fittest.

At least various needs and areas could be identified where the interface between public and private institution is more visible and producing both positive and negative outcomes.

8.3 CURRICULUM REVIEW ANS DEVELOPMENT

Universities develop their curricula keeping mainly in view the suitability of course, market demands / job orientation, skill imparting and soon. It is well argued that public institutions in general fail to keep pace with the changing needs so far as curriculum development is concerned whereas private institutions keep or revising the curricula in response to changing milieu. That is why students find the curricula / types of courses attractive and relevant. This is one of the reasons why enrolments in public / government funded institution shave been declining, delayed response or unwillingness to respond to changing circumstances gradually tend to bring these institutions to moribund state. Thus, public institutions of higher learning have to complete with the parallel system to have attractive curricula. Only those can survive who are able to excel academically and offer the curriculum relevant to the need of

society and industry. The University would set up a mechanism of curriculum review and development which would be dynamic in nature and ever evolving.

8.4 INFRASTRUCTURE FACILITIES

Infrastructure facilities constitute one of the vital components of pedagogy. Infrastructure facilities include classrooms, library, equipments and so on. Needless to say that those things are of special importance for healthy academic atmosphere. In general, private institutions come up with good infrastructure facilities as compared to institutions run / added by government. Lack of infrastructure creates bad impression among the prospective students.

While on the one hand they have improved themselves with respect to the areas mentioned above, they have to interact with other institutes of higher learning. Networking with other institutes not only offers them an opportunity for self-assessment but also provide them with new and innovative techniques tasks and so on. The university would strive to be a role model by demonstrating the best practices to all the other educational service providers. The University should set up smart campus with ultra modern facilities.

CHAPTER 9

RESOURCE GENERATION

PREAMBLE

The resource generation activities would focus on Internal Resource Generation (IRG) by the following: (i) fees from academic and other activities, (ii) testing and consultancies, (iii) short-term training programme, (iv) training programme for foreign nationals and NRIs, (v) International collaboration, (vi) Grant-in-aid from national government to non-governmental funding agencies, (vi) Grant-in-aid from international funding agencies, (vii) Hostel, canteen, guest house, parking facilities, (viii) Optimum utilization of university amenities like laboratories, computers, building, gymnasium etc., by leasing out to others(ix) Industry sponsored specialized training and R&D, (x) Nomination of alumni from industries to Governing Bodies.(xi) endowment fund and sponsored chair by industry/philanthropy.

9.1 FEES COMPONENTS

9.1.1 University Teaching Departments

The fees of the University Teaching Departments, particularly the following components be revised:

i) Development Fees
ii) Library Fees
iii) Compute Fees
iv) Laboratory Fees
v) Sports Fees
vi) Cultural Fees
vii) Creativity Club Fees
viii) Alumni Fees
ix) Security
x) Examination Fees

xi) Degree Fees

xii) Mark-list Fees

xiii) Character Certificate Fee

xiv) Enrollment Fees

xv) Migration Certificate Fee

xvi) Exam. Late Fees

9.1.2 Affiliated Collages

The fees of the Affiliated Colleges, particularly the following components be revised:

i) University Development Fees

ii) University Library Fees

iii) University Computer Fees

iv) University Sports Fees

v) University Cultural Fees

vi) University Creativity Club Fees

vii) University Alumni Fees

viii) Examination Fees

ix) Degree Fees

x) Mark-list Fees

xi) Enrollment Fees

xii) Migration Certificate Fee

xiii) Exam. Late Fees

The proposed fee structure is given in Annexure 9.1.

Self-Financed Courses:

All professional courses must be run under self-finance mode.
Entrance test must be held for these courses

50% seats must be in Economy mode (T. Fees: Rs.10000 approx.)
35% seats must be in Payment mode (T. Fees: Rs.40000 approx.)
15% seats must be in Sponsored mode (T. Fees: Rs.80000 approx.)

*10% students admitted under self-financed courses be given scholarship/fee concession to the extent of Rs.10000/- per annum in the basis of merit-cum-means.

9.1.3 Testing & Consultancy

- Good Quality Laboratory must be development in the areas of local needs.
- A policy must be framed for testing and consultancy by the faculty (if need be Ed.CIL may be asked to prepare a document on this subject)
- To the extent of 70% must be spent on providing facilities and remuneration to the concerned consultant faculty.
- If individual effort is involved, a minimum of 60% must be given to him/her as remuneration.

9.1.4 Short Term Training Programmes

- Short-term training programs in employment generation and entrepreneurship must be identified and training be provided with the help of SIDBI/IDBI/IFCI/DST etc.
- A policy must be framed on short term training need etc.(If need be Ed.CIL may be asked to prepare a document on this subject)
- To the extent of 70% must be spent on providing facilities and remuneration to the concerned persons.

- If individual is involved minimum 25% must be given to him as remuneration.
- If individual is involved minimum 25% must be given to him as remuneration.

9.1.5 Training/Degree Program for Foreign Nationals

- Training/Degree programs for Foreign Nationals be identified. Need based education be provided (if need be Ed.CIL may be asked to prepare a document on this subject).
- A policy must be framed on Training/Degree programs for Foreign Nationals (If need be Ed.CIL may be asked to prepare a document on this subject)

9.1.6 International Collaborations

- Degree programs/Foreign Universities be identified for academic collaboration at UG. PG and Ph.D. level.
- A policy must be framed on Training/Degree programs, sharing of resources, faculty and students exchanges etc.(If need be Ed.CIL may be asked to prepare a document on this subject). 2+2 or 3+1 at UG level, 1+1 at PG level and joint supervision at Ph.D level may be considered.
- Fees may be shared between the institutions as per the settled norms.

9.1.7 Grant-in-aids from Government Funding agencies

- Proposal for buildings/stadium/sports facilities/laboratory up gradation etc. be prepared and may be submitted to Government funding agencies such as UGC, MHRD, DST, DBT, MNES etc. (If need be Ed.CIL may be asked to prepare a document on this subject).

9.1.8 Grant-in-aids from Non Government Funding agencies

- Industries/Private organizations may be approached for institution of scholarships/medals etc.

- Industries may be approached to institute of professional excellence in various fields.(If need be EdCIL may be asked to prepare a document on this subject)
- NGOs be involved in health care, motivation, career counseling job creation etc.

9.1.9 Grant-in-aids from International Organizations

- UNDP grants may be required on various subjects. (If need by Ed.CIL may be asked to prepare a document on this subject).
- UNESCO may be approached for child welfare schemes (If need by Ed.CIL may be asked to prepare a document on this subject).
- Alumni/Private Foreign trusts may be approached for building funds

9.1.10 Hostels/Guest Houses/Canteen/Parking/Housing

- Hostels/Guest Houses be provided to visitors of University as well as other persons. Some tie-ups be made with tour operators etc. for maximum utilization of these facilities as resources.
- Canteen and shopping complexes be created and be rented.
- House facilities must be available to faculty and staff.

9.1.11 University amenities : University Lawns/Library/Computer Centre etc.

- Public membership of library be made open for the resident/non-residents of city.
- Computer facilities may be shared on rent basis during free time. Additional courses can be planned.
- University lawns may be rented for public functions/marriages etc.

9.1.12 Utilization of University Buildings/Laboratories/Faculty & Staff

- University academic building must be utilized optimally. New evening/late night academic programs be designed and implemented. The building can be shared on rent with private institutions.

- University laboratories may be used to impart practical training to the students of other institution on suitable charges basis.
- Faculty and staff may be provided to other institutions with a fee which must be shared between faculty staff and university.

9.1.13 Industry sponsored specialized training/R&D

- Several Indian and foreign industries need specialized training to their staff, which can be taken up.
- Sponsored industry project of mutual interest may be taken up.

9.1.14 Nomination of Alumni on Governing Bodies

- Nominations of alumni be considered on various bodies of the University in lieu of donations.

9.1.15 Preferential treatment to Alumni Children donating money to the University

Preferential treatment may be provided to the sons/daughters of alumni on donations basis.

University to maintain Alumni Portal, collaboration bureau and Technology Incubation Centres to ensure effective restoration of Alumni, Industry and Collaborating Universities.

Annexure 9.1

PROPOSED FEE STRUCTURE

(a) University Teaching Departments :

Following fee should be charged :

i)	Development Fees	@10000 (at the time of admission)
ii)	Library Fees	@1000 per annum
iii)	Computer Fees	@1000 per annum
iv)	Laboratory Fees	@1000 per annum
v)	Sports Fees	@500 per annum
vi)	Cultural Fees	@500 per annum
vii)	Creativity Club Fees	@500 per annum
viii)	Alumni Fees	@1000 per annum (at the time ode admission)
ix)	Security	@10000 (refundable)
x)	Examination Fees	@1500 per exam
xi)	Degrees Fees	@1000 once only
xii)	Mark list Fees	@100 per exam
xiii)	Character Certificate Fee	@100 per annum
xiv)	Enrollment Fees	@1000 once
xv)	Migration Certificate	@1000 once
xvi)	Exam. Late Fees	@1000-10000 (time schedule)
xvii)	Tuition Fee	(As per Govt. Norms)

(b) Affiliated Colleges :

i)	University Development Fees	@10000 (once)
ii)	University Library Fees	@1000 per annum
iii)	University Computer Fees	@1000 per annum
iv)	University Sports Fees	@500 per annum
v)	University Cultural Fees	@500 per annum
vi)	Univ Creativity Club Fee	@500 per annum

vii)	University Alumni Fees	@1000 (once)
viii)	Examination Fees	@1500 per exam.
ix)	Degree Fees	@1000 once only
x)	Mark-list Fees	@10 per exam
xi)	Enrollment Fees	@1000 once
xii)	Migration Certificate Fee	@1000 once
xiii)	Exam. Late Fees	@1000-10000 (time schedule)
xiv)	Tuition Fee	As per Govt. Norms

CHAPTER 10

MAJOR RECOMMENDATIONS

The various recommendation made in the preceding chapters are summarized below:

10.1 ACADEMIC

The various recommendations for academic activities are given here under:

1. Restructuring of Departments/Schools is carried out on priority basis
2. Semester and credit system with continuous evaluation be planned.
3. New Academic Courses be introduced in phased manner and market survey
4. Research Facilities be upgraded
5. Advanced Centres of Studies & Research be established
6. Sign MoUs other leading academic and R&D institutions and India and abroad.
7. Discontinuation of all Ph.D. programs in colleges and also those PG programmes which are in the area of Academics & Research Activities of UTD.
8. Focus on PG programs & Research/Project be the component of all PG courses.
9. An autonomous office of Deans of Colleges be set up to deal with college office.
10. Examination Reforms: The following needs to done:
    a. Centralized Admission. Tests for UTD & Colleges
    b. Requirement for Ph.D. programmes and degree be made more straight in line with those of IITs.
    c. Continuous Evaluation or Internal Assessment be made compulsory..
11. Computer Aided Instruction & Audio-visual instructions be encouraged.
12. PDP & EDPs be mandatory for all courses.
13. Training & Placement Cell be established in University.

14. Industry sponsored Academic Programs & Research be encouraged
15. Flexible curriculum for industry & working professionals be introduced.

10.2 ADMINISTRATIVE & GOVERNANCE

1. Steps be taken to reform administrative and governance structure of the university along the lines of Central Universities / IITs.
2. University should establish new Coordinating & Controlling structures

   There is a need to create following posts of Deans:

   Creations of the posts
   - Dean (Academic)
   - Dean (Student Affairs)
   - Dean (Planning & Admn.)
   - Dean (Research & Consultancy
   - Dean (College Affairs)

2. Controller of Examination be given more powers. The system of examination must have openness, and make use of e-gadgets.
2. The Satellite Campus with full autonomy in admission and examinations be established.
3. Rotation of HODs of existing schools/ departments be done immediately The period of head ship be for 3 years
4. Initiate New Policies
   a. Manpower Planning be carried out by all department/area/centers in close coordinated by Dean Planning
   b. Enforce stringent selection criteria for Teachers.
   c. Develop a Centralized merit based admission Policy for UG and PG programme
   d. Develop a policy for consultancy
   e. Institute Scholarships, freeships, Chair Professorship
   f. Promote post degree career programs.
   g. Institute financial & academic incentives for teachers and staff
   h. Quality Policy should be framed and implemented
5. University should develop a ***market or business plan*** to attract students from other centers. University should avail the services of professional agency.

6. University should offer a consultancy in academic/social/industrial plans of the State Government in the regions of jurisdiction of university.

9. e-Governance of university administration be considered as the priority area.

Annexure 10.1

University Schedule / Calendar

(The schedules may be revised year to year basis as per the need but it must be adhered strictly)

1.	Admission	July 1-August 31 (last date of submission 31st October each year)
2.	Submission of examination forms	October 31
3.	Late Submission of examination forms	November 15 (Rs.500)
4.	Late Submission of examination forms	November 30 (Rs.1000)
5.	Late Submission of examination forms	December 15 (Rs.2000)
6.	Late Submission of examination forms	December 31 (Rs.5000)
7.	Late Submission of examination forms	January 15 (Rs.10000)
8.	Late Submission of examination forms	December 31 (Rs.25000)
9.	Examination	March 22 onwards
10	Evaluation	April 15-May 30
11.	Declaration of Result	June 30
12.	Invitation of application form for Entrance Test	March 1-April 30
13.	Entrance Tests	Saturdays/Sundays in May
14.	Results of Entrance Tests	June 15
15.	Teaching starts	July 15
16.	Teaching duration (min 210 days)	July 15-October 7 October 24 – December 24 January 10 – March 15
17.	Vacations (8 weeks approx.)	October 8 – October 23 December 25 – January 9 May 15 – June 30
	Orientation program for Teaching Faculty (in house as well as office campus as per the approved policy)	2 weeks

CHAPTER 11

PLAN OF ACTION

The plan of action for the Pt. Ravishankar University, corresponding to the major recommendations made in chapter 10 and also based on strategies for academic excellence and good governance system, is given below in the form of activity chart for the key activities. The implementation of all critical and important non-critical or sub-critical activities would require further detailed planning. Requirements of physical, human and financial resources have been calculated based on the plan of action and are phased as per the activity schedules.

Plan of Action

SNo.	Activities	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1.	Review of Acts and Statutes for Good Governance											
2	Restructuring & Consolidation of Academic Departments											
	a) Restructuring of Courses											
	b) Clustering of Departments of UTD											
3.	Establishment of academic Staff College											
4.	Establishment of Centre of Excellence											
	a) Knowledge Innovation and Management											
	b) Advanced Studies in Indigenous Medicines											
	c) Material Science											
	d) Photonics											
	e) Tribal Empowerment											
	f) Bioinformatics											
	g) Energy and Environment											
	h) Jagdalpur Campus - Tribal Art and Culture											
	i) Post-Harvest Technology Centre											
	j) Technology Incubation Centre											
5.	Two Way Concrete Road											
6.	Boundary Wall											

SNo.	Activities	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
7.	Staff Quarters (50)											
8.	Roof Water Harvesting (60)											
9.	Land Scaping & Beautification											
10.	VIP Guest House											
11.	Community Centre											
12.	Hostel Boys 600 capacity											
13.	Girls Hostel 200 Capacity											
14.	International Student Hostel											
15.	Campus Area Network											
16.	Vehicles											
17.	Recruitment of Faculty											
	a) Identification of Vacancies											
	b) Sanctioning of Posts											
	c) Filling of Posts											
18.	Development of Physical & Academic Infrastructure											
	a) Equipment Listing											
	b) Establishment of Physical space(building)											
	c) Tendering of Civil Works											
	d) Tendering of Equipment											
	e) Tendering of learning Resource											
	f) Installation of equipment/ building/learning resource											

CHAPTER 12

PHYSICAL, HUMAN AND FINANCIAL REQUIREMENTS

Various physical resources will be required for implementation of major recommendations made in Chapter 10 in accordance with Plan of Action in Chapter 11. This chapter gives year-wise requirement of buildings (Civil Works), equipment, furniture & fixture and learning resources. The year-wise manpower requirements (teaching as well as non-teaching) in addition to the current staff have been entrusted. The financial estimates corresponding to capital (non-recurring), recurring expenditure have been given.

The University needs to make an investment of **Rs. 103.45 crores** on account of infrastructural development for 10 years. The estimated cost of civil work is Rs**. 41. 32 crores.** The estimates for equipment furniture, fixtures etc is **Rs. 54.86 crores.** The teaching learning budgets are estimated to be Rs 7. 27 crores(Table 12.7)

An additional recurring expenditure of Rs. 7.23 crores to Rs. 12.46 has been estimated (Table 12.6) over an above the existing expenditure of university (Annexure 12.1)

Table 12.1 to Table 12.4 shows the requirement of building and civil works, equipment, furniture & fixtures as well as learning resources respectively. Items / activities given in these tables corresponds for those given in Plan of Action.

Table 12.4 gives the detailed expenditure for modernizing the existing departments / schools with respect to civil works, equipment, furniture and fixtures and learning resources.

Table 12.5 provides the details of year-wise manpower requirements for the University. Table 12.7 provides the summary of cost estimates for non recurring capital and recurring expenditure.

Table 12.1: Capital Expenditure of Pt. Ravishanker University

(Rs. in Lakhs)

	Total	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Items	**Year wise phasing**											
1 Civil Works												
a. Existing schools / institutes	1320	264	528	528								
b. Academic Staff College	196	118	78									
d Centre (s) of Excellence												
Knowledge Innovation and Management	150		90	60								
Advanced Studies in Indigenous Medicines	100			60	40							
Material Science	100		40	60								
Photonics	100							60	40			
Tribal Empowerment	80						80					
Bioinformatics	90		54	36								
Energy and Environment	150						90	60				
Jadalpur Campus - Tribal Art and Culture	200			120	80							
Post-Harvest Technology Centre	150							90	60			
Technology Incubation Centre	150								90	60		
2. Two Way Concrete Road	150		120	30								
3. Boundary Wall	50	50										
4. Staff Quarters(50)	200	120	80									
5. Roof Water Harvesting (60)	30	15	15									
6.Land scaping & Beautification	100	20	40	10	10	10	10					
7. VIP Guest House	80		48	32								
8. Community Centre	56		56									
9. Hostel Boys 600 capacity	320		192	128								
10. Girls Hostel 200 Capacity	120			72	48							
11 Interantion Student Hostel	240				144	96						
12. Maintenance and Repair					61	69	72	77	83	89	92	94
Total (Rs. in lakhs)	**4132**	**587**	**1341**	**1136**	**383**	**175**	**252**	**287**	**273**	**149**	**92**	**94**

Table 12.2 Capital Expenditure for Equipment, Furniture and fixtures

(Rs. in Lakhs)

	Total	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Items	**Year wise phasing**											
1. Existing schools / institutes	**2600**	1040	780	130	130	130	130	52	52	52	52	52
2. Academic Staff College	58		41	17								
3 Centre (s) of Excellence												
Knowledge Innovation and Management	200			140	60							
Advanced Studies in Indigenous Medicines	250			150	100							
Material Science	250			125	125							
Photonics	250								150	100		
Tribal Empowerment	100							60	40			
Bioinformatics	250			175	75							
Energy and Environment	250							150	100			
Jadalpur Campus - Tribal Art and Culture	300				150	150						
Post-Harvest Technology Centre	250								150	100		
Technology Incubation Centre	350									245	105	
4. Roof Water Harvesting (50)	10	10										
5. VIP Guest House	15			15								
6. Community Centre	10		10									
7. Hostel Boys 600 capacity	20			20								
8. Girls Hostel 200 Capacity	8			8								
9 International Student Hostel	15					15						
10. Campus area network	250		100	100	50							
11 Vehicles (2Busses, 5 cars)	50			30		20						
12. Removal of obselence & modernization					137	137	137	137	137	137	137	137
Total (Rs. in lakhs)	**5486**	**1050**	**931**	**910**	**827**	**452**	**267**	**399**	**629**	**634**	**294**	**189**

Table 12.3 Capital Expenditure for Learning Resources

(Rs. in Lakhs)

	Total	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Items	**Year wise phasing**											
1. Existing schools / institutes	414	166	124	21	21	21	21	8	8	8	8	8
2. Academic Staff College	10		7	3								
3+A87 Centre(s) of Excellence												
Knowledge Innovation and Management	16			11	5							
Advanced Studies in Indigenous Medicines	30			18	12							
Material Science	26			13	13							
Photonics	30								18	12		
Tribal Empowerment	20							12	8			
Bioinformatics	40			28	12							
Energy and Environment	40							24	16			
Jadalpur Campus - Tribal Art and Culture	26				13	13						
Post-Harvest Technology Centre	30								18	12		
Technology Incubation Centre	45									32	14	
Removal of Obselence and Modernization					73	73	73	73	73	73	73	73
Total (Rs. in lakhs)	**727**	**166**	**131**	**94**	**148**	**106**	**93**	**117**	**141**	**136**	**94**	**81**

Table 12.4: Details of Capital Expenditure of Existing Schools of Pt. Ravishankar University

(Rs. in Lakhs)

S. No.	Department(s)	Carpet area (Sq.mt)	Civil Works	Equipment	Learning Resource
1	SOS in Chemistry	200	16	150	10
2	SOS in Computer Sciences	250	20	100	15
3	SOS in Geology & Water Resources			150	10
4	SOS of Mathematics			20	5
5	SOS in Physics	150	12	150	7
6	SOS in Statistics			20	5
7	SOS in Biosciences	300	24	200	15
8	SOS in Ancient History			10	5
9	SOS in Economics			10	5
10	SOS in Geography			10	5
11	SOS in History			10	5
12	SOS in Regional Studies in Research			10	5
13	SOS in Psychology	150	12	50	7
14	School of Law			10	5
15	SOS in Sociology	150	12	10	5
16	SOS in Comparative Religion and Philosophy			10	5
17	SOS in Library & Information Science	150	12	50	10
18	SOS in Literature and Language			10	5
19	SOS in Adult Continuing Education			50	10
20	SOS in Physical Education			50	5
21	Institute of Pharmacy			150	10
22	Institute of Management			150	10
23	Institute of Technology	15000	1200	800	200
24	SOS of Law		12	50	10
25	SOS in Electronics			50	10
26	USIC			200	10
27	Institute of Biotechnology	3000	240	120	20
	Total		**1320**	**2600**	**414**

Table 12.5 Manpower Requiements for University

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Manpower Requirement												
1.Teaching Staff	103	103	6	7	7	2	4	6	4	3	1	
Professor		15	1	1	1	0	1	1	1	0	0	
Reasder		29	2	2	2	1	1	2	1	1	0	
Lecurer		59	3	4	4	1	2	3	2	2	1	
Incremental Total		**103**	**109**	**116**	**123**	**125**	**129**	**135**	**139**	**142**	**143**	**143**
2.Non-Teaching Staff		93	98	104	111	113	116	122	125	128	129	129
Salary of Teaching Staff												
Professor		88	93	100	107	110	115	121	126	129	132	133
Reasder		118	125	138	151	156	165	176	185	192	196	198
Lecurer		177	187	213	239	248	264	288	304	317	324	327
Sub-Total		**383**	**405**	**451**	**497**	**514**	**544**	**585**	**615**	**639**	**651**	**658**
Salary of Non Teching Staff		**191**	**202**	**225**	**249**	**257**	**272**	**292**	**307**	**319**	**326**	**329**
Total		**574**	**607**	**676**	**746**	**772**	**815**	**877**	**922**	**958**	**977**	**987**

Table 12.6. Recurring Expenditure

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. Faculty	383	405	451	497	514	544	585	615	639	651	658
2. Non-Teaching	191	202	225	249	257	272	292	307	319	326	329
Sub Total	**574**	**607**	**676**	**746**	**772**	**815**	**877**	**922**	**958**	**977**	**987**
3. Programme Expenditure	86	92	102	113	117	123	133	140	145	148	150
4. Administrative expenditure	29	31	34	38	39	41	44	47	48	49	50
5. Travel/DA	29	31	34	38	39	41	44	47	48	49	50
6. Miscellaneous Expenditure	6	6	7	8	8	8	9	9	10	10	10
Total	**723**	**767**	**854**	**942**	**974**	**1029**	**1108**	**1164**	**1210**	**1234**	**1246**

Assumptions :

1. Incremental Faculty posts have been assumed for new centre
2. The salaries of Teaching staff has been assumed as: Professor Rs. 6 lakhs, Reader Rs. 4 lakhs and Lecturer Rs. 3 lakhs per annum.
3. Non Teaching Staff Salary has been assumed as 50% of Teaching Staff
4 Prograamme expenditure has been assumed at 15 % of Staff salary
5 Administrative expenditure has been assumed at 5 % of Staff salary
6 TA/DA expenditure has been assumed at 5 % of Staff salary
7. Miscellanoeus TA/DA expenditure has been assumed at 1 % of Staff salary
8. Annual inflaction of 10% has been taken in to consideration
9.The current expenditure of the University at current prices has not been taken into consideration

Table 12.7: Summary of Estimated costs for Capital and Recurring Expenditure

(Rs. in Lakhs)

Items	Year(s)											
	Total	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
A. Capial Expenditure												
1. Building and civil works	4132	587	1341	1136	383	175	252	287	273	149	92	94
2. Equipment, furniture & furnishing	5486	1050	931	910	827	452	267	399	629	634	294	189
3. Learning resources	727	166	131	94	148	106	93	117	141	136	94	81
Sub Total (Rs. in Lakhs)	**10345**	**1802**	**2403**	**2140**	**1359**	**733**	**613**	**804**	**1043**	**919**	**480**	**364**
B. Recurring Expenditure		**723**	**767**	**854**	**942**	**974**	**1029**	**1108**	**1164**	**1210**	**1234**	**1246**
Total (Rs. in Lakhs)		**2525**	**3170**	**2994**	**2301**	**1708**	**1642**	**1911**	**2208**	**2129**	**1714**	**1610**

1. The University needs to make an investment of Rs. 103 crores on account of infrastructural development for 10 years.
2. An additional recurring expenditure of Rs. 7.23 crores to Rs. 12.46 has been estimated over an above the existing expenditure of university.

ANNEXURE 12.1

GENERAL FUND ACCOUNT - ABSTRACT OF INCOME

(Rs. in Lakhs)

Sr. No.	Head of Account	Actual 2002-03	BE 2003-04	Actual 01.04.2003 31.08.2003	Estimates 01.09.2003 31.03.2004	RE 2003-04	BE 2004-05
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
A.	General Receipts	767.90	780.95	499.55	778.66	1278.21	1004.53
B.	Receipts for Academic Purposes	57.10	37.00	20.66	40.81	61.47	64.54
C.	Library Receipts	6.44	6.23	20.66	40.81	61.47	64.54
D.	Examination Receipts	550.47	538.50	115.88	483.24	599.12	626.39
E.	Receipts for Student Welfare	2.87	3.01	1.71	1.30	3.01	3.31
F.	Receipts for Directorate of Physical Education	43.74	47.00	1.75	43.25	45.00	47.00
G.	Receipts for University School of Studies	25.25	24.61	14.86	12.15	27.01	28.41
TOTAL A to G		**1453.77**	**1437.30**	**657.14**	**1364.13**	**2021.27**	**1782.14**
H.	Deposits & Debt Heads A/c	68.38	101.12	24.64	88.47	113.11	123.94

GENERAL FUND ACCOUNT - ABSTRACT OF EXPENDITURE

(Rs. in Lakhs)

Sr. No.	Head of Account	Actual 2002-03	BE 2003-04	Actual 01.04.2003 31.08.2003	Estimates 01.09.2003 31.03.2004	RE 2003-04	BE 2004-05
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
A.	General Administration	1020.73	1268.55	496.29	906.66	1402.95	1160.75
B.	Engineering Unit	68.43	187.45	28.42	99.28	127.70	115.20
C.	School of Studies	23.08	75.70	4.33	37.57	41.90	51.70
D.	University Library	31.11	39.51	0.33	40.97	41.30	46.95
E.	Directorate of Physical Education	55.32	73.88	8.40	68.65	77.05	153.83
F.	Examination	251.56	345.50	166.86	235.14	402.00	377.00
G.	Student Welfare	1.41	8.47	0.50	6.59	7.09	7.26
H.	Staff Welfare Units	2.95	29.80	0.71	11.19	11.90	30.10
I.	General Miscellaneous	7.35	17.35	1.30	16.05	17.35	17.35
J.	University Press	1.23	15.50	0.32	3.18	3.50	13.50
K.	Center for Women's Study	-	1.00	-	1.00	1.00	1.00
L.	College Development Council	-	-	-	-	-	0.60
TOTAL A to L		**1463.17**	**20.62.17**	**707.46**	**1426.28**	**2133.74**	**1975.24**
	Deposits & Debt Heads A/c	54.77	89.70	12.31	84.00	96.31	102.78