

## Criterion - II: Teaching – Learning and Evaluation

### 2.1 Admission Process and Student Profile

#### 2.1.1 How does the institution ensure wide publicity and transparency in the admission process?

**\* Ensures wide publicity in a planned manner.**

- Admission notification is published in leading national and regional daily newspapers in English and Kannada languages.
- Admission notification hosted on University Website.
- The notification contains detailed information about number and range of courses, eligibility, process of admission and academic as well as support facilities.
- Prospectus giving all the academic administrative and financial aspects related to admission process is made available to students.
- Merit and Reservation policy of government ensures access, equity and social justice.
- To ensure national character, a few seats are reserved for outside University students.

**\* Ensures Transparency as under:**

- University follows academic calendar of events giving last date for receipt of application, publication of I list, II and III list and last date fixed for admission based on availability of seats.
- Preparation of merit gradation cum reservation list and its notification. The selection is through committee systems and approval of authorities.
- The selected candidates lists that is announced on the notice boards as well as on the website of University, indicating the percent of marks and reservation category.
- From 2008-09, the University will be following admission based on central counselling as per a schedule.
- Inter departmental transfer is allowed based on availability of seats.
- Thus transparency is ensured from the stage of notification till the completion of admission process. Hence, access, equity and social justice is ensured through transparency and adherence to rules.

#### 2.1.2 How are the students selected for admission to the following courses?

- a) General      b) Professional      c) Vocational**

**At University level:**

**• General courses:**

For general PG courses (M.A., M.Sc., M.Com.) the admission is based on merit at the qualifying examination cum reservation, as per the order of Government of Karnataka.

- **Professional courses:**

- For professional PG courses like MBA and MCA, admissions are based on Common Entrance Test conducted by Vishveshwarayya Technological University (VTU), Belgaum. It is followed by counselling and selection.
- For M.Sc. Biotechnology course, a quota of 7 (25%) seats is filled on All India Level Competition, processed and selected by DBT, New Delhi.
- For other PG Professional courses and PG Diplomas, (M.S.W., M.Lib.Sc., M.Sc. Microbiology, Biochemistry, PGDCA, PGDGI) admission is based on merit cum reservation.

**At College level:**

- Admission to UG programmes offered by Government and Private aided/unaided Institutions are based on merit cum reservation, taking college as a unit. The admissions are made by the colleges. The authorities of University, Department of Collegiate Education and Departments of Social Welfare of the Government of Karnataka ensure the proper implementation of reservation policy of Government of Karnataka.
- Admission to P.G. courses at colleges is done at University level, for 50 and 100 percent of seats at private aided/unaided colleges and Government Colleges respectively. The remaining 50 percent of seats are filled by private management at college level, again ensuring reservation.
- For professional courses like M.B.A., M.C.A., the admission is through common entrance tests conducted by Vishveshwarayya Technological University, Belgaum, as well as counselling.
- Admission to vocational programmes (COPs), is open and transparent, following merit cum reservation, wherever applications exceed the demand.

**2.1.3 What strategies are adopted to create access to**

- a) Disadvantaged community**
- b) Women**
- c) Differently-abled**
- d) Economically-weaker sections of the Society**
- e) Athletes and sports persons**

**Strategies adopted to create access are as follows:**

**\* Orientation – Awareness and Empowerment**

- Creation of awareness on the importance of higher studies – education as a means of socioeconomic change and a means empowerment – orientation and counselling.
- Provision of Government Order – policy of constitutionally guaranteed merit cum reservation at the time of admission.

- Awareness and orientation on the financial and academic facilities, incentives to the marginalised students.
- Educating and counselling needy parents of women students on the importance of women education, exclusive facilities available for women, financial incentives and security and protection provision.
- Extension lectures and career counselling.

#### \* Through Reservation Policy

- Access is ensured to these marginalised groups through the total implementation of reservation-cum-merit as per the orders of Government of Karnataka. At present the reservation quota is as follows:  
SC 15%, ST 03%, OBC 32% (Cat.I 04%, Cat.IIA 15%, Cat.IIB 04% Cat.IIIA 04%, Cat.IIIB 05%) GM 50%.  
Reservation is ensured at all levels of admission namely UG, PG and M.Phil. degrees. For Ph.D., there is a compulsory quota for SC/ST students.
- Even for NSS, NCC and defence category students, one seat in each subject is reserved.
  - a) **Disadvantaged Community:** There is reservation for students belonging to disadvantaged community as per Govt. of Karnataka notifications.
  - b) **Women:** For women, there is no reservation for admission but the women candidates are provided with equal opportunity. Separate hostel facilities are available for women.
  - c) **Differently Abled:** As per Govt. of India directives, seats are earmarked for differently abled students in the admission, the same are followed.
  - d) **Economically Weaker Sections of the Society:** There is reservation for students belonging to economically weaker sections of the society as per Govt. of Karnataka notifications, the same are followed for admission.
  - e) **Athletes and Sports Persons:** One student is admitted preferentially in each Department based upon the excellence of the student in athletics or sports activities at regional or national level.

#### 2.1.4 How many applications were received and how many were granted admissions for the following courses?

	No. of Applications	No. Admitted
a) Professional courses	2182	364
b) General courses	3923	945
c) Vocational courses	--	--
d) Post-graduate courses	6105	1309
e) Undergraduate courses	25350	24701
f) For all courses	31455	26010

Thus, for professional and applied courses as well as majority of basic subjects, the number of applications received is more than the seats, thus ensuring fair competition and selection.

## **2.2 Catering to Diverse Needs**

### **2.2.1 Is there a provision for assessing student's knowledge/needs and skills before the commencement of the teaching programme?**

- The orientation programme conducted at each department/subject before the commencement of teaching programme helps in internal understanding of the knowledge base and skills of the students. The merit and performance of students in qualifying examination as well as their earlier career is also considered.
- The performance of students in the first and second internal tests which are a part of continuous internal assessment also helps in understanding the students' level of understanding, of the subject.
- It is proposed to have Induction Analysis cum orientation classes to all the newly admitted students before the actual commencement of teaching programme in order to assess the status of current knowledge of subject, general knowledge, reasoning and skills. It is expected that this analysis and the performance of students at qualifying examinations are likely to create a base for monitoring the future progress of students.

### **2.2.2 Does the institution provide bridge courses to the educationally-disadvantaged students?**

There are interdisciplinary professional and applied courses offered at the University (example – MBA, MCA, M.Sc. in Materials Science, Mineral Processing, Social Work, Women's studies, Biotechnology, Microbiology). For these courses, either any graduate (MBA or Mathematics at +2 level (MCA) or with cognate interdisciplinary/allied subject at UG degree level is eligible for admission. Hence, these students need a bridge course on that new subject of study before the commencement of the actual TLE. Hence, Bridge programme for the admitted students of these courses are arranged after admission during the first week of the First Semester. Thus, for interdisciplinary courses, where in students come from different disciplines, bridge courses are offered as per their needs.

### **2.2.3 What programmes are offered to the students from the disadvantaged communities?**

- The University has established an exclusive "Civil Services and Competitive Examination Coaching and Training Centre". It is headed by a Director (teacher designate) and supported by visiting faculty. This centre arranges for training and special programmes especially for SC, ST and OBC students, free of cost.

- This expenditure is totally borne by the University. This is a unique academic support to the students.
- For SC/ST and OBC students, short term programmes are offered. These courses are conducted by external agency and experts.
- Short term programmes on HRD like "Feel Employable and Communication Skills", are arranged during the annual year. Experts from HRD institutions conduct these programmes. These are interactive sessions and has learner focus.
- Special coaching classes for the preparation to IAS/KAS and other competitive examinations. Experts from outside and teachers of the University act as resource persons.
- The data regarding the number of programmes and number of students benefited and the expenditure involved is available with the centre and also in its profile.

#### **2.2.4 What specific strategies are adopted for facilitating**

- a. Advanced students?**
- b. Slow learners?**

The advanced learners and slow learners of a subject are identified by the concerned faculty, based on their performance in CIA, and semester-end examination. They are also identified based on their active participation, involvement, performance in the class room/practical hall dynamics. Accordingly, subject wise, paper wise, practical wise strategies are adopted.

##### **\* Specific strategies for the Advanced Learners:**

- Provision of additional learning – reference material – Books, Review Articles and Reports, CDs and Internet surfing.
- Assignment preparation on current and latest topics based on reference books, CDs and Internet surfing.
- Student Seminars on selected reference topics.
- Participation in Quiz, Debate and Problem Solving – Decision Making Exercises.
- Student Project Work based on theoretical data/practical work/survey data/ case studies.
- Projecting them as "Team Leaders and Facilitators of Teams", comprising fast, medium and slow learners.

##### **\* Strategies for slow learners:**

- Tutorials, discussions, interactions and remedial coaching.
- Personal, academic and social counselling.
- Concept clarification and problem solving exercises.
- Bilingual explanations and discussions.

- Provision of simple but standard lecture notes/course material.
- Revision of topics and practicals (not as punishment but as amelioration method).
- Making them part of student teams wherein there is a admixture/blend of fast, medium and slow learners. Here, as a “team dynamics – cooperative efforts”, the slow learner experience adoptability, develop self esteem, self respect and confidence.
- Steps to enhance their communication skills, art of reading – learning.
- Trial tests and mock examinations.
- Monitoring their progress at every CIA and semester-end examinations.

## **2.3 Teaching-Learning Process**

### **2.3.1 How does the institution plan and organize the teaching learning evaluation schedule into the total scheme? Does the University have an academic calendar? How is it prepared?**

**\* The University follows an Academic Calendar for all its academic processes:**

- The Academic Calendar of the University is prepared by the Committee of Deans and academic administrative authorities.
  - There are separate Semester-wise/ annual calendar for PG and UG courses - faculty-wise. Even there are separate academic calendars for a few PG courses exclusively.
  - The logistics of the semester-wise annual calendar of events is based on the following data/directions/feedback/steps.
  - UGC guidelines on academic working days.
  - Schedule of announcement of the results of qualifying examinations – for M.A., M.Sc. M.Com. and other courses.
  - Schedule of the centralised Common Entrance Tests conducted by Government of Karnataka and Vishweshwarayya Technological University (for M.B.A., M.C.A.).
  - Meeting proceedings from BOS, Academic Council, Consultative Committees, Department Councils.
  - Feedback from students and revenue administration.
  - Policy and orders of Government of Karnataka.
  - Meeting proceedings from Principals and Managements.
- Institutional planning and organisation of Teaching–learning–evaluation schedule into total scheme of Academic Calendar is mainly based on three important provisions. They are as follows:

- i. The Regulations of each course (UG or PG) specifies the frame work for academic schedule – TLE. (The number of semesters, working/teaching days, number of subjects – papers to be taught, hours of instruction per paper, practical, method of teaching and learning (practical, theory, field work etc.), method of CIA, semester-end examinations, weight-age for CIA and semester-end examinations and method of assessment and declaration of results.
  - ii. The Board of Studies prescribes the detailed syllabus for a subject based on provisions of Regulations.
  - iii. The Evaluation section, based on their logistics, prepare the time frame for conducting examinations (exam schedule, evaluation schedule, tabulation schedule, result announcement schedule, marks card, ledger submission schedule).
- Based on these three major provisions, as well as the steps followed for preparing an annual calendar, teaching, learning and evaluation schedule is planned, organised and implemented.
  - This systematic step provides, in advance, the need for preparation towards “TLE” by all stakeholders.
    - Students would know the academic programme (teaching days, learning days, evaluation days) and also the components to be learnt and to give examination.
    - Teachers would know the time frame for teaching – learning process and ensure the total attention for the completion of syllabi and possible revision.
    - Examination authorities and examiners to know the time frame for completion of the process of evaluation and results.
    - Examination section also announces its calendar of events – examination time table, evaluation days, tabulation days, announcement of results, date for revaluation, re-totalling, photocopy provision and grievance redressal if any.
    - Thus, the systematic planning, organisation and implementation of teaching – learning – evaluation is possible within the total scheme of university schedule. It is rational, realistic and scientific.
    - Sample copies of the annual calendar for PG and UG courses may be perused.

**2.3.2 What are the courses which predominantly use the lecture method? Apart from classroom interactions, what are the other methods of learning experiences provided to students?**

- All the PG courses in the University use the lecture method as a first means to introduce the topic, base, theories, concept elaboration and depth of subject.

- The quality and quantum of the lecture methods and learning strategies (lecturing, discussion, group discussion, question answers, case studies, role play, illustrations, and special lectures) depend upon the topics being dealt with.
- Most of the applied courses and professional courses have study tour programs, practical sessions, projects and field work components in their curricula, besides the usual class room interactions.
- A few departments provide instructional materials to the students for easy follow-up/understanding the concepts.
- Team project works, surveys, assignments, case studies, preparation of charts, models, quiz programmes are also followed.

**2.3.3 How 'learning' is made student-centred? Give a list of the participatory learning activities adopted by the institution, which contribute to self-management of knowledge development and skill formation?**

- The learning process is student-centred in this University.
- Participatory learning activities like presentation of seminars and assignments/project work by referring to listed bibliography, collection of information from Internet, CD-ROM databases and on-line data bases is encouraged.
- The students in the departments like Management, Commerce, Social Work, Women's Studies, all science departments, Library and Information Science, Journalism and Mass Communication, etc. undertake project work, where self learning by students is core of the work.
- Such activities contribute to self management of knowledge development, skill formation in the student and provides requisite platform to the student to become confident and self reliant.
- Lesson plans, self instructional material etc., downloaded and made available in the VLRC & DL.
- Science and social science exhibition gives a plat form for creativity.

**2.3.4 What are the modern teaching aids used in classroom instruction? What are the other student learning experiences?**

- The use of modern multi-media teaching aids like LCD, OHP, models, CD-ROMs and computer systems are usually employed in class room instructions as well as other student learning experiences.
- In some departments, computer based packages are used to elucidate abstract knowledge and virtual instrumentation through computer animation.
- The students are also encouraged to use computer software packages for meaningful analysis of the experimental data collected/acquired by them.
- In the VLC of the University Library, students gather information and involve in learning process.

**2.3.5 Is there a practice of having tutorial classes for the students? If yes, for what courses?**

- There is formal provision for tutorial classes to help the students to overcome their difficulties and for problem solving as well as to go deep into the subject.
- Almost every department has such slot in their instruction schedule which is followed by them.

**2.3.6 Is there a provision for counsellors / mentors/ advisors for each class or group of students for academic and personal guidance? If yes, specify.**

- Yes, there is a provision for counsellors/mentors/advisors for each class or group of students for academic and personal guidance.
- The students are divided into groups and each group is provided with counsellor/mentor/advisor to provide academic and personal guidance to the needy students. It is done at each Department of PG studies.

**2.3.7 How is the academic progress of each student monitored by the faculty?**

- The teacher in-charge carefully monitors the regularity of attendance, participation in seminars and other activities and also the performance of the students in internal tests/semester examinations.
- Accordingly the students are advised to improve by way of help and remedial/corrective action.

**2.3.8 Give details of the course by sessions of work assigned and implemented in the tutorial session?**

- Every week, one hour is assigned for tutorial work and one hour for student seminars.
- As per the periods assigned in the syllabus, the teaching and practical work is carried out regularly.

**2.3.9 How do the students and faculty keep pace with the recent developments in the subjects?**

- The students and the faculty keep pace with recent developments in their disciplines by perusing research journals, latest reference books, participating in national seminars/workshops/symposium/summer schools/refresher courses/internet browsing and interactions with experts.

- The students are encouraged to read the magazines, journals, CD-ROM data bases and latest information available on the internet.
- The students are encouraged to give seminars on recent developments.
- Such interactions are mutually beneficial to the students and the faculty.
- Special lectures are organised and outside experts address the students and teachers, which will also help in equipping students and faculty with latest information and talent developments.
- Faculty and students attend National/International seminars symposiums and workshops in the field of subject. It helps in keeping pace with recent developments.
- Perusal of Research Journals and review articles.

**2.3.10 Are there departmental libraries for the use of faculty and students? If yes, give details.**

- Some well-established departments have Departmental Libraries and self managed reading rooms for the benefit of faculty and students.
- These departments like Kannada, History, Management and most of the science departments have Departmental Libraries with recent journals, working collection of books and data sheets and some archival materials.
- Some faculty members have their personal collection of a large number of books and they share the books and journals with the fellow colleagues, the research scholars and PG students round the clock.
- Project Reports, M.Phil. and Ph.D. dissertations of the students are also kept in the departments for reference by the students.
- Majority of staff are provided with computer and Internet connectivity for innovative research topics, reviews, methodology, data gathering and information output.

**2.3.11 On an average, how many students and faculty use the library per week?**

On an average 90% students and 75% faculty use the library facilities per week.

**2.3.12 What are the initiatives taken to make optimum utilization of INFLIBNET/DELNET facility by the students and faculty?**

- The University is privileged to have INFLIBNET and INFONET facility by the courtesy of UGC.
- Additionally, the University subscribes to CD-ROM databases facilitating quick E-survey of the literature by giving only 6 key words.
- Through INFLIBNET and INFONET facilities, the students and the faculty have access to approximately 4,100 on-line E-journals.

- At the beginning of every academic year, orientation programs are arranged by the Library staff. In addition to orientation programs, sensitization/awareness programmes, hands on training are also arranged for the optional use of INFLIBNET/DELNET facilities.
- All the PG students, research scholars and the members of the faculty make optimum utilization of these resources for the teaching-learning process and research work.
- The members of the faculty from neighbouring universities and affiliated colleges also have access to these facilities.

### **2.3.13 How does the library collect books and journals for all departments?**

- The library collects books and journals for all Departments in a systematic way.
- The needs of the students and the faculty are assessed by the Departmental Council of each Department periodically and the list of requisite books and journals is submitted to the library.
- The Library Committee earmarks the funds for purchase of books and journals for all the Departments.
- As per the purchase procedures of University, the Librarian procures the books and journals for the Central Library and the Libraries of the P.G. Centers.
- The invoices in triplicate are sent to the Chairpersons of the Departments to verify the procured books with the list of the recommended books by the Departmental Council.
- Some of books and journals are procured on standing instruction basis to avoid delay in procurement.
- Special provision also is made to meet the specific needs of researchers/faculty by the Library.

### **2.3.14 How does the library manage to cater to the needs of teachers and students with access to books and journals and timings?**

The books and journals in the Library are available on open access basis. Subject books are issued to students and teachers to take them home for reading/reference.

- The library is kept open on all days except national holidays with flexible hours of working as per the needs of the stakeholders.
- During examinations, library is kept open from morning 7.00 AM to 8.00 PM.
- Document delivery, Bibliographic compilation, Inter Library Loan and other facilities are provided by the Library.

## 2.4 Teacher Quality

### 2.4.1 What is the faculty strength of the University? How many positions are filled against the sanctioned strength? How many of them are from outside the State?

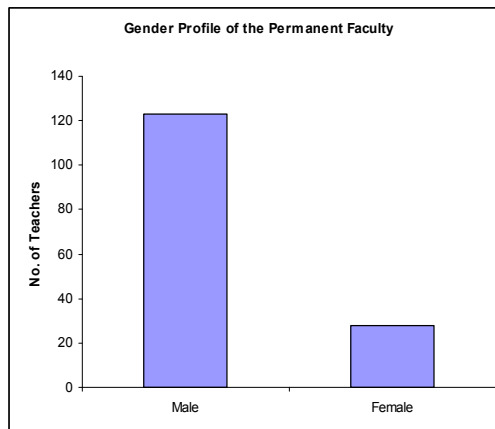
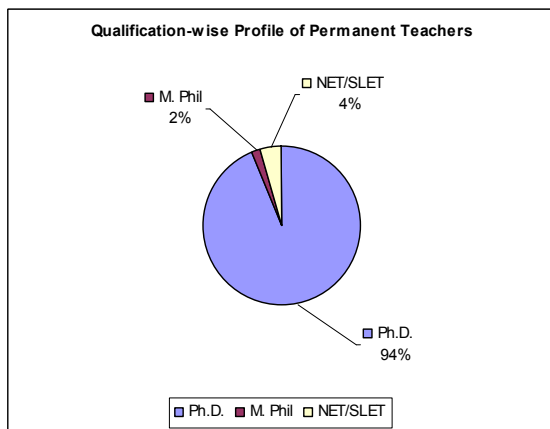
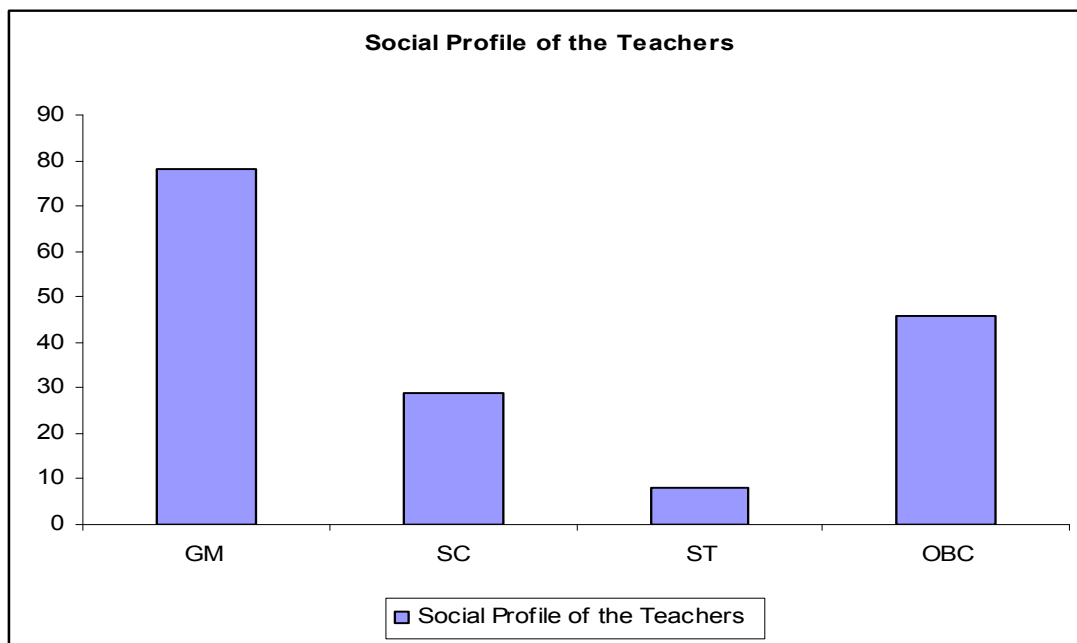
- The University has a faculty strength of 161 against the 247 strength of sanctioned posts.
- Ten faculty members are from outside the state.
- Due to ban on recruitment of the staff as per orders of Govt. of Karnataka some of the posts are vacant since 1995, except for backlog vacancies.
- However, 141 guest faculty have been appointed to assist 161 permanent faculty in TLE.
- Thus University is trying to compensate the delay in recruitments by appointing qualified persons with full workload and full salary (as per UGC norms)/as Guest/temporary faculty.
- The profile of the faculty is as follows:

#### (1) Profile of permanent faculty

Sl. No.	Cadre	Number			Social profile in percent (actual numbers in bracket)				
		Male	Female	Total	SC	ST	OBC	GM	Total
1.	Professor	60	04	64	09	-	19	36	64
2.	Readers	47	21	68	13	06	21	28	68
3.	Lecturers	26	03	29	07	02	06	14	29
	<b>Total</b>	<b>133</b>	<b>28</b>	<b>161</b>	<b>29</b>	<b>08</b>	<b>46</b>	<b>78</b>	<b>161</b>

#### (2) Profile of Permanent Faculty Qualification wise

Sl. No.	Description	Gender Profile			Social Profile				
		Male	Female	Total	SC	ST	OBC	GM	Total
1.	Teachers with Ph.D. as highest qualification	123	28	151	27	06	44	74	151
2.	Teachers with M.Phil. as highest qualification	03	00	03	01	01	01	-	03
3.	Teachers with PG Degree and NET/SET as highest qualification	07	00	07	01	01	01	04	07
	<b>Total</b>	<b>133</b>	<b>28</b>	<b>161</b>	<b>29</b>	<b>08</b>	<b>46</b>	<b>78</b>	<b>161</b>



**(3) Guest faculty**

Sl. No.	Description	Number		
		Male	Female	Total
1.	Guest faculty with Ph.D. as highest qualification	05	03	08
2.	Guest faculty with M.Phil. as highest qualification	08	02	10
3.	Guest faculty with PG Degree and NET/SET as highest qualification	<b>83</b>	<b>40</b>	<b>123</b>
	<b>Total</b>	<b>96</b>	<b>45</b>	<b>141</b>

**2.4.2 How are the members of the faculty selected? Does the University have the required number of qualified and competent teachers to handle all the courses for all departments? If not, how does the University cope with the requirements?**

- The faculty members are selected as per the guidelines of UGC, on all India basis through open advertisement and the provisions of the Karnataka State Universities Act, 2000. The Section 59 of Karnataka State Universities Act 2000 gives criteria for the constitution of Board of Appointments of Teachers (Vice-chancellor, Head of the Departments, Experts of Subject) and stepwise procedure (notification, receipt of application, interview by BOA, preparation of merit list, proceedings of BOA and final selection by the University).
- The University has the required number of qualified and competent teachers to handle all the courses for all departments.
- Due to non-recruitment of fresh members of faculty due to ban by Govt. of Karnataka, the strength of teachers has been slightly reduced.
- However, in case of inter-disciplinary subjects, the teaching staff is pooled and expertise of teachers is made available.
- In order to cope-up with the problem of recruitment, University recruits temporary/guest faculty as per the statutes under the Karnataka State Universities Act, 2000.
- During the last 7 years, 18 Professors have retired from service.
- During the last 7 years, 12 Teachers have been recruited on permanent basis.
- During the last 7 years, a number of Guest faculties have been appointed each year (141 last year).

**2.4.3 Does the University appoint substitutes/ additional faculty to teach existing and new programmes? How many such appointments were made during the last year?**

- Yes. The University appoints temporary/guest faculty to teach the existing and new programmes.
- About 141 such appointments were made during the 2007-08.
- The UGC has sanctioned ten posts of lecturers in various Departments during X Plan. Due to non-concurrence of the State Govt. to bear the expenditure in future, the University has filled two posts for the X Plan period on contractual basis.

**2.4.4 What is the teacher student ratio?**

- The teacher student ratio is 1:12.

#### **2.4.5 What percentage of the teachers have Ph.D. as the highest qualification?**

- 92.5% of teachers have Ph.D. as the highest qualification.

#### **2.4.6 What percentage of the teachers have M. Phil as the highest qualification?**

- 1.87% of teachers have M.Phil. qualification.

#### **2.4.7 What percentage of the teachers have completed UGC, NET and SLET exams?**

- 03 % of teachers have qualified in UGC-NET and SLET exams. (recruited after 1992) (NET was not compulsory before 1993).

#### **2.4.8 What efforts are made by the management to promote teacher development? (e.g., research grants, study leave, deputation to national/international conferences/seminars, in-service training, organizing national/ international conferences etc.)**

- All the needy teachers are sanctioned study leave to pursue higher studies either under FIP or in other schemes.
- The teachers, whose papers are accepted/invited for oral, poster presentations, are deputed to participate and present their research papers in the national/international conferences/seminars/ workshops.
- Teachers are also deputed for in-service training to gain knowledge about new technologies in emerging areas.
- The Departments are encouraged to organize national/international conferences by providing seed money from the UGC unassigned grants and by obtaining funds from other national/international funding agencies.
- Recently the University has restructured its norms relating to projects so as to encourage the teachers to take projects.
- The young teachers are encouraged by sanction of minor research projects from the University funds and from the UGC unassigned grant.

#### **During the last 7 years, following faculty development programmes were conducted by the University:**

- Organisation of conferences/seminars/symposium/workshops.
  - Number of International level conferences/ seminars/ symposium/workshop - 02
  - Number of National level conferences/seminars/symposium/ workshop - 26
  - Number of State level conferences/seminars/symposium/ workshop - 17
- Deputation of teachers to go abroad. - 20
  - Number of teachers to present papers - 15
  - Number of teachers as visiting faculty - 05

- Deputation of teachers to present papers in conferences with in India.
  - Every teachers is entitled for **2 time** incentive in a year of proceeding on OOD with TA/DA and Registration fee to present their papers.
  - All teachers have made use of it. Over and above, teachers are sanctioned OOD to attend conferences on their own expenses or from their projects to present papers.

**2.4.9 What are the teaching innovations made during the last five years? How are innovations rewarded?**

- In the last five years, many teachers have developed ICT enabled course material. Many departments are supplied with audio-visual teaching aids which are also used to teach students through UGC sponsored Distance Education Teaching Programmes. Such teachers are rewarded for their innovations through commendation from the Vice Chancellor.
- Learner centred activities, like participative learning, interactive sessions, student seminars, case studies, project work, assignments, problem solving exercises, practical – field work are followed.

**2.4.10 Does the institution have representation of women among the staff? If yes, what percentage?**

- Yes, the University has representation of women among the staff. They comprise of 17.5% total strength of teaching staff and 39.79% of Non-Teaching staff.  
(The profile of the faculty may be perused).

**2.4.11 List the faculty who have been recognized for excellence in teaching during the last five years?**

The teachers have been conferred with 141 awards during the last seven years. The list may be perused by the Peer team (annexure).

**2.4.12 List the faculty who have undergone staff development programmes during the last five years (refresher courses, orientation programmes and staff training conducted by the university and other institutions)**

- Attending UGC sponsored refresher courses, orientation programs is mandatory for promotion of lecturer to reader post under the CAS scheme.
- Therefore, a large number of needy teachers have been permitted to attend UGC sponsored refresher courses and orientation programs either in this University or Academic Staff Colleges of other Indian Universities.
- The faculty is also encouraged to undergo training in emerging areas and new technologies either in Indian Universities or in foreign institutions.

- Some Departments like Chemistry, Physics and Materials Science have faculty-exchange programs under the British Council for collaborative research for development of new drugs and materials and Department of Physics at ICTP, Italy. Also departments of Biochemistry, Botany, Mathematics, Microbiology, Biotechnology and Applied Electronics have faculty exchange programmes with many foreign universities and centres of excellence.
- List of teachers showing the participation of teachers in orientation programmes/refresher courses, and staff training conducted by the university and other institutions may be perused.

<b>Number of Courses Attended</b>			
<b>UGC Orientation Programmes</b>	<b>UGC refresher courses</b>	<b>Staff Training conducted by the University</b>	<b>Total</b>
21	74	07	102

**2.4.13 What percentage of the faculty served as resource persons in Workshops/Seminars/Conferences during the last five years (average)?**

- About 95% of the faculty served as resource persons in UGC sponsored refresher courses and orientation programs and also in national/international workshops/seminars/ conferences during the last seven years.
- Data is available in the Department Evaluation Reports.

**2.4.14 What percentage of teaching staff participated in Workshops/Seminars/Conferences and presented papers during the last five years? (average)**

- About 98% of teaching staff participated in national/ international workshops/ seminars/ conferences and presented research papers.
- Most of the senior faculty delivered not only key note addresses and invited talks but also chaired technical sessions in such national/ international conferences/ seminars.
- Some faculty members also worked as convenors/members of the organizing committees of national/international conferences/seminars organized either in this University or in other Universities/Institutions.
- Data is available in the Department Evaluation Reports.

**2.4.15 Has the faculty been introduced and trained in the use of**

- Computers**
- Internet**
- Information Technology**
- Audio Visual Aids**
- Computer Aided Packages**

- Yes. Most of the faculty has been trained in use of computer software packages, internet browsing, e-survey of literature through CD-ROM data bases, and 4100 on-line research journals using INFONET/INFLIBNET network facilities.
- The faculty is also trained in effective utilization of audio-visual aids like LCD, OHP and DVD-based educational video films in teaching learning process.
- They are trained in computer application software packages like MS-Word, RDBMS, Access, Excel, PowerPoint, Origin, Photoshop, AutoCAD etc.
- Department of Applied Electronics utilizes advanced Computer software packages like MATLAB, Lab. VIEW for PC-based virtual instrumentation for automation and robotics.
- Department of Materials Science utilizes software packages for the crystal structure determination, structure simulation, modulation, analysis, animation, calculation of various materials related parameters, computational materials science, etc.
- Departments of Computer Science, MCA, Information Science, Instrumentation Technology, Mineral Processing and MBA use the relevant software applicable to their curriculum/syllabi.
- The University Library organizes sensitization and awareness programmes on ITs, ICTs and e-resources.
- Department of Environmental Science utilizes advanced software packages like digital image processing software packages like ERADAS, ArcGIS Geographic Information System for meaningful analysis and interpretation of remote sensing satellite images for natural resources management and other applications.
- The teachers from affiliated Colleges, neighbouring Universities, Officers from the Govt. agencies, and NGOs are also encouraged to attend short term training programs for the utilization of the above mentioned sophisticated and advanced computer software packages and novel technologies in emerging fields.

**2.4.16 Does the university have an Academic Staff College? If yes, give the details of programmes it offers.**

- No. But the University does have UGC-sponsored Refresher Course Centre. It conducted Refresher Courses of 21 days for various subjects for the benefit of teachers from Universities and affiliated colleges.
- The University has conducted more than 40 UGC-sponsored refresher courses.
- The University has submitted a proposal to the UGC for sanction of Academic Staff College during the XI Plan.

## **2.5 Evaluation Process and Reforms**

### **2.5.1 Does the university evaluate teachers on teaching and research performance? How does the evaluation help in the improvement of Teaching and Research?**

- The University evaluates the teachers on their teaching and research as well as extension performance based on their Self Appraisal Reports (SAR)/ Personal Appraisal Reports (PAR) submitted every year. This evaluation based on SARs/ PARs helps in ensuring academic accountability of teachers and monitoring of their major research projects and other academic activities.
- The Vice Chancellor sends commendation letters to the teachers who have done reasonably well, so as to motivate them further.
- The teachers are also evaluated by the students and their analyses and out come are intimated to the teachers concerned, which will help in improving their performance.
- The Evaluation has been done by Administrative and Academic Audit Committee which consists of internal and external experts.
- The Evaluation is also made department-wise by the Higher Power Committee setup by the University, consisting eminent educationists of national level. This analysis also helped in drawing road map of the university in teaching and research.

### **2.5.2 Has the institution introduced evaluation of the teachers by the students? If yes, how is the feedback analyzed and implemented for the improvement of Teaching and Learning?**

- Yes. The University has introduced evaluation of the teachers by the students. The feedback from the students is obtained teacher-wise and course-wise. The model questionnaire issued by the NAAC is used for this purpose. The technical support committee of IQAC analyses these feedback forms and gives the analysed evaluative report teacher wise.
- These analysed evaluated, reports are perused by the Vice-Chancellor. In turn the outcome of the feedback analysis is informed to each teacher for futuristic improvement and encouragement.
- The outcome of the evaluation and its analysis are intimated to the individual teachers to understand their strength and weaknesses and leading to improvement in their performance.

### **2.5.3 Does the institution promote self-appraisal of teachers? If yes, how often?**

Yes. The University promotes self appraisal of teachers every year as mentioned above in section 2.5.1. The UGC prescribed SAR proforma is used and its guidelines are used for its processing.

#### **2.5.4 Is the appraisal by the teachers reviewed by the head of the institution and used to improve the quality of teaching?**

- The University authorities review the SARs / PARs of the teachers through a well established mechanism.
- The Chairperson of the Department reviews the SARs/PARs of fellow teachers and submits them to the University authorities.
- The Dean of faculty reviews the SARs/PARs of the Chairpersons and senior faculty members and submits them to the Vice-Chancellor.
- The Vice-Chancellor personally reviews the SARs / PARs of the Deans, Professors and officers.
- The review of SARs/PARs is effectively utilized for improvement of quality of teaching.

#### **2.5.5 Does the institution have an academic audit of the department? If yes, illustrate.**

- Yes, the University has an effective administrative and academic auditing system and had appointed three Committees for the said purposes during the past five years.
- The Internal Quality Assurance Cell (IQAC) ensures that higher standards in quality are sustained and enhanced.
- External Academic and Administrative Audit Committee (AAAC) was constituted during 2002-03 as per the guidelines of UGC to ensure academic and administrative accountability of all the teaching Departments, various Central facilities, and individual teachers involved therein. This Committee was headed by a former Vice-Chancellor of Bangalore University with three external experts and six internal experts, co-ordinated by internal Member-Secretary.
- Similarly, an internal Academic and Administrative Audit Committee headed by a Senior Professor with twelve members was constituted during 2001-02 to look into the academic and administrative accountability of the system as a whole.
- During 2006-07, the University constituted a High-Power Committee comprising of three eminent experts, viz., Prof. Anandkrishnan, Chairperson, Madras Institute of Development Studies, Chennai, Prof. G.D. Sharma, Director, Consortium for Educational Communication, New Delhi and Prof. M.I. Savadatti, Former member of UGC and Former Vice-Chancellor, Mangalore University. This team visited the various Departments and facilities three times and going deeper into functionality and achievements of these units. Ultimately, the Committee submitted a comprehensive report ensuring administrative and academic accountability of the system with SWOT analysis and have given suggestions to the University to prepare the road map for the next 15-20 years. The Planning, Monitoring, and Evaluation Board (PMEB) will utilize such inputs to initiate new programs and also take remedial measures to ensure high quality of teaching learning process.

**2.5.6 Based on the recommendations of academic audit what specific measures have been taken by the institution to improve the teaching, learning and evaluation?**

The reports of the administrative, academic audit Committees have given valuable inputs to the IQAC and the PMEB. The PMEB has been utilizing these inputs to initiate new programs in consultation with and approval of the University bodies like Syndicate and Academic Council as per the provisions of the KSU Act, 2000. These inputs are also utilized by the IQAC for ensuring internal quality assurance mechanism and submission of AQAR to the NAAC annually.

**2.5.8 How does the institution monitor the performance of the students? (Annual/ Semester exam, Trimester Exam, Midterm Exam, Continuous assessment, Final exam, etc.,)**

- The University follows semester system for UG and PG programmes.
- The University monitors the performance of the students on the basis of continuous internal assessment (20% weight-age) and semester examinations at UG and PG levels (80% weight-age).
- For the M.Phil. programs, the University follows annual system as per the existing regulations. Performances of these students are monitored through continuous discussion with the Research Guide, submission of Dissertation, University examination performance.
- At Ph.D. level, the University follows informally the semester scheme as the research scholars are required to submit half-yearly progress reports every semester. These progress reports are processed, perused and monitored by Department Council, Research Review Committee and Doctoral Committee.
- Thus the performance of the students is monitored continuously, ensuring performance and improvement. The Regulation of Ph.D. calls for colloquium, publication of two research papers before the submission of thesis. Regulations allow adjudication of thesis, acceptance of thesis and open viva-voce before the final award of the Doctorate degree.

**2.5.9 Are the evaluation methods communicated to the students at the beginning of the year? If yes, how?**

- Yes. The details of the evaluation methods are communicated to the students at the beginning of the year.
- Each Department holds orientation program for the fresh students to familiarize them with the University system, teaching-learning process, laboratory and library facilities and the evaluation techniques.
- The Prospectus, Regulations and Orientation Workshop deliberations and Students interaction, Counselling with teachers act as means for proper communication to students on "Evaluation System".

### **2.5.10 What is the method of evaluation followed? (Central, Door, Double evaluation, etc.,)**

- The method of evaluation involves coding and decoding at both UG and PG levels to ensure unbiased evaluation.
- At UG level there is single, central evaluation procedure at the University evaluation section.
- However, at the PG level, the University has double valuation system involving external examiners from other Universities who also set 50% of the question papers.
- If the difference between the first the second valuer is more than 20%, the University arranges for the third valuation and the average of the nearest two scores are considered.
- For M.Phil. Dissertations and Ph.D. theses, triple valuation scheme (involving two external referees and the supervisor of the student) is in vogue.
- There is a provision for having foreign referees on the panel of examiners for the adjudication of the Ph.D. theses in faculty of Science and Technology, Social Sciences, Law, Management, Commerce, wherever necessary.

### **2.5.11 What is the mechanism for redressal of grievances regarding evaluation?**

- The University has prepared a Manual for the Examination System.
- This Manual has provision for redressal of grievances of the students regarding evaluation. The Syndicate Sub-Committee meets regularly for objective and effective redressal of the grievances of the students regarding evaluation. This is a statutory committee.
- The student has the right for (i) re-totalling (ii) revaluation (iii) photocopy of answer sheets.
- Other than these, any stakeholder is entitled to get the grievance redressed on QP, method of conducting examinations, supervision, evaluation and results, schedule and any related matters. The University even take note of news items, letters and legislative or executive or judiciary references promptly.

### **2.5.12 When are the examination results declared? Give the time frame.**

- The examination results are declared within specified period as per the academic calendar of the University.
- At PG level, the results are declared within 15 to 30 days after completion of the examinations.

- At UG level, it takes about 45 days to declare the results in view of large number of students and teachers involved in the evaluation process.
- At M.Phil. and Ph.D. level, the results are notified within 7 days from the date of their viva-voce.

**2.5.13 Does the institution communicate to the parents regarding the evaluation outcome?**

The University communicates the outcome of the evaluation promptly not only to the parents but also to all stakeholders by publishing their results on the Internet through the University Website. This is apart from the publication of detailed results on University/Institutional/Department notice board. A news item is promptly given publicity calling the attention about the announcement of results of a particular course.

**2.5.14 How long has the current system of evaluation been in practice?**

- The current system of evaluation is based on semester scheme.
- It has been in practice for five years for PG programs and one year for the UG programs.
- Earlier the University had annual system of examination.

**2.5.15 Has the institution developed any evaluation reforms?**

- Yes, the University has introduced modern evaluation reforms involving continuous internal assessment of each student in every semester with 20% weightage.
- The continuous internal assessment system comprises of components like internal tests, take-home assignments, seminars, periodic evaluation of practical and projects/field work in an objective manner.
- Project work evaluation.

**2.5.16 What are the reforms made with reference to evaluation? (Double evaluation, Open book examination, Question Bank, Moderation, Internal assessment)**

- The peer evaluation of the examination system is carried out by the AAACs regularly.
- Double evaluation with a scope for third valuation exists at PG level.
- Question banks have been prepared to facilitate students at UG level.
- Moderation of the question papers is done at both UG and PG levels. The moderation of question papers is done by Board of Examiners consisting of both internal as well as external examiners, appointed/nominated by the Syndicate of the University. MCQ and short/long essay – short notes are permissible as a component of internal assessment scheme to enhance problem solving capability of the students.
- There is moderation of valued answer scripts at UG level.

**2.5.17 Is evaluation procedures made transparent, If yes, how? Illustrate the different stages of evaluation till the declaration of results?**

- The evaluation process has been made transparent.
- The internal assessment marks are shown to the students in the class room itself.
- The questions framed have modularity and the students are able to estimate their scores.
- If the expectations of the students are different from the marks secured, the student can go for recounting, obtaining the Xerox copies of the answer scripts and finally for re-valuation, if he/she desires.

**2.5.18 Does the University have continuous assessment, If yes, please specify the weightage?**

The University has a component of continuous internal assessment both at UG and PG levels under the semester scheme with a weightage of 20%. Two tests each of 10% weightage are conducted per semester in general. In few professional courses, weightage is allowed for home assignment/seminar for 10 marks and another CIA test for 10 marks weightage.

**2.5.19 What is the scheme/system of examination in practice for the affiliated institutions?**

Semester scheme of examination with built-in component of continuous internal assessment (20%) weightage is in practice for the affiliated colleges of this University. At UG I, II & III Semesters, ECA paper has 100% weightage for I.A.

**2.5.20 Give details of the number of question papers set, examinations conducted per year.**

- Usually two exams are conducted per year after the end of each semester at both UG and PG levels.
- Usually, three sets of question papers are set at UG level and two sets for PG level per each paper/subject.
- Any one of them is randomly picked up for final printing ensuring complete confidentiality.
- In a given year, 1014 number of UG papers and 786 number of PG papers are set to conduct UG and PG semester-end examinations.

**\* The UG examination is conducted in the following way as per the regulations of examination manual.**

- Course wise/programme wise time table is published and announced well in advance.
- For each examination centre, one or more external Senior Supervisors are nominated from among the eligible teaching staff. The Principal or his nominee acts as Internal Senior Supervisor and also Custodian of Question papers. Facilities to keep question papers in Police custody/Treasury are made. Junior Supervisors per block of 25 students are nominated.
- Flying Squads district wise/area wise are constituted to give sudden visit to examination centre for verifying the smooth conduct of examinations.
- Immediately after the examination, written answer books of students are sent to university in sealed cover to university for coding and central valuation.
- Custodians are nominated to conduct central valuation and preparation of marks list. Moderation is done by subject moderator and Chairman.
- The marks per paper of student is entered to computers by two operators separately to ensure correct feeding. Further examination software generates the results.
- The P.G. examination is conducted almost in the similar way, except that there is double valuation, tabulation and third valuation if any followed by final tabulation and announcement of results.

**2.5.21 Mention the number of malpractice cases reported and how they are dealt with.**

- There are no malpractice cases at P.G. level.
- However there are a few malpractice cases at UG examinations
- These are dealt by Malpractice Case Enquiry Committee (MPCEC) set up by the university.
- The MPCEC follows the process of enquiry, scale of punishment, fine, future action, by referring to manual regulations.
- Approximately, in a year, 300 Malpractice Cases are reported. They are given an opportunity to offer their view point / stand and version before suitable decision is made.

**2.5.22 Does the university provide the photocopy of answer scripts to students? If yes, give details of the practice.**

- Yes, the University supplies the photocopy of the answer scripts to the students if he/she so desires. The student can apply for revaluation if he/she is not satisfied with the original scores awarded in the first valuation. If the scores improve as a result of revaluation, the student is issued with revised marks card.

### **2.5.23 Give details regarding the computerization of the examination system?**

The entire examination system has been computerized. The marks cards, ledgers, processing of examination application forms, issue of hall tickets, allocation of register numbers, marks card, issuance of passing certificates etc. have been computerized and a centrally monitored data base system has been created. This has facilitated flexibility and rapidity of action in each sphere of activity in the examination branch. The final results of the students at various examinations are communicated to the stakeholders through the publication of the results on the Internet or University Website. There is a provision to download the marks card from the Internet directly. This facilitates the students to apply for admissions and/or their placement. The issuance of final Degree/Diploma certificates is also computerized to ensure elegance and avoidance of delay. In this way, entire examination system is automated.

## **2.6 Best Practices in Teaching-Learning and Evaluation**

### **2.6.1 What innovations/best practices are followed by the college with regards to teaching, learning and evaluation? With reference to admission process, student profile/catering to diverse needs/teaching-learning process/teacher quality/evaluation process and reforms or any other quality initiatives.**

**\* The following innovative/best practices are followed:**

- a) The students of professional courses undergo in plant training/field work/project to appraise themselves with the direct application of their knowledge/skills to real life problems e.g., MBA, M.Com., MCA, MSW, MLISc, LL.M and M.Sc. courses in various science subjects.
- b) Admission to some of the P.G. courses is done through state-wide Common Entrance Test. (e.g., MBA, MCA and M.Sc Biotechnology (07 seats) on all India level)
- c) Students are subject to continuous assessment by way of internal assessment tests, seminars, quiz and home assignments.
- d) Student evaluation of teachers is carried out in every semester.
- e) The MCA (IV and V Semester) students are provided with internship during which they are associated with the e-learning resource centre of University Library and Central Computer Centre to assist the users of these facilities.
- f) The orientation programmes are conducted for the newly admitted students in order to sensitise them to the various on-campus facilities, regulations exam. procedures etc.
- g) The students are permitted to obtain the photo copies of their answer scripts and appeal for revaluation.

**For Re-accreditation:****1. What were the evaluative observations made under Teaching-Learning and Evaluation in the previous assessment report and how have they been acted upon?**

- **Observation made by the Peer Team:**

An increasing number of departments appear to lack staff strength leading them to consequential academic and administrative imbalance.

For a more holistic approach, the university may consider immediate focus on inter-disciplinary courses.

**Measures undertaken:**

Inadequacy of staff strength was primarily because of ban on the recruitment of the staff by the State Government. To address this issue, University has appointed guest faculty on full-time annual basis or other wise. In all, University has appointed 141 teachers on the said basis. This has helped in addressing concern expressed by the Peer team.

Further, in order to utilize the available expertise in a judicious way, the University has decided to establish the schools comprising several disciplines (School of Physical Sciences, School of Chemical Sciences, School of Mathematical Science, School of Life Sciences, School of Social Sciences, School of Law, School of Business and Commerce and School of Education). Academic council has already passed a resolution to this effect. This would enable the introduction of choice based credit system and cafeteria approach in utilizing the existing faculty.

The following interdisciplinary courses have been introduced.

- i. M.Sc. in Materials Science
- ii. MBA
- iii. LL.M. in Bhartiya Nyaya Darshan and Rajadharma, sponsored by State Government and in collaboration with Vijnaneshwara Foundation.
- iv. PG Diploma in Embedded Systems
- v. MTA
- vi. M.A. in Journalism and Mass Communication.
- vii. P.G. Diploma in Geo-informatics in collaboration with ISRO.

- **Observation made by the Peer Team:**

Keeping abreast of the changing needs in education, the examination and other processes may have to undergo rapid modernization, such as introduction of the semester system, multiple-choice question, continuous internal assessment etc.

**Measures undertaken:**

Semester System along with continuous internal assessment system has been introduced at both PG and UG level. Multiple-choice question paper pattern is being encouraged. Question paper patterns have been revised so have to short questions, short notes, notes and small essays.

Following measures have been taken with regard to teaching, learning and evaluation.

- i. Thrust to learner centric approach.
- ii. Use of ICTs and audio visuals and other teaching aids in the class room instruction. Every Department has facility for power point presentation.
- iii. Emphasis laid on practical, field work and technology assisted learning.
- iv. Group seminars, group discussions, assignments, project work and internship.
- v. Internal Assessment with the weightage of 20%
- vi. Use of INFONET and other e-resources
- vii. The exam branch has been computerized so as to undertake pre and post evaluation tasks of the examination branch effectively.
- viii. Providing photo copy of answer scripts to the students in case of demand, where there is single valuation.

**2. What are the other quality sustenance and enhancement measures undertaken by the institution since the previous Assessment and Accreditation with regard to Teaching-Learning and Evaluation?**

**Measures undertaken:**

Major quality sustenance and enhancement measures undertaken in the last seven years are:

- i) Teaching and learning process has been updated and modernized based on the requirement of curriculum, feed back from the stake holders and available ICT tools and softwares.
- ii) Modern teaching aids are employed in teaching-learning process.
- iii) Learning activity is facilitated through e-library, Internet and virtual learning centre.
- iv) Internal assessment component at both UG & PG.
- v) Projects/ Field work/ Study tours / Assignments are made part of the courses.
- vi) Interaction between successful and well placed alumni with the students in the departments is encouraged.
- vii) Subject experts deliver special lectures on recent trends and developments in their field of expertise to the students.
- viii) Transparency in evaluation system.
- ix) Thrust for faculty development – participation in seminars, refresher courses and workshops.
- x) Organization of seminars/ workshops.