

CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

2.1.1. How does the university ensure publicity and transparency in the admission process?

The University follows transparent procedure for admitting students to various academic programs of schools of studies. The University ensures publicity in admissions by issuing an advertisement in National Newspapers and also uploading admission related information on the University website www.admissions.dauniv and www.cet.dauniv.ac.in. Information related to courses, fees, School/Institute and handbook/prospectus information are provided on university website. The results of entrance test are displayed on the university website as well as on the Institutional Notice Boards.

2.1.2. Explain in detail the process of admission put in place by the university. List the criteria for admission: (e.g.: (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, (iv) common entrance test conducted by state agencies and national agencies (v) other criteria followed by the university (please specify).

The admissions of students to different programmes in the University are made as per one of the following six criteria - (i) Merit in All India GATE examination conducted by an IIT each year for M. Tech. courses, (ii) Merit in Admission Test of MP State Professional Courses Board for BE, MCA and MBA courses, (iii) Common Entrance Test (CET) based merit and (iv) Departmental Entrance Test (DET) based merit (v) Departmental Admission process without entrance but only on merit basis (vi) State level Counseling for courses like B.Ed. on merit basis. All admissions are subject to the Reservation Policy of the State Government.

2.1.3. Provide details of admission process in the affiliated colleges and the university's role in monitoring the same.

2.1.4. Higher Education Department of M.P. monitors the admission process of the affiliated colleges. The admissions are based on merit in the qualifying examination in the respective category of students. The admissions are made through on-line counseling.

2.1.5. Does the university have a mechanism to review its admission process and student profile annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?

University Admission Committee is constituted each year which reviews the entire admission process thoroughly. For example, University Admission Committee decided to do admissions in the courses by CET (Common Entrance Test) in 2012 in certain courses where DET (Department Entrance

Test) was used in earlier years . The reviews lead to use of DET again in those where the demand was found low in 2012. This led to overall improvement in admissions in these courses, such as when re-adopted in 2013.

Student profile analysis has been done in 2013 by IQAC of University. The profile analysis of students and the suggestions are taken from all Heads of the Departments have helped in making admission process fully transparent and in some cases even online. It will certainly aid to improve the admission processes in future.

2.1.6. What are the strategies adopted to increase/improve access for students belonging to the following categories:

The category wise policies adopted are:

- * SC/ST Reservations, Scholarships and Fees by State,
- * OBC – Reservation and Fees by State of economically weak students.
- * Women – Reservation in seats. 1/3 in each category, waiver in University tuition fees, separate hostels.
- * Persons with varied disabilities – Reservation, 3% scholarship, disabled friendly ramps.
- * Economically weaker sections – Student Welfare Department’s Financial Assistance
- * Outstanding achievers in sports and other extracurricular activities – When admissions are done through academic merit, one or two or three percent Weight in marks while determining merit. Weight depends on University, State and National level Sports performance

2.1.7. Number of students admitted in university departments in the last four academic years:

Number of University School/Institute of Studies [University Teaching Departments]: 27 enrollment figures for the last four years are given below -

Categories	Year 1 2009-2011		Year 2 2010-2012		Year 3 2011-2013		Year 4 2012-2014	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	534	287	524	322	537	307	589	361
ST	327	190	349	189	343	177	312	174
OBC	498	297	590	356	575	400	635	400
General	1401	1049	1399	1056	1553	1041	1659	1139
Others	12	7	15	8	13	5	24	16
Total	2772	1830	2877	1931	3021	1930	3219	2090

2.1.8. Has the university conducted any analysis of demand ratio for the various programmes of the university departments and affiliated colleges? If so, highlight the significant trends explaining the reasons for increase /

decrease.

University has conducted analysis of demand ratio (Applications/Admitted) for the programmes of the Schools/Institute of Studies. The following are the results for the Engineering and Technology courses.

Programmes	Number of applications	Number of students admitted	Demand Ratio
UG	118044	2628	45:1
PG	300	74	4:1
Ph.D.	2330	758	3:1
Diploma	32	31	1:1
PG Diploma	40	20	2:1

The demand for each course is analyzed. The course wise demand ratios and trends have been identified and presented in individual School/Institute SSR hosted at the website www.iqac.dauniv.ac.in.

Individual subject-wise demand ratio (DR) [Number of applicants/Admitted] is as under. Increasing trend or Decreasing Trend

2.1.9. Justification for increases and decreases in various subjects are as under:

Bio-chemistry: Decreased

The applicants received were normally 250-300 for 30 seats during 2008-2012. With the Demand ratio is 10:1 in 2008-2012 for PG, and 15:1 in 2012-13 for Ph.D. The number of applications for admission to M.Sc. Biochemistry course decreased in 2013-2014 and was only 65. This year, the declining trend for admission in Biological science courses has been observed.

Economics: Increased

MA Economics demand ratio has increased consistently during the period 2009- 10 to 2011-12 from 7:5 to 2:1. The reason for this is attributed to student influx from rural background.

M. Phil. demand ratio has increased significantly in 2009 to 2013. This is because of scholarships offered by the government. The admissions in other programmes are mainly through Common Entrance Test where the overall ratio is very high.

During the current year 2013 many students (around 40-50%) are from J & K state in M.Phil. programme.

Educational Multimedia Research Centre: Increased

There is a reasonable demand of EMRC courses in CET of DAVV. This is due to increased employment demand globally and non availability of employment oriented Electronic Media Courses in the state.

Electronics: Increased

There has been strong demand of M. Tech. courses run by the department as is evident from the demand ratio for last five years. Demand ratio for year 2008-09 was 2:1 which has increased to 10:1 in year 2013-14.

Energy and Environmental Studies: Decreased

M. Tech Energy Management course, Demand Ratio had gone down in 2009-10 only to 2.1, but it increased again in recent years due to the market growth in energy sector.

M. Phil (Energy and Environment) course, Demand Ratio had gone down continuously in last five years from 3.2:1 to 2.7:1 due to several reasons. The main reasons were the delay in result declaration in neighboring States and also in our state. Students interest in getting direct Ph.D. admission are also responsible for a slump in the demand ration for M.Phil.

Ph. D programmes are having increasing trends due to accelerated promotions for Ph. D's in teaching posts and better job opportunities in the Energy and Environmental field.

Future Studies and Planning

No trend is established in Ph.D. admissions as admissions were made first time in Ph.D. as per revised Ordinance.

Institute of Management Studies: Increasing

An increasing trend in the management courses has been observed in the last few years owing to ample job opportunities for management graduates. This has led to huge demand for all the courses offered by the department. The university receives approximately 16,000 applications for the various courses run by the department and around 720 students are admitted every year through a rigorous entrance examination process conducted by the university and state government.

Journalism and Mass Communication: Increased

There is an increase in students ratio in UG courses of journalism because presently media industry is in a boom and students are desirous of admission leaving the courses of engineering and M.B.A. PG courses also find a good number of students. In Ph.D. Programme, all the seats are filled. Diploma of B.J. Mass Communication has lesser number of students because of preference for PG degree in mass communication. Usually out of 10 students, 01 student is selected after the entrance examination.

Library Sciences: Decreased

Library Science course show a downward demand trend is mainly due to higher fees structure and too many colleges offering BLISc course.

Pharmacy: Decreased

Demand ratio of PG course suddenly decreased in 2012-13 because of increase in number of colleges in the State and recession in Pharmacy Industry.

Physical Education: Increased

Significant increasing trend has been observed during the last four years in UG and PG courses due to much awareness perceived importance of sports and physical fitness globally.

Physics: Increased

Although, there is a general trend of decrease in demand of basic courses, time to time counseling of the courses about the fundamental importance of physics and employment opportunities are the reasons for increasing trend.

Statistics: Decreased

On analysis, it was found that the demand decreased during 2012 and 2013. Thereafter, the School conducted NASA, New-Delhi sponsored workshops for graduate level students to bring awareness about the employment opportunities in central and state government jobs, multinational companies, insurance sector, financial institutions etc, leading to a boom in admissions

Affiliated colleges

University could not conduct any analysis of demand ratio for the various programmes of the affiliated colleges. The admission is through on-line counseling by the State. Demand ratio differs from College to College. Details of the State online admission data are not accessible to the University.

2.1.10. Were any programmes discontinued/ staggered by the university in the last four years? If yes, please specify the reasons.

Yes, Diploma in Labour Law and Personnel Management, Diploma in Consumer psychology and advertising, PG diploma in Guidance and counseling and PG diploma in Human rights are dysfunctional. The Reason is few admission seekers making them unviable financially.

2.2 Catering to Student Diversity

2.2.1 Does the university organize orientation / induction programme for fresher? If yes, give details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.

Induction programme is conducted at University and departmental levels.

University level induction programme

Induction programme was conducted at university level in July 2012. Along with experts from industry, like Dr. Raghuraman, Columnist in Dainik

Bhaskar, (2012-13). Vice Chancellor and Registrar were also involved in the programme. Introductory film about the university and other inspirational short films are shown. Dean, Student Welfare narrates the student facilities in the University. The students are guided about anti ragging measures taken by the university and they are encouraged to study well, imbibe human values, ethics, social responsibility and environment consciousness. The students also fill an Undertaking prescribed by UGC for prevention of ragging.

Induction programme for the ongoing session was organized on 11.09.13 (Swami Vivekananda memorable Chicago Speech Day) at University Cultural Centre. The main speaker on the occasion was Prof D. P. Singh, Vice Chancellor.

School/Institute level induction programme

Schools/Institutes also conduct two to three day programs at departmental levels for the newly admitted students. The students are appraised more specifically about the school/ institute culture, the ways of working, status of the department nationally and globally, research activities, student's facilities, ethics, discipline, zero tolerance on ragging, environmental awareness. The students and faculty members are introduced to each other.

Orientation programme

Orientation programme is conducted at departmental level for the new students of the department. Programme ranges from one or two days. Issues covered are University and departmental libraries, e-resources and web-resources, syllabus and course plans for each paper, Academic Calendar, Internal and External examination patterns, Internal tests, Quizzes, Assignments, Student Seminars, Student projects, Scheme of Examination for a course, Ordinance No.31 relates to grade-Credits system of the examination and Internal examination procedures and end-semester Comprehensive Viva Voce examination. Besides this, inputs are also given about cultural, sports and alumni activities and Student Feedback Mechanism. Few departments also invite the ex-faculties and distinguished alumni of the School at this occasion. Does the University have a mechanism through which the "differential requirements of the student population" are analyzed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

Differential requirements are analyzed after admission and before the commencement of classes. The mechanism is informal discussion in the department with the students by the Course coordinators and mentors.

Key issues are identified and addressed: The key issues that have been identified most often are lack of prerequisites for a course and lack of communication skills, Computer Skills and Quantitative Aptitude. Extra inputs are provided to students in order to make up these deficiencies and bring them to a desired level of proficiency.

Based on their educational backgrounds, specific needs of the students are identified. Thereafter, soft skills and academic lectures / workshops are conducted.

2.2.2 Does the university offer bridge / remedial / add-on courses? If yes, how are they structured into the time table? Give details of the courses offered, department-wise/faculty-wise?

The remedial courses are conducted after the internal tests from academic year 2013-14 and the same have been structured in the time table. Remedial courses and add on courses are conducted by both internal as well as external experts for weaker students who perform poor in internal tests. Students are supported by providing them additional reference and web based learning resources. University takes academic initiatives to organize group discussions, proficiency and personality development workshops for both PG and UG students. Besides, add-on courses, viz. Special Coaching of NET, Civil Services and other National tests are also arranged for the motivated and advanced learning.

BSNL offers 45 students free training in its telecommunication advanced laboratories.

2.2.3 Has the university conducted any study on the academic growth of students from disadvantaged sections of society, economically disadvantaged, physically handicapped, slow learners, etc.? If yes, what are the main findings?

Yes, it has been observed that a good percentage of students from the disadvantaged section of society lack communication skills, presentation skills. Therefore, they require improvement in the analytical and logical capabilities. Different departments take care of the need of the students in different ways, formally/informally. A steady improvement in their academic growth has been observed in the last few years.

University has the policy of “Earn while you Learn”. Students are also associated with advanced industry projects to get some additional earning.

2.2.4 How does the university identify and respond to the learning needs of advanced learners?

Learning needs of the advanced learners are analyzed after Semester examination. Special courses/projects/training packages are offered to the advanced learners during semester breaks and vacations.

Advanced learners in M. Tech second year and PG professional courses in IET, IIPS and SCS&IT opt for performing final year project in the Industry and research organizations, besides departmental research projects.

2.3 Teaching-Learning Process

2.3.1 How does the university plan and organise the teaching, learning and

evaluation schedules (academic calendar, teaching plan, evaluation blue print, etc.)?

Annual and semester Academic Calendar for teaching, learning and evaluation are planned by the University in consultation with the departments, colleges and other academic bodies. A committee is constituted prior to start of each academic session for finalization of the same.

Departments also prepare a detailed AC after inclusion of special needs of students, remedial classes and enrichment courses for advanced learners. Many departments also plan extracurricular activities by way of constituting various committees with student participation there in.

2.3.2 Does the university provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?

Yes, the Course syllabi, course plans, outlines and schedules are provided to the students at the beginning of the semester and are uploaded on the website link of the department. It is mostly prior to the commencement of the academic semester. Faculty members prepare their hourly teaching plan (time table) and display the same on departmental notice boards and on the website.

Effective implementation is ensured by the statutory Departmental Committee (DC). Ordinance No. 23 has provision of DC. The members are as follows: All Professors, Two Associate Professors and Two Assistant Professors. All the Faculty members remain present in departmental meetings which relate to effective implementation of courses syllabi, course plans, outline and schedules.

2.3.3 Does the university face any challenges in completing the curriculum within the stipulated time frame and calendar? If yes, elaborate on the challenges encountered and the institutional measures to overcome these.

Ordinarily, no difficulty is faced. In case of contingencies, concerned Faculty members take extra classes. A Teaching Learning Process Monitoring Committee (TLPMC) monitors the effective implementation of the calendar.

2.3.4 How learning is made student-centric? Give a list of participatory learning activities adopted by the faculty that contributes to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.

Learning is made student-centric by organising the student seminars. Each advanced and keen learner is assigned a topic for the seminar. Group discussions, case studies and role plays are also used. Implementing a project also enables a student to develop advanced skills.

Engineering and Management courses constitute associations/clubs for example, HR club, Marketing Club and Engineers without borders. The activities vary depending upon the course; Tutorials/Assignments in all departments have been introduced. Remedial, enrichment classes and soft skills training are also imparted. Apart from class room instructions, following activities are also provided to students to facilitate / support their learning:

Laboratory work / practical exercises, Field visits, Group discussions / Seminars Assignments based on Lab work/ Fieldwork, Visit to industries / institutes, Study tour and Power-point presentations and other ICT based programmes.

Some of the programmes encourage participatory learning approach. Field-training and hands-on activities, internship programmes are conducted for students - Quiz, debate, seminars, exhibitions, role plays, colloquiums etc.

Regular classroom lectures are supplemented with all teaching-learning/audio visual aids along with black board models. Additional web-based learning, online lectures, special lectures by senior professors and experts in the field are provided. Students are also motivated to use these audio visual /multimedia resources during their presentation in classroom seminars.

2.3.5 What is the university policy on inviting experts / people of eminence to deliver lectures and/or organize seminars for students?

University policy is extremely liberal about inviting experts/people of eminence to deliver lectures and organize the seminars for students. Almost all departments arrange expert / guest lectures by senior academicians/ industry experts / bureaucrats etc. Some UGC-SAP departments have provision for inviting people of eminence as visiting fellows for longer durations ranging from one week to three months.

A large number of guest lectures and visits of eminent personalities are organized in the University from time to time. Recently, Bharat Ratna, Dr. A P J Abdul Kalam delivered message to the students on June 12, 2013.

Guest speakers are drawn from both industry and academics. Honorarium up to Rs. 5000 has been permitted for eminent experts of high national standing along with the travel and boarding expenses.

University also organizes innovative Lecture Series, where students and Faculty listen to top National experts. Lectures series on Mahamana Pandit Madan Mohan Malviya was organised in 2012.

2.3.6 Does the university formally encourage blended learning by using e-learning resources?

Yes, Our University took the lead in 1999 by establishing fiber backbone on the Campus with a mission to blend e-learning resources with the face to face teaching.

Webinars are held through EDUSAT programme. ID's are given to students to use INFLIBNET at IT center and Central Library of the University. Besides providing references to printed books, faculty members also provide the links of web tutorials, web resources and e-book.

2.3.7 What are the technologies and facilities such as virtual laboratories, e-learning, open educational resources and mobile education used by the faculty for effective teaching?

Virtual laboratories are used in Engineering and technology courses. Virtual class room (ViCR) concept is also used at the Institute of Engineering and Technology. First use was made in June 2012. The lectures were delivered from IIT Bombay on Research Methodology all over the country using ViCR concept.

ViCR's are being planned in number of other departments during the current year. This will enable the departments to take advantage of NMEICT initiative of MHRD. Separate access and to take common classes, for example, C programming are being established in a number of the departments.

2.3.8 Is there any designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the university's educational processes?

Every batch has a group ID where the faculty can share information, assignment topics or other relevant information accessible to the students. Faculty members join the group IDs of each class, communicate and engage for educational discourse.

2.3.9 What steps has the university taken to orient traditional classrooms into 24x7 learning places?

University departments installed nearly 125 LCD projectors in 2007 in the class rooms and laboratories. These class rooms also have the Computer, UPS and Internet connectivity. Hostels have also been installed with Wi-Fi. Efforts are in progress to make the entire campus Wi-Fi enabled.

Use of Internet with Wi-Fi and LCD projector has converted conventional class rooms as well as hostels into 24x7 learning places. Students view lecture series and popular videos of topic of their concern in the class rooms.

In many departments, students are given online assignments and projects. Students are required to submit weekly and monthly reports online only. A large number of real time exercises and simulation games can be viewed in the class rooms.

Mobile phone numbers and group e-mail ID's of Faculty members in many departments' are also made available to the students for 24x7 connectivity with the Faculty.

2.3.10 Is there a provision for the services of counsellors / mentors/ advisors for each class or group of students for academic, personal and psycho-social guidance? If yes, give details of the process and the number of students who have benefitted.

A mentor/Advisor is allocated to each group of students from the Faculty. Every week, student group meets the mentor/advisor for academic, personal, and career guidance. The Psycho-metric tests are planned from 2013-14 for psycho counseling. The services of advisors/counselors will be taken soon.

2.3.11 Were any innovative teaching approaches/methods/practices adopted/put to use by the faculty during the last four years? If yes, did they improve learning? What were the methods used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?

Following innovative teaching approaches/methods/practices have been adopted and put to use by the Faculty during the last four years:

(1) Use of PPTs and power-point projections, (2) Hosting of the PPTs and course material on website, (3) e-mails for communication, dialogue and discussions between Faculty and students, (4) On-line submission of project weekly reports, monthly reports and semester end-reports by the students (5) Real time assignments (particularly to finance students), real life projects in the market (mainly for marketing students), visits to industry/hospitals, simulation exercises, case methodology, role plays, business games, and movies, and (6) Assignments and tutorials as a regular feature, (7) Student seminar (8) Exhibitions and Quiz (9) Self-instructional package like module/computer assisted instructions /PLM etc. (10) Use of open web learning resources (11) Outreach activities (12) Observing of days and (13) Screening of Educational Films for achieving non-scholastic objectives.

Faculty members in the respective subjects use innovative methods to impart knowledge to the students depending upon the complexities and requirements of their course.

Student feedback method on use of ICT is used to evaluate the impact of such practices. One of impact is that more periods are available for the student seminars, group discussions and quizzes in the class. Use of power-point projection saves time.

Vice Chancellor records the appreciation in the Annual Self Appraisal Report (SAR) of the Faculty members. Appreciation letters are issued to the Faculty members who show exemplary performance and innovation in teaching and overall work. Executive Council has also recorded appreciation for the Faculty for writing excellent text books or on award of appreciable project grants.

School of Computer Science and Information Technology has a practice of polling for best teacher by the final year students. Award is given to selected teacher by Vice Chancellor. A Faculty once awarded may be considered again for the award in successive fifth cycle of polling. Few other departments also plan to introduce the practice.

The faculty efforts getting due recognition for innovation in teaching is being planned from academic session 2013-14.

2.3.12 How does the university create a culture of instilling and nurturing creativity and scientific temper among the learners?

University Faculty creates a culture of instilling and nurturing creativity and scientific temper among the learners by giving problems or case studies or class room or laboratory projects or simulation exercises, and the assignments to the students. Projects may have 10% to 20% weight and assignments may have 5% to 10% weightage in the performance evaluation of a student. There are regular class-tests also for the students in which solution of the problems are given by the students.

Lectures on research methodology help in understanding the scientific ways of representing the facts and analyzing the data.

Eminent Scientists and experts deliver series of lectures to create scientific temper in the students. A unique conference was organized by the University from July 17-19, 2009 where Dr. Shanti Swarup Bhatnagar Awardees were invited to deliver lectures, including, Padam Vibhushan Dr. Anil Kakodkar, the then Chairman Atomic Energy, Padam Bhushan Dr. T. Alex, Director ISRO, and Padam Shri Dr. M. S. Sodha. Dr. Ajoy K. Ghatak delivered lecture on Einstein life and his novel work on Theory of Relativity.

A National Seminar on Fostering Excellence in Research was organized on January 15, 2013, for faculty and researchers, which also instilled scientific temper.

2.3.13 Does the university consider student projects mandatory in the learning programme? If yes, for how many programmes have they been (percentage of total) made mandatory?

. Most programmes have mandatory student projects as a part of their curriculum. M.E and M. Tech. courses have one full year project done in two phases. All the final year students of the post graduate programmes are allotted the mentors for doing their major research project. The projects are evaluated by experts. The evaluation is by one external and one internal examiner.

Number of the students doing in-house and external projects varies from department to department. The following is the common analysis:

Bio-chemistry: 30; Bio-technology 200; Computer Science and Information Technology: 165; Energy and Environmental Studies: 145; Futures Studies and Planning: 36; Institute of Engineering and Technology (IET): 170;

Instrumentation 36; Languages: 60; Life Sciences 09; Mathematics; 28; Pharmacy: 375; Social Sciences: 100.

Names of external institutions associated with the University for student Project work:

Bio-chemistry: Delhi University, JNU, NII, IITs, CDFD, IGIB, NCCS, NCL, and NIV and many other Universities across the country.

Bio-technology: Number of institutes including NCBS, Bangalore, IISc, Bangalore, CCMB, Hyderabad, Delhi University, JNU, New Delhi, IIT, Delhi, NII, Delhi, CDFD, Hyderabad, IGIB, Delhi, NCCS, Pune, NCL, Pune etc. Other Universities and institutes across the country.

Commerce: All students of final semesters of each course have a Major research project.

Computer Science and Information Technology: Software companies for example TCS, Infosys, Wipro, Impetus, Cognizant, Accenture, TechLink, and Infobeans etc. provide the project training to the students. RR-CAT, Indore; IIT Allahabad

Economics: It is mandatory for the students in third semester to prepare a Major Project in financial, international, business areas where student's insight for research is developed. These project include both field work or secondary data collection whichever is relevant for the topic

Educational Multimedia Research Centre: AICTL – City Bus Service. Students made a film for City Bus Service.

Electronics: Academic institutes such as IIT Bombay, IIT Indore, IIT Kharagpur and Companies such as, Tata Elexi, ST Microelectronics, CG Corel, Infinum, Impetus, Aquilonios etc

Future Studies and Planning: National Physical Laboratory, New Delhi; CSIR Centre for Mathematical Modelling and Computer Simulation, Bangalore, IIM, Indore, IIM, Kolkata, IIT, Delhi, NISTADS, New Delhi

Institute of Engineering and Technology (IET): RRCAT, Eicher Motors, Mahindra Two Wheelers etc

Institute of Management Studies: Institutions such as National Civil Defence College, Nagpur; HDFC, ICICI, Asian Paints, NCEIT, a large number of industries located at Pithampur.

Instrumentation: Number of institutes including RRCAT, Indore, UGC DAE CSR Indore Centre, CEERI, Pilani etc. Besides many Universities and institutes across the country.

International Institute of Professional Studies: Students do their compulsory projects with several National and Multinational Companies like Deloit, Capital IQ, MGM, ICICI Bank and several others. Some students do

independent projects with faculty members. Some projects have also been done for NGOs, Department of Archaeology, Govt of M.P etc.

Law: Krishna and Saurastri, Mumbai; K and S Partners, Delhi; and many similar companies

Library Sciences: Help of external institutions like IIM Library, Indore is taken by interaction with the Faculty.

Life Sciences: NCBS, Bangalore, IISc, Bangalore, CCMB, Hyderabad, Delhi University, JNU, New Delhi, IIT, Delhi, NII, Delhi, CDFD, Hyderabad, IGIB, Delhi, NCCS, Pune, NCL, Pune Besides many other Universities and institutes across the country

Pharmacy: Wockhardt, Anchrom Enterprises

Physical Education: Students are going to the schools such as St. Paul's School, New South wells school for taking their theory teaching lessons and general lesson plans

Social Sciences: N.G.Os, Corporate sector, M.P. Govt., RGNF and ICHR are associated.

Role of faculty in facilitating such projects

Bio-Chemistry: Faculty members advise and facilitate the students to get opportunity at reputed Institutes. The Faculty members also undertake few students for project work.

Bio-technology: 100 % faculty members are actively engaged in guiding M.Sc. projects.

Commerce: Faculty members are the mentor of student to guide in completing the projects

Computer Science and Information Technology: Faculty members supervise the projects throughout the semester. The projects in the four areas of Database, Network, Software Engineering and Image processing have been done in the respective laboratories.

Economics: Faculty members and course coordinators are assigned the responsibility of guiding and mentoring the students for the purpose of presentations.

The students prepare a Summer Training Report on the basis of training they receive in their respective organizations and present them through PPTs. This has been included as a routine part of the curriculum to make the students undertake training in a sincere and regular way.

Educational Multimedia Research Centre: All faculty are actively engaged in guiding student projects on production of multimedia programmes.

Electronics: Faculty guides the students who wish to pursue their Major projects in the department.

Energy and Environmental Studies:

Identification of problems after discussion with students, Motivation, Guidance and work with students, Help in analysis and project writing, Final checking of project reports and Evaluation of the Project

Future Studies and Planning:

The faculty members write the letters to the concerned persons for engaging the students for their projects. The institutions select some of the students for projects as per their criteria. There is provision of keeping external and internal supervisors for each of such project work. Internal supervisor is one of the faculty members. The internal supervisor keeps continuous watch on the progress of the project

Institute of Engineering and Technology:

Yes, all student are guided by a faculty

Institute of Management Studies: Institute gives importance to the project work. All first year students (PG courses) are required to undertake a project during their summer break and submit its report to the Institute. This project can be done in the institute or in any organization.

Students are allotted a faculty guide for the Major Research Project .An external examiner awards marks for the same. The students are also given mini projects by various faculty members in their respective courses.

The institute has collaboration with a number of institutions such as National Civil Defense College Nagpur where the students of Disaster Management every year, go for two months training, besides this the Institute has an association with major companies like HDFC, ICICI, Asian Paints, NCEIT etc where they go for their summer training. A large number of industries located at Pithampur have an association with institution allowing the students to undertake small projects and industrial visits from time to time.

Faculty /coordinator of each programme supervise the progress of the student's projects.

Instrumentation: Faculty is actively engaged in guiding M. Tech. projects.

International Institute of Professional Studies: All faculty members acts as mentor and advisor in the completion of the project as Major Research Project is a compulsory component of all PG courses. The faculty members, research and development centre and placement cell help the students get research projects in companies and other agencies.

Journalism and Mass Communication: Students are given projects in their final year, where they have to prepare a dissertation on any topic from the syllabus. A continuous guidance is given by the faculty, starting from the selection of topic to the end. Students also have to make a documentary on any subject of social relevance.

Law: Effective Supervision and Guidance is carried out by faculty members.

Languages: Faculty guides students in planning, executing and evaluating these research projects/dissertations

Library Sciences: A faculty member is assigned for each project and who ensures effective Supervision and Guidance

Life Sciences: M.Sc. projects are performed in external Industries/Institutes.

Life Long Learning: Interaction learning sessions with faculty, experts and students.

Mathematics: Faculty members guide the projects and gives references and source of information.

Pharmacy: Faculty members help in successful completion of projects by providing guidance and cooperation in literature review, procurement of chemicals, study materials etc. Besides, they regularly monitor practical laboratory work carried out by students to ensure quality in research work

Physical Education: Faculty members guide and evaluate the projects and suggests students for betterment

Physics: Faculty members provide laboratory facilities for further experimental work, computational work, guidance and monitoring during the whole course of project.

Social Sciences: As a Research Guide/ Guidance during field visit.

Statistics: Faculty members suggest innovative problems, guide the line of the computation with proper references and presentation.

2.3.14 Does the university have a well qualified pool of human resource to meet the requirements of the curriculum? If there is a shortfall, how is it supplemented?

University has a well qualified pool of faculty members and supporting staff. University is following the UGCs' regulations and norms for recruitment of faculty. Students are benefitted by the expertise and the experience of qualified pool of Faculty. More than seven hundred permanent, contract, guest and part-time faculties from academics and Industry are there. Several faculty members are well recognized in their fields nationally and internationally.

2.3.15 How are the faculty enabled to prepare computer-aided teaching/ learning materials? What are the facilities available in the university for such efforts?

University established Computer Center in 1986 and created a name in its Computer courses. University established fiber connectivity on the Campus in 1999 and later linked all three Academic, Engineering courses and administrative campuses through Fiber and created Internet backbone and best last mile connectivity in 2000 with the then fastest CISCO switches. University departments have installed the LCD projectors in most class of 125 plus class rooms.

The excellent Computer and ICT infrastructure enables the Faculty members to prepare computer-aided teaching/ learning materials. University has also been assigned Computer training e-learning material in 2013.

2.3.16 Does the university have a mechanism for the evaluation of teachers by

the students / alumni? If yes, how is the evaluation feedback used to improve the quality of the teaching-learning process?

University has a formal mechanism for the evaluation of Faculty by the students. Feedback form with 10 to 20 important aspects of teaching and teachers is circulated to students at the end of each semester. Two approaches are in practice. Students either keys in the data on Excel sheets or marks it on sheet of paper and gives grades between 1 and 5 on each of the point. Student also writes suggestions on curriculum, paper setting and evaluation and use of ICT.

University has an informal as well as formal mechanism for the evaluation of teaching processes by the alumni. Whenever Alumni meet takes place or when alumni visit the department or contact by e-mail, he/she is asked the suggestions for further improvement of our curriculum or teaching learning process.

Feedback data are analyzed quantitatively and qualitatively.

Evaluation by feedback is used and has been found very effective in improving the quality of the teaching-learning process. Feedbacks are also hosted on the website link for the Feedback.

2.4 Teacher Quality

2.4.1. How does the university plan and manage its human resources to meet the changing requirements of the curriculum?

The planning and management of departmental human resources are discussed in meetings of TLPMC or DC to meet the changing requirements of curriculum. (1) Faculty members also participate in the Faculty Development Programmes, within and outside the University. (2) Faculty members are also given appropriate time slots to undertake M. Tech or Ph. D. research within the department. (3) Faculty members are also given study leave to undertake M. Tech or Ph. D. work in leading Institutions or International or National laboratories or (4) Faculty members are also granted study leave or extra-ordinary leave to work as Post-doctoral research Fellow or Visiting Scientist under different prestigious fellowships / grants from institutions such as International Centre for Theoretical Physics, Trieste, Italy (UNESCO), and Humboldt foundations, Germany, DAAD Germany in the leading International Universities and Research institutions.

The above steps have enabled the departments to meet changing requirements of the curriculum. The arrangement of lectures of external experts/visiting faculty are also arranged to teach a new course or skills or in which human resources are not lacking. .

2.4.2. Furnish details of the faculty

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
	Permanent teachers						
D.Sc./D.Litt.	2	0	0	0	0	0	2
Ph.D.	44	12	29	17	37	18	157
M.Phil.		0	0	0	2	0	02
PG*			6	7	39	25	77
UG(B.E./B.Tech.)					1	3	4
Total Perm. teachers							
	46	12	35	24	79	46	242
Temporary teachers							
Ph.D.					4	7	11
M.Phil.					4	6	10
PG					41	42	83
UG(B.E./B.Tech.)					2		2
Total							
					51	55	106
Part-time teachers							
Ph.D.	7	1	2	0	19	22	51
M.Phil.	5	8	0	0	6	15	34
PG*	1	1	0	0	134	135	271
UG(B.E./B.Tech.)					16	7	23

*PG includes M.E./ M.Tech. 13 10 2 0 175 179 379

2.4.3. Does the university encourage diversity in its faculty recruitment? Provide the following details (department/School/Institute-wise).

All selections are done through All India advertisements. University does not enforce compulsory Language policy. University strictly adheres to UGC and AICTE guidelines for recruitments and promotions and State Government reservation policy for SC/ST/OBC/ Differently-abled

School/Institute	% of faculty from the same university	% of faculty from other universities within the State	% of faculty from universities outside the State	% of faculty from other countries
University all Schools/	56.8	22.9	20.3	0

Institutes				
Bio-chemistry	75	0	25	0
Bio-technology	77.77	0	22.22	0
Chemical Science	25	25	50	0
Commerce	80	20	0	0
Computer Science and Information Technology	50	40	10	0
Economics	67	13	20	0
Education	92	0	8	0
Educational Multimedia Research Centre	83.33	0	16.66	0
Electronics	80	10	10	0
Energy and Environmental Studies	0	0	100	0
Futures Studies and Planning	33	0	67	0
Institute of Engineering and Technology (IET)	36.36	39.4	24.24	0
Institute of Management Studies (IMS)	65	18	15	0
Instrumentation	100	0	0	0
International Institute of Professional Studies	49	21	15	
Journalism and Mass Communication	100	0	0	0
Law	60	40	0	0
Library Sciences	25	75	0	0
Life Long Learning	0	100	0	0
Life Sciences	50	0	50	0
Mathematics	33	0	66	0
Pharmacy	29	59	12	0
Physical Education	28.5	71.5	0	0
Physics	37.5	62.5	0	0
Social Sciences	100	0	0	0
Statistics	100	0	0	0
Yoga Center	100	0	0	0

2.4.4. How does the university ensure that qualified faculty members are appointed for new programmes / emerging areas of study (Bio-technology, Bio-informatics, Material Science, Nanotechnology,

Comparative Media Studies, Diaspora Studies, Forensic Computing, Educational Leadership, etc.)? How many faculty members were appointed to teach new programmes during the last four years?

Physics and chemistry departments are functioning in the University since 1971 and 1976, respectively. Teacher's strong motivation, self learning initiatives and use of web-resources have lead to development of competence to teach and initiate research in new areas of Lasers, Material Science and Nanotechnology.

Biotechnology department has appointed contractual full time Faculty and invites visiting faculty for information technology and allied areas. Faculty members have earned name nationally and internationally for the University in teaching and research. School of Biotechnology one of the Faculty is author of International level research books from top International publishers, for example, Horizon Scientific Press, UK; Nova Science Publishers, USA.

University Computer Science (1986), Electronics (1990), Biotechnology, Instrumentation, Future Studies and Planning (1991) departments are functioning as the Faculty members from allied areas who have strong motivation and self learning initiatives were appointed in Computer Science, Information Technology and Electronics. Faculty members were give appropriate time slots to undertake M. Tech or Ph. D. research within the department or nearby institutions. Faculty members were also given study leave to undertake M. Tech or Ph. D. work in leading Institutions or International or National laboratories.

University School/Institute of Studies of Computer Science, Electronics and Information Technology has Faculty members from areas of Physics, Statistics, Electrical, and Civil Engineering. Faculty members with strong motivation, self learning initiatives and Internet savvy who have earned name Nationally and Internationally for the University in teaching and research in Computer Science, Industrial electronics, Embedded Systems and Mobile Computing and become researcher in Computer Science, and also author of International level text books from top International publishers, McGraw-Hill; Oxford University Press and Pearson Education. His books have been translated in Korea and China in their languages and a book has International Student Edition. A faculty member has published a textbook on Software Engineering from Cannege Learning.

University ensures very effective teaching learning process for new programmes/emerging areas of study in Lasers, Material Science, Nanotechnology, Biotechnology, Bioinformatics, Mobile Computing Technology, Information Technology, Electronics and Communication, Electronics and Telecommunication Engineering and Computer Engineering.

Few additional contract faculty members were also appointed to teach new programmes during the last four years.

2.4.5. How many Emeritus / Adjunct Faculty / Visiting Professors are on the rolls of the university?

School/Institutes of Life Sciences and Statistic had two Visiting Professors and statistics one during XI plan. Now, University is in the process of appointing Emeritus/Adjunct Faculty /Visiting Professors soon.

2.4.6 What policies/systems are in place to academically recharge and rejuvenate teachers (e.g. providing research grants, study leave, nomination to national/international conferences/ seminars, in-service training, organizing national/international conferences etc.)?

University has Academic Staff College which runs professional development programmes round the year. Newly recruited faculties undergo orientation course helping them to understand the nuances of the pedagogy and fundamentals of their respective disciplines. They are also helped to pursue further studies/research degrees. More experience faculties are required to attend refresher courses. University faculty members are also invited for delivering lectures/ chairing sessions in National and International conferences.

Nomination to national/international conferences/ seminars is transparent, easy and fast. The registration and travel expenses for the National conference and seminars are incurred from UGC plan grant and through departmental funds. The registration and travel expenses for the International conference and seminars are incurred from UGC plan grant or DST grant. An approval of the paper to be presented by two external experts is required before approval is granted for International travel expenses.

University also encourages Faculty to be members of National and International academic/research bodies by reimbursing a part of Annual membership fees of top International Research Society in their subject with a cap of Rs. 5000. Reimbursement of Internet charges to Heads/ Professors/ Researchers/Ph.D. guiding Faculty is also granted enabling them to avail 24 hours Internet connectivity.

University funded research grants and grant of seed money for research have been introduced for new Faculty from 2013-14.

Faculty members are given study leave to undertake M. Tech or Ph. D. work in leading Institutions or International / National laboratories

2.4.7 How many faculty received awards/ recognitions for excellence in teaching at the state, national and international level during the last four years?

Several Faculty members have been conferred various awards for research contributions. (Criterion III Section 3.4.3). Details are mentioned in Evaluative reports of each School/Institutes. Examples of Academic honors are as follows:

1. Dr. H. R. Pal, Professor of Education, has been bestowed with State level, Dr Shankar Dayal Sharma, Srujan Samman 2007 (2010). and Rajeev

Gandhi National Gyan Vigyan Moulik Lekhan Puraskar 2011-12 (2013), awarded by the President of India.

Dr. Raj Kamal, Professor of Computer sciences and IT, has been awarded Fellowship of Institute of Electronics and telecommunication Engineers.

Dr. Anil Kumar, Professor of Biotechnology, has been awarded Honorary Fellowship of World's Society of Cellular and Molecular Biology, France and awarded Honorary Fellowship of Association of Biotechnology and Pharmacy.

Dr. Dinesh Varshney, Professor of Physics has been awarded K. N. Katzu Award, 2009 by the M.P. Government.

2.4.8 How many faculty underwent staff development programmes during the last four years (add any other programme if necessary)?

Academic Staff Development Programmes: The details of the faculty participating in A.S.C. professional development programmes are as under:

* Refresher Courses	:	118
* HRD programmes	:	12
* Orientation Programmes	:	114
* Staff training conducted by the university	:	31
* Staff training conducted by other institutions	:	07
* Summer / Winter School/Institutes, workshops, etc.	:	46

2.4.9 What percentage of the faculty have been invited as resource persons in Workshops / Seminars/ Conferences organized by external professional agencies?

- * invited as resource persons in Workshops / Seminars/ Conferences organized by external professional agencies? 57.6%.
- * participated in external Workshops / Seminars/Conferences recognized by national / international professional bodies? 63.4%.
- * presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies? 54%
- * teaching experience in other universities / national institutions and other institutions? 23.69%
- * industrial engagement? 13.81%
- * international experience in teaching? 5.57%

[Evaluative reports of the Schools/Institutes give the details for each one.]

2.4.10 How often does the university organize academic development programmes (e.g.: curriculum development, teaching-learning

methods, examination reforms, content / knowledge management, etc.)
for its faculty aimed at enriching the teaching-learning process?

University has an Ordinance No 31. It is in operation since 1990. It empowers School/Institute of Studies to modify the curriculum, Courses and Syllabus continuously under the overall control of the Board of Studies. Each School/Institute of Studies modifies the *curriculum at least once a year*. Interactions with experts and stake holders are also done regularly during teaching-learning processes.

TLPMC or DC initiates the curriculum development, teaching-learning methods and content/knowledge management. Curriculum development process starts at the beginning of the session for all courses. The same is revised regularly and updated on the department website. Necessary changes are made incorporating it with changing corporate requirements. . A copy of the revised syllabus is placed in the institutions library for use of students and Faculty.

[University Statute No.10 provides for constitutions of the Faculties and Board of Studies. When new academic developments take place a new Faculty or Board of Study is created. Each course in the Board has as Ordinance which defines the eligibility, period, admission process, attendance and other statutory requirements to be fulfilled for the award of a degree.]

Examination reforms are frequently initiated at the University Academic Council level for all the courses. Examination reforms at the UG courses and PG courses in the affiliated colleges are initiated at the level of the University and at the behest of Department of Higher Education.

Content / knowledge management is done very frequently. The contents and knowledge is now communicated to the students regularly through website throughout the teaching learning process.

2.4.11 Does the university have a mechanism to encourage Mobility of faculty between universities for teaching? Faculty exchange programmes with national and international bodies? If yes, how have these schemes helped in enriching the quality of the faculty?

University has a mechanism of providing mobility by sanctioning leave with pay for maximum period of two years for higher studies, Ph.D. or post doctoral research work. University also has a mechanism of providing mobility by sanctioning leave without pay for maximum period of five years for teaching in other Universities, Engineering colleges, and Software and other Companies. University also undertakes on deputation Faculty from other Universities and

colleges. Schools of studies also invite experts from other Universities as visiting fellows up to a period of three months and vice-versa.

The mechanisms have provided mobility to faculty between universities for teaching. The leave is provided either when a Faculty is sent on deputation or is provided when a Faculty is appointed by another University of Engineering Institution for a limited period.

Faculty exchange programmes with national and international bodies exist in School/Institute of Studies in Physics, Chemistry, and Bio-technology.

The schemes have helped in enriching the quality of the Faculty and research output.

2.5 Evaluation Process and Reforms

2.5.1 How does the university ensure that all the stakeholders are aware of the evaluation processes that are in place?

All the stakeholders for each course of School/Institutes of Studies courses are aware of the evaluation processes as per Ordinance No.31. Academic calendars for all the courses are hosted on the website. Scheme of each course for the examinations is communicated to the students through the website as well as group e-mail ID's/ Notice Boards. In some departments, students play a major role in preparing class tests/final examination schedules.

Ordinances, notices, examination schedules, academic calendars and results for all the courses are hosted on the website for all the stakeholders for each course in the affiliated colleges.

2.5.2 What are the important examination reforms initiated by the university and to what extent have they been implemented in the university departments and affiliated colleges? Cite a few examples which have positively impacted the examination management system.

Schools/Institutes courses examination reforms

Reforms in the examination are a continuous process in the University. The University Teaching Departments have been given full autonomy for conducting examinations including paper setting, evaluation and declaration of results. The departments show evaluated answer copies of tests as well as semester exams to the students. They can compare their answers with other students and see the best answers. The student is given the right to discuss with the evaluator and get satisfied with awarded marks. The entire process is fully transparent. The student can appeal to Board at the end of Semester examination.

Some departments use innovative practices like MCQ based tests, open book examinations, peer & self assessment, assessments through assignments, student seminars, quiz etc.

Affiliated Colleges examination reforms

University has a full-fledged controller of examination. In recent years a number of reforms have been introduced as per the present day requirement. In 2011, University introduced “Semester System” at the Undergraduate as well as Post Graduate Level for the affiliated colleges. The colleges are also a part of conducting examinations by way of conducting unit tests and their evaluation. As a result there is improvement in the continuous steady system in the colleges.

2012: Reforms have been introduced at the State Level for the UG courses by way of online examination form submission, online enrollments for private students.

2013: University opted for a revolutionary change by way of allowing the examinee to see the evaluated answer scripts under RTI act. Arrangements have also been done for online issue of admit cards through TCS-MP Govt (MP Online). Examinee can also file application for the review of the result. The University understands that process of reforms is continuous and work is in progress for more feasible reforms.

2.5.3 What is the average time taken by the University for Declaration of examination results? In case of delay, what measures have been taken to address them? Indicate the mode / media adopted by the University for the publication of examination results e.g. Website, SMS, email, etc.).

School/Institute of Studies

In the University Teaching Departments, and Autonomous Colleges examination results are declared within a fortnight of completion of exams. In case of delay (sometimes due to delay in evaluation of a particular paper(s) by an evaluator), head of the department is fully empowered to take the corrective measures. Result is displayed on the *website and* departmental notice board.

Affiliated colleges, other than autonomous colleges

Examination management is based external examination by the University Administration. Result preparation and declaration are done by the University. Examinations start on Schedule and State also monitors the time table and Unified academic calendar for UG programmes in State colleges. The results declaration by the University is mostly on time (within a month).

Mode/media adopted by the University for the publication of examination results is website. SMS software is being experimented in collaboration with TCS-MP Govt. initiative known as MP-Online.

2.5.4 How does the university ensure transparency in the evaluation process? What are the rigorous features introduced by the university to ensure confidentiality?

* University Schools/Institutes Transparency

The University Schools/Institutes adopt full transparency in the evaluation process. Each examinee is shown answer sheets after each test by the Faculty and marks are reviewed. The students also see the copy of other high marks scoring students to know the appropriate and correct answers. They are told about the criteria of assessment and the mistake they have committed in answering the questions. Thus, examination is quite open to scrutiny.

It has positively impacted the examination management. Examination management became totally internal.

* Confidentiality

Paper setter himself/ herself prepare multiple copies of the question paper. The photocopied set of papers are put in a sealed and signed envelope by the paper setter himself. Full confidentiality and secrecy is ensured with reference to examination.

Affiliated Colleges Transparency

The entire result is hosted on the University website making it open to scrutiny by stakeholders. Transparency is ensured by following reform adopted from January 2013 in the State Colleges. An examinee can see the evaluation of marks under RTI act. Examinee can then file application for the review of result for each question detailing reasons for the change/review of marks. An examiner reviews the result and gives the reasons for the change. Examination Committee of the Board of Studies then accepts or rejects the recommendation of the reviewer.

Confidentiality

There is full-fledged confidential section with Assistant Registrar, Deputy Registrar and Examination Controller. The section maintains strict confidentiality. University has a Press of its own for printing question papers with a confidential wing in the press, where entry and exit as well as printing are strictly controlled. Centre wise set of sealed question papers are readied for delivery to respective center.

Measures taken to ensure confidentiality

There are well established pre-examination processes – Examination Time table generation, student list generation, Invigilators, Attendance sheets, are done seriously and well intimated in advance.

2.5.5 Does the university have an integrated examination platform for the following processes?

University Schools/Institutes

There is decentralization for each School/Institute in-house for pre-examination and examination processes and post examination evaluation and result declaration processes are in the School/Institute as per Ordinance No. 31 thru sets of Grade Card prepared by the respective School of Studies, which are

presented for the signature of Registrar, whose office retains one copy of the Grade Card for record since 1990.

Post-examination process – Signature of Registrar on marks-sheet and issue of degree certification is through Centralized University system. It is as per well established processes.

Affiliated Colleges

There is centralized integrated examination platform for the processes.

(i) Pre-examination processes – It includes chalking out exam schedule for holding examinations, OMR, student list generation, invigilators, flying squads, attendance sheet, online payment gateway, etc. Decision regarding this are taken, after extensive consultations with stakeholder, the Principals of Colleges, the students, and the officers of the University.

(ii) Examination process – Examination material management, logistics, etc. - It is all done as per well established processes.

(iii) Post-examination process – Attendance capture, OMR-based exam result, auto processing, generic result processing, certification, etc. It is all done as per well established processes.

2.5.6 Has the university introduced any reforms in its Ph.D. evaluation process?

A Ph.D. cell is functional. Ph.D. course work evaluation process has been decentralized as per Ordinance No 31. University is planning to introduce reforms in its Ph.D. evaluation process for making it more efficient, economical in terms of time and scholar centric. in 2013-14.

2.5.7 Has the university created any provision for including the name of the college in the degree certificate?

Yes, the name of college appears in students' marksheets.

2.5.8 What is the mechanism for redressal of grievances with reference to examinations?

University Schools/Institutes of Studies

Grievances related to Evaluation and examinations are resolved at the departmental level itself. As per the Ordinance No 31, the student can argue with the evaluator at the time of showing the answer sheets. If not satisfied by the evaluator, the student may represent his case in Viva Voce Board. If not satisfied even after that, he may apply for reevaluation.

There is student Grievances Redress cell for final redress of grievance if not satisfied with the departmental actions.

Affiliated Colleges

Grievances are resolved that are *related to Evaluation* through a process as follows: When an examinee sees the evaluated marks under RTI act, examinee files application for the review of result for each question detailing reasons for the change/review of marks. An examiner reviews the result and gives the reasons for the change. Examination Committee of the Board of Studies then accepts or rejects the recommendation of the reviewer.

Grievances related to Examination Processes like issue of admit card, correction in marks sheet, issue of degree are resolved by the appropriate authorities of the College/University.

Admit Card: These are addressed by Head or Principal of respective Department/College

Marks Sheets: Issues are addressed by Head or Principal of respective Department/College. Further University helps in resolving the grievances with the help of result section of the university and Registrar.

Issues of Degree: Result section of the University, Registrar and Vice Chancellor.

2.5.9 What efforts have been made by the university to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved the process and functioning of the examination division/section.

Schools/Institutes of studies themselves have established the process and function of examination. Examinations of affiliated colleges are controlled by the Controller of Examinations. There is on-line examination form submission and online enrollments since 2012. There is on-line issue of admit cards through TCS-MP Govt. initiative known as MP-Online since 2013. These efforts have significantly improved the process and functioning of the examination division/section.

2.6. Student Performance and Learning Outcomes

2.6.1 Has the university articulated its Graduate Attributes? If so, how does it facilitate and monitor its implementation and outcome?

Graduate attributes are that a Graduate of the University has fundamental, conceptual and latest knowledge of the subject, has strong practical orientation, good communication skills and has ethical values, social responsibilities and environment friendly attitude.

A Graduate attribute of fundamental, conceptual and latest knowledge of the subject is facilitated by the lectures are combined with presentations, case studies, group discussions, class tests and projects. Monitoring of this attributes is done at the Faculty and departmental level.

Strong practical orientation is achieved by practical classes, laboratory work and projects in-department or in industry or advanced institutions. Monitoring of practical orientation and projects and their outcome is done at the

departmental level. The emphasis is on development of skill required in the industry, research, higher educational fields. A graduate is exposed to theoretical concepts along with practical knowledge so as to have a better understand of real life situations.

A Good communication-skill is facilitated by provisioning of Language Laboratory and activities of Career Counseling and Placement Cell. Monitoring of implementation and outcome is done by In-charge Language Laboratory and Coordinator Career and Counseling Cell at the University level.

Ethical values, social responsibilities and environment friendliness are facilitated by lectures on Values and on achievements of great personalities. There is a task group set-up in 2012 to imbibe human values and ethics.

Extension activities are undertaken. Participation in the Green policy of the University is ensured. There is a task group set-up in 2012 to imbibe environment friendliness.

Freshers were administered Oath during the induction programme to imbibe the attributes of ethics, social responsibility and environmental friendliness.

Bharat Ratna Dr. A P J Abdul Kalam delivered a message to the students and faculties of the University on June 12, 2013. His very presence was sufficient to electrify the gathering, not to say of the virtues, he advocated through oath to the faculty and students.

2.6.2 Does the university have clearly stated learning outcomes for its academic programmes? If yes, give details on how the students and staff are made aware of these?

Yes, each School/Institute of university has clearly stated learning outcomes for each academic programme. The students and staff are made aware of these through departmental website link. Freshers also become aware of these during orientation programme. Details are in evaluative reports of each individual School/Institute. They are also at SSR of Each Institute/School hosted at www.iqac.dauiv.ac.in.

2.6.3 How are the university's teaching, learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes?

Teaching, learning and assessment strategies structure to facilitate the achievement of the intended learning outcomes is as per Ordinance No. 31 of the University. DC or TLPMC monitors that the students are enriched through regular classroom interactions supported by practical exposure in practical classes and projects, through seminars, workshops, guest lectures from personalities of the Industry.

Class rooms, auditorium, placement cells are equipped with latest technology to facilitate meetings, seminars and panel discussions. Lectures are combined

with presentations, case studies, group discussions for better outcomes. There is extensive use of ICT also which facilitates the achievement of the intended learning outcomes.

Industrial visits to various corporate houses are a part of the learning and curriculum. The institute is proud to be associated with many governmental and private sector institutions for better interaction with industries.

Summer training programme in the first half of the course and a Major Research Project in the second half make these programmes more fruitful.

All the programmes are designed keeping in mind not only inculcation of skills but also value system amongst the students. The curriculum focuses on gaining knowledge both practical and conceptual along with employability. Assessment of students is done on a continuous basis throughout the course both written and oral.

2.6.4 How does the university collect and analyse data on student learning outcomes and use it to overcome the barriers to learning?

Faculty members perform the pre tests of the students. This helps Faculty to test their pre requisites for a course. A number of formative assessments during teaching help the Faculty to identify the learning needs of the students. Students are provided remedial teaching or enrichment exercises as per the needs,.

Facility of online student feedback and other stake holder is available. This information is used in upgrading the curriculum and teaching process.

2.6.5 What are the new technologies deployed by the university in enhancing student learning and evaluation and how does it seek to meet fresh/ future challenges?

Enhancing student learning

Psychological and personal problems of students are also addressed through tutorial / mentoring sessions.

ICT based techniques and practical lab experiments and work on field projects are designed and used by students to learn advance techniques. It enables to design development and evaluate the systems or processes for the industry or Institutions.

Audio video aids are also used for imparting quality teaching. Each classroom is well equipped with digital boards and projection system for the presentations. Full-fledged facilities are available for students for learning resources. University has a Wi-Fi campus for the students to access Internet.

Students are encouraged to make optimum use of computers and Internet facility provided. Assignments & e-tutorials are given to students to encourage

them to make extensive use of E-resources. Notes and assignments are also forwarded through group e-mail accounts and other networking sites.

A virtual class room technology has been introduced from June 2012 and more virtual class rooms will be established during 2013-14 session.

New Mobile computing Technology in Evaluation processes

Mobile based Education software has been developed in-house at School/Institute of Electronics in two M.Tech projects. Mobile based self evaluation and tests for Digital Electronics and Analog Electronics are being tested at School/Institute of Electronics.

Any other information regarding Teaching, Learning and Evaluation which the university would like to include.

1. University has setup the facility for Internet access for the visually challenged students. NTPC has helped to set up a 50 lacs Rs. Equipment and laboratory in University for training of visually challenged students.
2. Periodical training is also arranged for senior citizens use of the Internet for different purposes.
3. Recently BSNL has offered 45 students free training in its advanced telecommunication laboratories. .
4. University has set up a task group on Teaching, Learning and Evaluation which helps the faculties in networking of best practices in pedagogy so as to effectively achieve the vision of the University