SARDAR PATEL UNIVERSITY

VALLABH VIDYANAGAR – 388 120
GUJARAT

THE RE-ACCREDITATION REPORT

3. CRITERIA-WISE ANALYTICAL REPORT

MAY 2016

CRITERIA WISE ANALYTICAL REPORT

Preamble

Establishment

Sardar Patel University was established by an Act of the Legislative Assembly of the then Bombay Province in December 1955 and was recognized under 2f of the UGC Act in October 1968. The University has completed 60 golden years of fruitful existence that has brought it to the forefront on terms of its academic excellence. No wonder, then, efforts have been made either to emulate its example or to replicate it elsewhere in Gujarat!

Location

Sardar Patel University is situated in Vallabh Vidyanagar. The educational township of Vallabh Vidynagar is close to the Milk City of India (Anand) in terms of its strategic geographical location. Anand is on Vadodara-Ahmedabad line of the Western Railway in the heart of Anand District of Gujarat. It is well connected with the rest of the country by railway network and roads. It is flanked by two major cities of Gujarat: Sardar Patel International Airport, Ahmedabad and Vadodara Airport, Vadodara. Besides their Airports, Ahmedabad and Vadodara also have railway junctions and bus terminuses, and this makes it easy for a visitor to reach Anand and from there on to Vallabh Vidyanagar. This distance between Anand and Ahmedabad is 75 kms by road and 65 kms by railroad, and the journey takes about one and half hour. Similarly, the distance between Anand and Vadodara is 45 kms by road and 35 kms by railroad and the journey takes about 45 minutes. The Express Highway between Ahmedabad and Vadodara has reduced the time taken in traveling and added comfort to the journey. Vallabh Vidyanagar is about 5 kms from Anand and 2 kms from Karamsad, the native place of Sardar Patel. The University Campus - the main campus as well as 3 satellite campuses – is situated in the heart of a rural countryside against a lush green pollution-free backdrop, offering all the amenities of modern life. Sardar Patel University comprises of 27 Postgraduate departments, one constituent college, and 90 affiliated colleges. The teaching programmes are grouped as Doctoral, Postgraduate, Graduate, Diploma, Postgraduate Diploma and Certificate programmes under the Eleven Faculties viz. Arts, Science, Engineering & Technology, Business Studies (Commerce), Law, Education, Home Science, Medicine, Pharmaceutical Science, Management and Homoeopathy. The University offers 102 Postgraduate courses through its departments, constituent and affiliated institutions. The Graduate programmes are offered by the affiliated colleges. All the regular programmes run by the University as well as by the Colleges and Institutions affiliated to it are under semester system incorporating the Choice Based Credit System. The courses offered are framed keeping in view the needs of the students, the society and the employing agencies - industry or organizations - at the state, national and international levels.

शीलवृतफ़लम् श्रुतम्

The tree in the centre of the emblem is the historic mango tree where the founders of this seat of learning, Shri Bhailalbhai Patel (Bhaikaka) and Shri Bhikhabhai Patel, initiated their visionary project of this educational township. The rising sun behind the tree represents the dispersion of light of learning by this institution dedicated to the Gandhian principles of rural upliftment. The Sanskrit motto decorating the lower crest of this emblem reads: शीलवृतफ़लम् श्रुतम्, that is, 'character and conduct are the fruits of learning'.

शीलवृतफ़लम् श्रुतम्, the motto of Sardar Patel University, is wisely chosen from our national epic, the *Mahabharata*, comprising nearly one lakh stanzas. In the Sabha Parvan of the *Mahabharata*, Narada, the sage celestial, visits Yudhishthira's empyreal court in Indraprastha. After a formal conversation between the two, the stage desires to know if his Vedic studies, wealth, wife, and learning are fruitful. Not knowing how these become fruitful, the king wants to know when they become so. The sage tells him that daily offerings, such as *agnihotra* (offering of milk at sunrise and sunset), makes one's Vedic studies fruitful; wealth is fruitful when one utilises it and donates it; wife is fruitful in terms of sexual satisfaction and siring a son; and learning is fruitful if it results in good conduct and character (अग्निहोत्रफला वेदा दतभुक्तफलं धनम् | रतिपुत्रफला दारा: शीलवृतफ़लम् श्रुतम् || 5.101). That is to say, if education and learning do not contribute to our character and conduct, that education and learning are futile.
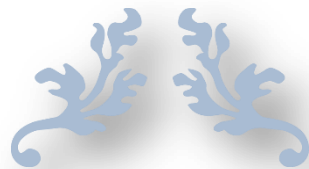
CRITERION I

[CURRICULAR ASPECTS]

CRITERION-I
[CURRICULAR ASPECTS]

1.1 CURRICULUM DESIGN AND DEVELOPMENT

1.1.1 How is the institutional vision and mission reflected in the academic programmes of the university?

The Sardar Patel University believes in the diversity in uniformity and excellence matters. We nurture the talent and polish the raw diamonds coming from the remote areas of Gujarat and other states in general. To bring out the dormant talent, we keep no stone unturned while working with the youth in and outside the classes. We offer specially designed unique courses to the talented students. The university organizes research students meet regularly wherein the identified talents from among the PG students are given the first hand exposure. We have a unique lecture series in basic sciences called IA Patel Sherthawala Lecture Series under which reputed experts from all over India are invited to deliver talks, which are well received by the students. It has been a long tradition of the university to adopt the curriculum guided by UGC. The syllabi in professional courses like Computers and Information Technology are updated every couple of years to match the state of art technology.

The Centre for Interdisciplinary Studies in Science and Technology (CISST), established under PURSE programme of the university has taken initiatives to arrange interdisciplinary lectures introducing particular aspect of science leading to the fore of the same. Creation of the knowledge is also interwoven in various projects offered to the PG students either formally as a part of their curriculum or informally. All the departments have been offering the free Internet access to their students. The university has also created a central facility of cyber room at the Central Library. The subscription to INFLIBNET brings the literature at the tip of their fingers. Special training programmes for students preparing for NET-JRF like tests are organized regularly. To backup the same, online problem solving groups confined to the respective subject have been created for more than a decade. This has increased the passing percentage of UGC-CSIR-NET, GATE, NBHM etc. of the students of our university. This, in turn, has a lion share of our alumni serving in various government and GIA colleges where the selection is based on NET.

The latest journals are housed in the department and the students are encouraged to refer to the same.

The motto of the university is to make the wisdom prevail among the students. An informal interaction with the students inculcating the wisdom, building their moral character is unique to this university.

1.1.2 Does the university follow a systematic process in the design and development of the curriculum? If yes, give details of the process (need assessment, feedback, etc.).

The Sardar Patel University has a well-mannered system of curriculum design and development. Each subject has a Board of Studies consisting of experts from the university department, affiliated colleges and experts from other universities and representatives from industry.

Normally the Boards of Studies transact the business twice a year to oversee the programmes under its purview, its syllabi, its implementation, examination, quality of question papers and panel of experts for examinations. It assesses the needs and the relevance and future prospects of the syllabi based on the feedback received by its members. The designed/changed/modified syllabi are then put up for discussion in respective faculties and on the approval of the same, they are implemented. Boards of Studies take into consideration national development, needs of the society, local needs, emerging needs, expectations based on analysis of the feedback from the stakeholders, innovativeness, programme level standards, scope for further research, global demand, contemporary needs of the industry, women empowerments and inclusiveness etc.

1.1.3 How are the following aspects ensured through curriculum design and development?

- **Employability**
- **Innovation and**
- **Research**

All of our programmes are taking care of employability, innovation and research component by including various courses in their curricula. It is not uncommon for us to have a significant share among the batches of new recruits by UPSC and GPSC like bodies. The expertise of our university has been even exploited by other universities for training their students in NET and SLET like examinations. Online discussion groups for students preparing for such examinations are created and monitored. Special programmes training the students for their interviews, NET/SLET examinations are organized enhancing their employability.

In many departments project work is a part of the curriculum either as an elective in the third and fourth semesters or replacing one semester.

The students' bodies at the department level for participatory management related to the students' activities are created which are usually named as the associations or the societies. These associations organize competitions related to the subjects bringing out the innovations of the students. The university religiously follows the Anveshan Programme of AIU providing the platform to the students and inculcating the culture of interdisciplinary idea sharing among the students. This also takes care of the research component of the curricula. There are specially designed courses, listed elsewhere, taking care of the research component encouraging the students to pursue research at their level. University also organized two research students meet during the period of assessment providing a platform to research students to share their research work and giving access of their work to the PG students.

Ours is one of the few universities in India to establish the Community Science Centre. This is a common platform where the students show up their innovation.

(Please see Annexure-1: Details of Successful Candidates in Various Competitive Examinations.)

www.spuvvn.edu/iqac/rar16/annexures/ann-1.pdf

1.1.4 **To what extent does the university use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the university been instrumental in leading any curricular reform which has created a national impact?**

The Sardar Patel University, while developing and/or reconstructing curriculum for different courses takes into account the guidelines of the regulatory bodies as the fundamental base. The guidelines modified, periodically by the bodies like UGC, AICTE, NCTE, Pharmaceutical Council of India etc. are considered in curriculum update. The contributions of the Sardar Patel University in promoting innovative programmes are well recognized throughout the country, and many new courses initiated by the University have created national impact significantly. The following are the courses for which our University stands either as the first in the country or has a unique identity.

(a) Programmes in which SPU has pioneered

MSc in Biomedical Science
MSc in Defense Science
MSc in Earth Science
MSc in Quality and Productivity Management (Formerly known as MQPM)

(b) Specially designed courses/papers:

Android Technology and Advanced JAVA programming in MCA

Problems & Exercises in Mathematics at UG, PG and MPhil level.

Mathematics Education at MSc level

Financial Mathematics at MSc level

(c) Innovative Programme:

Our university is the first to initiate innovative programmes in Nutrigenomics, Food Design and Quality Assurance and has won State as well as National level recognition through special funding. We are the also one of the first to develop and start new undergraduate and postgraduate programmes in education for mentally retarded. Based on successful completion of MSc Industrial Biotechnology (Phase-I). The review committee recommended its continuation and funding for the period 2012-2017. This is also one of the innovative programmes at the National Level.

(d) Some significant courses/papers contributing to the social needs:

Environmental Problems in India (MA Political Science)

Feminism and Women's Participation in Indian Politics

Art of Film Appreciation (MA Gujarati)

Personalized Nutrition (Home Science)

Electoral Politics (Political Science)

Life Enrichment (Gujarati)

1.1.5 Does the university interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the university benefitted through interactions with the stakeholders?

As mentioned earlier, the University takes into account, feedback from industry, research organizations and members of civil society in revising the existing curriculum. Any revision process in the curriculum is approved by the Board of Studies after due deliberations. The expertise, guidance and feedback of the representatives from the industry help such revision. Further, while organizing seminars/workshops/conferences/ symposia/endowment lectures in the University, the faculty members find an opportunity to interact with the experts from the industry, academia and alumni participating and thereby enable themselves to contribute modifications/revision in the existing syllabi. This process keeps curriculum in consonance with the contemporary trends. Moreover, the University uploads the syllabi of all the courses offered on the official website of the university.

It is worth mentioning as an example that a couple of Boards of Studies like MCA, Statistics, Defense Science are very keen on including experts from industries. This has resulted in introduction of courses like:

- Android Technology and Advanced JAVA programming in MCA
- SPSS as a certificate programme (Statistics)
- Fundamentals of HRM, TQHRM and Supply Chain Management (Statistics)
- Lean Six Sigma Methodology (Statistics)
- Quality Management Systems (Statistics)
- Generalized Linear Models. (Statistics)

While the prospective employers from industries like ELECON, TCS, Sun Pharma, Manoria Associates, Arya Consultant, Dexter Consultancy, Amul Dairy, Rhino Machines Pvt. Ltd, Global Consultant, Sidhdhi Eng. Pvt. Ltd. visited to certain department for campus placement, their feedback are obtained by the respective heads of the departments resulting in the modification of syllabi.

1.1.6 Give details of how the university facilitates the introduction of new programmes of studies in its affiliated colleges.

The following briefly summarizes the process of approval of new programmes of studies in colleges affiliated to the university or the new institution.

First of all the application is assessed for its technical completeness and correctness. Then the scrutiny committee duly constituted by the university scrutinizes the details in order to assess the ability of the trust to carry out the pursuit successfully. In this stage, the existence of administrative and physical infrastructure for already existing institution is also considered as a parameter of scrutiny.

The program is started at the institute on temporary affiliation. After due time given to the institute, the On the Spot Committee visits and verifies the infrastructure and compliance of LIC recommendations. On the satisfactory report of the On the Spot Committee every year for double the length of the programme, the institute is given the affiliation for that course.

1.1.7 Does the university encourage its colleges to provide additional skill-oriented programmes relevant to regional needs? Cite instances

Under the CBCS many of the undergraduate institutes are encouraged to start two credits soft skill based (*KAUSHAL*)oriented courses as a part of regular curriculum. These courses include communication skills in English language & communication etc. Colleges are also encouraged

and permitted to start vocational under graduate, post graduate degree programs to cater the special needs of the region in the areas of hospitality and tourism, detail management, banking &financial service supply chain and logistic, export& import management, insurance &financial marketing, software development and nursing etc. from time to time as per the State Government of India suggestions.

1.2 ACADEMIC FLEXIBILITY

1.2.1 Furnish the inventory for the following.

Programmes taught on campus

Sardar Patel University offers many programmes in the faculties of Arts, Science, Engineering and Technology, Home Science, Business Studies (Commerce), Management Studies, Education and Pharmaceutical Sciences leading to various degrees, diplomas and certificates.

- **Bachelor in Library and Information Science - 2 Semesters**
- **Bachelor in Education - 2 Semesters**
- **Bachelor in Education Special MR (Psychology) - 2 Semesters**
- **Master of Arts (10 Subjects) - 4 Semesters**
  Gujarati, Hindi, English, Sanskrit, Economics, History, Political Science, Sociology, Psychology, Communication and Media Studies
- **Master of Science (24 Subjects) - 4 Semesters**
  Mathematics, Statistics, Microbiology, Biochemistry, Botany Zoology, Biotechnology, Industrial Biotechnology, Bioinformatics, Materials Science, Nanoscience and Nanotechnology, Electronics, Chemistry (with specialization in Organic Chemistry, Industrial Polymer Chemistry, Analytical Chemistry, Physical Chemistry, Inorganic Chemistry), Information Technology, Instrumentation, Physics, Quality and Productivity Management (Formerly known as Masters in Quality and Productivity Management (MQPM))
  Home Science: Foods and Nutrition (with specialization in Nutrigenomics, Food Design and Quality Assurance), General, Human Development, Food Biotechnology (with specialization Nutrigenomics, Food Design and Quality Assurance), Textiles and Clothing, Family Resource Management
- **Master of Computer Applications - 6 Semesters**
- **Masters in Pharmacy (2 Subjects) - 4 Semesters**
  Quality Assurance, Pharmaceutics
- **Master of Library and Information Science (Full Time - 2 Semesters / Part Time - 4 Semesters)**
- **Master of Human Resource Management (MHRM) - 4 Semesters**

- **Master of Social Work (MSW) - 4 Semesters**
- **Master of Commerce - 4 Semesters**
- **Master of Education - 4 Semesters**
- **Master of Business Administration - 4 Semesters**
- **Master of Philosophy (16 Subjects) - 4 Semesters**
  Gujarati, Hindi, Sanskrit, English, Sociology, Economics, Psychology, Library and Information Science, History, Social Work, Political Science, Education, Physics, Mathematics, Statistics, Business Studies
- **Doctor of Philosophy (Arts) (11 Subjects) - Minimum 6 Semesters**
  Gujarati, Hindi, Sanskrit, English, Sociology, Economics, Psychology, Library and Information Science, History, Social Work, Political Science
- **Doctor of Philosophy (Science) (12 Subjects) - Minimum 6 Semesters**
  Microbiology, Biochemistry, Biotechnology, Botany, Zoology, Chemistry, Computer Science, Electronics, Materials Science and Technology, Mathematics, Physics, Statistics
- **Doctor of Philosophy (Home Science) (3 Subjects) - Minimum 6 Semesters**
  Food and Nutrition, Biotechnology, Textiles and Clothing
- **Doctor of Philosophy (Education) (2 Subjects) - Minimum 6 Semesters**
  Education, Physical Education
- **Doctor of Philosophy Business Studies - Minimum 6 Semesters**
- **Doctor of Philosophy (Pharmacy) (1 Subject) - Minimum 6 Semesters**
  Pharmaceutics
- **Diploma/Postgraduate Diploma Courses (14)**
  Post BSc Diploma in Instrumentation
  Postgraduate Diploma in Analytical Chemistry
  Postgraduate Diploma in Business Management (PGDBM)
  Postgraduate Diploma in Computer Science and Application
  Postgraduate Diploma in Defense Materials
  Postgraduate Diploma in Drama and Dramatics
  Postgraduate Diploma in Food Deign and Quality Assurance
  Postgraduate Diploma in Functional Hindi
  Postgraduate Diploma in Human Resource Development (PGDHRD)
  Postgraduate Diploma in Library Networking and Digital Technology
  Postgraduate Diploma in Nutrigenomics
  Postgraduate Diploma in Polymer Science
  Postgraduate Diploma in Retail Management

Postgraduate Diploma in Translation Studies

- **Certificate Course (9 Subjects)**
  Advanced Certificate Course in Communication Skills in English
  Certificate in Biostatistics
  Certificate in Data Entry Course
  Certificate in English Language Teaching
  Certificate in Financial Statistics
  Certificate in Guidance and Counselling
  Certificate in School Administration
  Certificate in SPSS
  Junior and Senior Certificate Courses in English

- **External Courses (14 Subjects) (Yearly System)**
  PG: MA Gujarati, MA Hindi, MA English, MA Sanskrit, MA Economics, MA Sociology, MA History, MCom.
  UG: BA Gujarati, BA Hindi, BA English, BA Sanskrit, BA Economics, BCom.

1.2.2 Give details on the following provisions with reference to academic flexibility

Core/Elective options

The postgraduate programmes being run consist of four/six semesters. In each semester six courses with total 25 credits are offered. In each semester three to four theory courses are offered. About 75% of courses are core courses and the rest are elective to be chosen from the courses offered by the respective departments. Some departments offer common courses in collaboration with other sister departments. Some programs have dissertation component in place of practical at fourth semester levels. In some cases the entire forth semester is dedicated to project work.

There is also a provision for accumulation of credits obtained at universities other than ours and IQAC facilitates the transfer of these credits to the students migrating into our programmes.

(Please see Annexure-2: Details of Core/Elective Courses)
www.spuvvn.edu/iqac/rar16/annexures/ann-2.pdf

1.2.3 Does the university have an explicit policy and strategy for attracting international students?

Sardar Patel University has been initiating many steps to encourage international students to seek admissions into various programmes. The office of the Director, International Students Affairs, is established with a view to facilitate support services to the international students.

The following are the strategies adopted to attract international students:

The international students are accommodated in the university colony in the specially earmarked blocked with necessary amenities like furniture, refrigerator and RO system. More than 80 students were admitted in various programmes during the assessment period.

(Please see Annexure–3: List of Foreign Students.)

www.spuvvn.edu/iqac/rar16/annexures/ann-3.pdf

1.2.4 Have any courses been developed targeting international students? If so, how successful have they been? If no, explain the impediments

The international students are admitted into our existing programmes and counselling session is arranged for them to choose the course of relevance to their country.

1.2.5 Does the university facilitate dual degree and twining programmes? If yes, give details.

The University does not offer Dual Degree and Twinning Programmes.

1.2.6 Does the university offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programes?

Yes, the university has been admitting students on self-financing basis in many of its programmes. The self-financing mode is of two types: provision for additional seats on self-finance bases along with GIA seats or a separate division consisting of self-finance seats only. The details of such number of seats programmes, divisions and fee structure for semester:

(Please see Annexure-4: List of Self-financed Programmes.)

www.spuvvn.edu/iqac/rar16/annexures/ann-4.pdf

The teachers appointed exclusively for Self-financing programmes are paid partly at par with GIA teachers.

1.2.7 **Does the university provide the flexibility of bringing together the conventional face to face mode and the distance mode of education and allow student to choose and combine the courses they are interested in? If 'yes', give operational details.**

University does not offer any programme in the distance mode or has not started any counselling centre outside university area.

1.2.8 **Has the university adopted the Choice Base Credit Systems (CBCS)? If yes, for how many programmes? What efforts have been made by the university to encourage the introduction of CBCS in its affiliated colleges?**

Sardar Patel University is one of the first two universities among all the universities in Gujarat to adopt the Choice Based Credit System in UG as well as PG in all its program except Medical faculty and Law faculty. The CBCS was adopted in 2009-2010. In the law faculty CBCS was adopted in 2014-15 after the Bar Council accepted the system.

1.2.9 **What percentage of programmes offered by the university follows?**

Semester System is followed in almost all the regular programmes offered by the University. This amounts to the following bifurcation.

- Annual system   11%
- Semester system   89%
- Trimester system   0%

1.2.10 **How does the university promote interdisciplinary programmes? Name a few programmes and comment on their outcome.**

Sardar Patel University is always at the forefront in designing courses with interdisciplinary approach. The constitution of Board of Studies includes the subject experts from sister disciplines. This facilitates the designing of curriculum on interdisciplinary basis. The University has introduced a number of inter/multi disciplinary programmes/courses such as Industrial Biotechnology, Bioinformatics, Food Designing and Quality Assurance, Nutrigenomics, Quality and Productivity Management, Political Sociology: The Indian Context, Indian Political Economy. All these programme/courses are very much in demand and are continued in the campus for several years. This indicates the fact that inter/multi disciplinary approach is the part of University's academic culture.

The Department of Science &Technology (DST) has made available a special grant for PURSE programme under which the Centre for Interdisciplinary Studies in Science & Technology (CISST) is established. Various programmes are offered by CISST for example,

MSc in Defense Science, Earth Science, Biomedical Science, Bioinformatics.

To nurture the scientific temper in interdisciplinary programmers, University has introduced research projects of interdisciplinary type. The list of interdisciplinary research projects taken up by various faculty member are listed an Annexure elsewhere in Criterion-III.

The Human Resource Development Centre is also organizing the Refresher Courses of multidisciplinary type. The list is enclosed as:

(Please see Annexure–5: Interdisciplinary and Multidisciplinary Programmes organized by the UGC Human Resource Development Centre, Sardar Patel University)

www.spuvvn.edu/iqac/rar16/annexures/ann-5.pdf

For the List of the Interdisciplinary programmes run by the university:

(Please see Annexure–6: Department-wise List of Interdisciplinary Programmes)

www.spuvvn.edu/iqac/rar16/annexures/ann-6.pdf

1.3   CURRICULUM ENRICHMENT

1.3.1   How often is the curriculum of the university reviewed and upgraded for making it socially relevant and/or job oriented/knowledge intensive and meeting the emerging needs of students and other stakeholders?

The curriculum of the university is reviewed in the relevant faculty by the respective Board of Studies every three to five years and upgraded as per the need keeping in view the feedback of stakeholders.

1.3.2   During the last four years, how many new programmes at PG levels were introduced? Give details about:

- **Interdisciplinary**
  MSc in Biomedical Science
  MSc in Defense Science
  MSc in Earth Science
- **Programmes in Emerging Areas**
  MSc in Information Technology
  MSc Food and Nutrition with specialization in Food Design and Quality Assurance
  MSc Food and Nutrition with specialization in Nutrigenomics
  MSc Food Biotechnology with specialization in Food Design and Quality Assurance
  MSc Food Biotechnology with specialization in Nutrigenomics

BEd Special Education to Mentally Retarded People
MEd Special Education to Mentally Retarded People
PhD in Social Work

1.3.3 What are the strategies adopted for the revision of the existing programmes?

The university keeps abreast the changes taking place in society, environment and the frontiers of various branches of knowledge. The changes are reflected in the teaching by introducing corresponding revisions in the programmes and introducing new programmes. All branches of the knowledge meet at the horizon demanding the emergence of interdisciplinary studies. The university has been very sensitive introducing programmes and courses of studies in accordance with the same.

The university adopts the UGC guidelines for curricula with relevant changes looking at the needs of the local social demands.

As already mentioned the feedback of the stakeholders has a vital role in framing of syllabus.

Looking at the current trends, the university has also incorporated the due weightage of skill (*KAUSHAL*) based courses and programmes. Research is an integral part of the University. The university has bagged special recognition to many of its departments from UGC/DST/DAE because it has included in its curriculum the component of research oriented courses and students project inculcating the research environment of the starting level. This is because of the component of research oriented courses and projects at PG level.

Please see Annexure–7: Details of Courses/Programmes Revised (Department-wise)

www.spuvvn.edu/iqac/rar16/annexures/ann-7.pdf

1.3.4 What are the value-added courses offered by the university and how does the university ensure that all students have access to them?

The University has been offering the following value-added courses:

- Computer Applications (Home Science)
- Community Nutrition (Home Science)
- Communication Technology (Home Science)
- Entrepreneurship Development (Home Science)
- Language and Literature and ICT (English)

- Writing for Academic and Professional Purposes and Life Enrichment (English)
- Literary and Critical Terms and Movements and Communication Skills (English)
- Author Study and Critical Thinking and Problem Solving Skills (English)
- Life Enrichment course (Gujarati as well as MSW)
- Consumer protection and behaviour, counselling of needy people (Psychology)

1.3.5 Has the university introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skill Development Corporation and other agencies?

Out of the 21 areas identified by the NSDC for the purpose of introducing high order skill development programmes, the University has launched the following programmes:

- Spoken Tutorial Project offered by IIT Mumbai National Mission on Education through ICT, MHRD, Govt. of India (MBA)
- ICT Translation &Editing (Gujarati)
- Information and Communication (MSW)
- Communication Skills (MSW)
- Critical Thinking and Problem Solving Skills (MSW)

1.4 FEEDBACK SYSTEM

1.4.1 Does the university have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?

The University has developed a formal mechanism to get feedback from students regarding the curriculum. Feedback on curriculum is obtained from students. The Head of the Department collects feedback on curriculum periodically. The suggestions and comments collected from the feedback are placed before the DIQAC for discussion and consideration. The IQAC of the University closely monitors the execution of the formal mechanism designed for collection of feedback on curriculum.

1.4.2 Does the university elicit feedback on the curriculum from national and international faculty?

The required feedback from various professors visiting under various exchange programs is considered.

1.4.3 **Specify the mechanism through which affiliated institutions give feedback or curriculum enrichment and the extent to which it is made use of.**

The Boards of Studies of the university also have members from various affiliating colleges/institutions. The composition of Board of Studies is fixed by the statute book. The chairman of board of studies is also on rotation bases therefore the members from affiliated colleges have equal share in revising the syllabi and also for academic reforms.

1.4.4 **What are the quality sustenance and quality enhancement measures undertaken by the university in ensuring the effective development of the curricula?**

The University has been initiating many quality enhancement measures which are shown below for the effective development of the curriculum:

The University has been taking many steps to enhance and sustain the quality to ensure the effective development of the curricula. The composition of the Board of Studies ensures the significant representation of undergraduate teachers and postgraduate teachers over and above other experts to develop the holistic approach in course designing of a programme from UG to PG. Keeping in view the thrust areas developed at various department, the emerging areas in particular discipline and its application the curricula are developed around the same.

Additional Information regarding Curricular Aspects

One student from the first batch of MSc Earth Sciences has spent 4 months for his project work of semester IV at PRL, Ahmedabad and he was eventually cleared their JRF examination and he is presently registered for PhD. This exam was also taken up by students from IITs and other Central Universities. The success of our student indicates that our curriculum is of sufficient and national quality.

The MSc programmes offered by CISST have the following unique features:

- Highly interdisciplinary and holistic in content
- Sufficient stress on training in foundations of Basic Sciences including Mathematics and Statistics
- Mandatory Research Projects
- Exposure to highly sophisticated Scientific Equipments
- Involvement of Faculty Members of other Departments and experts from other National Labs in curriculum designing.
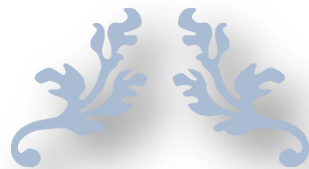
CRITERION II

[TEACHING-LEARNING AND EVALUATION]

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?

Since Sardar Patel University is the State University, it follows all the rules and regulations of the State Government in the admission process. As a public organization, the University keeps open all the admission information and makes the admission process truly transparent. Notification for admission to different PG courses is issued in daily leading news papers and the details are hosted on the University website (**www.spuvvn.edu**). The prospectus is made available on the university webpage. The hard copies of the brochures prepared by certain departments are sent to various universities, colleges and institutes to gain wide publicity. The merit list of applicants for each programme is also displayed prominently on the Notice Board in the Department concerned as well as on the university website. The counselling date/test date/interview date and time (if any), for different departments are announced in the prospectus itself.

At each stage of the admission process, due information is made available publicly. The information hosted on our website includes list of candidates with their merit and dates of counselling. Wherever the admissions are based on admission tests, the lists of qualified candidates are also made public on and website. The process of counselling is carried out by the departmental admission committee.

2.1.2 Explain in detail the process of admission put in place by the university. List of 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) any other criteria followed by the university).

In all the cases the admission is based fully on the merit. For first three years of the assessment period the process of admission was semi-automated. The forms were made available on the website for downloading. The candidates had to submit the application in hard copy. The merit list was prepared after the data entry by the university. The candidates were offered the admission in a personal counselling on a pre-determined date printed in the prospectus. During the latter two years of the admission process, university adopted a tailor made University Management System fully automated for the stages from

online applications to preparation of merit lists. The counselling process remains the same.

Following the guidelines of UGC, the admissions to MPhil and PhD are based on entrance test and counselling.

In the professional courses (MPharm, MBA, MCA) admissions are governed by the State Level Admission Committee for Professional Courses (ACPC) based on Common Management Admission Test (CMAT) score. Detailed information is supplied along with the application form to the candidates. The reservation policy decided by the government is duly followed in the process of admission maintaining the transparency.

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

The admission process at UG level is decentralized at respective affiliated college and institute level as per the intake approved by the University. The colleges are asked to give the admissions as per the university guidelines about eligibility, merit, reservation quota etc.

The university facilitates the admissions of students by issuing Provisional Eligibility Certificate (PEC), equivalence wherever necessary. The university also addresses the issues of redressal as they are received by constituting appropriate committees. The university arranges for the transfer of credit to the students migrating from other universities.

2.1.4 Does the university have a mechanism to review admission process and student profile annually?

Yes, in a pre-meeting with the Heads of various departments and sections, the process of admission is discussed before the printing of prospectus. The admission process is reviewed based on informal feedback by the Heads of departments, feedback from students, and necessary reforms are introduced. This includes counselling at departments to a central place at Gyanodaya building of university. The details of profiles of students admitted is under different categories is maintained and recorded.

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

* **SC/ST**
* **SEBC**
* **Women**

∗ **PH**
∗ **Economically Weaker**
∗ **Outstanding achievers in sports and other extracurricular activities**

The University, since its inception, followed inclusive policy and as a result, the students belonging to marginalized communities claim their due share in total admissions of the University. The percentage of students belonging to SC, ST, Persons with varied Disabilities (PwD) and Socially and Economically Backward Classes (SEBC) in the University constitute a significant share and that stands as a testimony for the successful strategies adopted by the University to increase/improve the access for such categories.

The strategies adopted to improve access for:

SC, ST: The University follows statutory reservations scrupulously for providing access to SC, ST students after providing due relaxation in eligibility, qualification, age etc as per government rules time to time. To develop competencies to succeed in competitive examinations special coaching is provided through UGC sponsored coaching centres. The students are provided pre-placement training and placement support. The University follows social equalization policy and does not permit any kind of social discrimination. All measures are taken to provide safety and security.

The SC/ST Cell, which takes necessary steps to display all notifications/circulars on all the notice boards and provides guidance to the students belonging to SC/ST. Important decisions taken by the university advisory committee for scheduled caste/scheduled tribes are strictly followed and implemented. SC/ST Cell also monitors the progress of the NET coaching classes with the help of financial assistance from the UGC, New Delhi for SC/ST and minority students and provides the guidance for competitive examination.

The following scholarships/fellowships are made available to SC/ST/SEBC:

- State Government scholarships for students whose parent's income prescribed by government time to time.
- Gujarat Government fellowships for MPhil/PhD students.
- Concession in the fee for the students whose parents have a BPL card.
- The accommodation and boarding is free for ST students admitted into constituent department and affiliated colleges. A 200 seater separate hostel is built for ST candidates exclusively namely Eklavya hostel. A separate modern hostel with 500 seats capacity each for

male and female SC students has been constructed and named as Samras hostel.

Women: Female students are provided accommodation in exclusive hostels for women. The prescribed tuition fee is exempted completely to girl/women students under the Kanya Kelavani programme of Government of Gujarat. The University has set up a Prevention of Sexual Harassment and Grievance Cell to infuse confidence by providing equal opportunities for the women students. All measures are taken to provide safety and security. An anti ragging cell is created at department level and the contact numbers of the anti ragging committee are displayed prominently on the notice board of the department. All the other measures suggested by government taken care of.

Persons with varied Disabilities (PwD): The University follows statutory reservations for persons with varied disabilities as per the Government norms. The essential facilities like ramping and special chairs are provided.

Economically weaker sections: The free studentship to 10% of total admitted students is provided by the university. The other benefits are provided as per government norms.

Minority: State Government scholarships for students whose parent's income prescribed by government time to time. Gujarat Government fellowships for MPhil/PhD students.

(Please see Annexure–8 for the Details of Scholarships/Studentships Awarded to Students Belonging to ST/SC/SEBC/Economically Weaker Sections.)

www.spuvvn.edu/iqac/rar16/annexures/ann-8.pdf

2.1.6 Number of students admitted in university departments in the last five academic years:

Categories	2010-11		2011-12		2012-13		2013-14		2014-15	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
SC	147	85	127	86	174	106	140	119	90	121
ST	142	83	105	113	118	110	109	118	83	138
SEBC	258	141	245	180	239	140	200	127	210	176
General	859	733	777	766	771	779	673	688	549	679
PWD	06	01	07	02	05	-	05	02	-	01

2.1.7 **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.**

The number of applications received for various programmes are approximately 2.5 times more than number of seats.

Programmes	Year	Number of students admitted
PG	2010-11	2267
	2011-12	2245
	2012-13	2315
	2013-14	2042
	2014-15	1897
MPhil	2010-11	188
	2011-12	163
	2012-13	127
	2013-14	139
	2014-15	150
PhD	2010-11	78
	2011-12	251
	2012-13	208
	2013-14	208
	2014-15	208
Certificate	2010-11	51
	2011-12	90
	2012-13	38
	2013-14	-
	2014-15	30
Diploma	2010-11	02
	2011-12	-
	2012-13	-
	2013-14	-
	2014-15	-
PG Diploma	2010-11	269
	2011-12	160
	2012-13	192
	2013-14	131
	2014-15	131

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

No programme is discontinued.

2.2 CATERING TO STUDENT DIVERSITY

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

Yes, orientation classes and induction classes for the newly admitted batches of students are conducted in the beginning of the term in almost in all the departments. Senior faculty members of the departments are involved in such programmes. The programme is designed by individual department based on the students profile and course needs. The common issues covered include introduction to life in the campus, infrastructure, students support facilities, learning resources, conventions and traditions, expectations and issues regarding Anti-ragging Cell, Women Cell, Placement Cell, etc.

2.2.2 Does the university have a mechanism through which the "differential requirements of the student population" are analysed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

Yes, the analysis of student's profile is conducted as it provides insight into the differential requirements of various students. The departmental committees analyze different requirements of the student population with respect to curriculum, career, opportunities, add on courses and training skills. Major requirements of the students are identified and the support programmes and classes are organized by the departments accordingly. Every year university gets students from foreign countries like Nepal, Bangladesh, Yemen and other Asian countries apart from students from Jammu and Kashmir through ICCR. The list of such students is provided in Criterion-I. A separate centre called International Students Centre of the university has been taking care of all differential needs of these students.

2.2.3 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?

Yes, the faculty members identify slow learners, who require remedial classes after the completion of the first semester examination. Some of the departments conduct NET/SLET coaching classes. A separate

NET/SLET coaching centre funded by UGC is functioning in the campus. Statistics department provides add-on courses like certificate courses in (i) SPSS (ii) Biostatistics and (iii) Financial Statistics.

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

Yes, the university arranges remedial classes for slow learners and disadvantaged sections of the society. University also awards state government sponsored scholarships to SC/ST, SEBC and Freeships to economically disadvantaged students and gives concession in tuition fees for the economically backward students.

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

The advanced learners are provided an opportunity to interact with various experts to make them motivated in taking up pointed studies towards research. Advanced learners are oriented towards research component in the programme, and are facilitated to interact with visiting scientists from other institutes. In most of the departments students are encouraged to attend summer programme and other training school. Every year about two to three students go for Mathematical Training and Talent Search (MTTS), Advanced Training in Mathematics (ATM).

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.)?**

The teaching, examination and vacation schedules are prepared well in advance of the commencement of the academic year by the university; it is prepared in consultation with the heads of the departments, principals of colleges and the administrative officers. After the university calendar is finalized, the departmental calendar is prepared, where details like, internal tests, internal practical examination, arrear tests extra-curricular activities are planned.

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, syllabus outline of all courses are uploaded on the university website; the outline is also made available to the students by the teachers concerned.

2.3.3 **Does the university face any challenge 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.**

Due to shortage of the faculty in some of the departments extra classes are taken to complete the curriculum within the stipulated time. If necessary, these classes are conducted on holidays as well.

2.3.4 **How is learning 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.**

The basic philosophy of the university is to make the learning student-centric. Different faculties adopt suitable teaching and learning methodologies to involve students and to facilitate participative learning. In each department, seminar is a part of a regular academic curriculum, in which students are encouraged to teach topics, interact with other students and they are evaluated on that basis. The science departments involve students in lab practical as an experiential learning. The focus of the teaching-learning process is to develop skills and competencies among the students and to make them self independent. In MBA department students are involved in individual and group projects in each course as well as summer internship for 6 weeks in any corporate organization. Students are provided with e-learning resources. The use of ICT in teaching-learning further strengthened the concept of participative learning. Students are provided with ample opportunities to ventilate their ideas and to carry out experiments of their own. The focus of the teaching-learning process is to develop skills and competencies among the students and to make them independent.

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

All the academic departments are encouraged to invite experts from industry, research institutions and people of eminence in different fields. Budgetary provision is made for this purpose. The departments are encouraged to organize seminars, conferences, workshops, etc., by seeking support from funding agencies and the stakeholders. Grants are sanctioned under various schemes like SAP/CAS/FIST/Shri IA Patel (Shertha) Visiting Professor/UGC exchange programme/MS Joshi endowment fund etc. for inviting experts from industry and other institutions for giving lectures.

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

Sufficient e-learning resources are provided in the campus of the university. Internet facility is provided in all the departments and hostels. The University Library subscribes to online e-journal/e-book which can be accessed through INFLIBNET. The university signed MOU with IIT Mumbai for Spoken Tutorial Project funded by Government of India.

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?

The following facilities are created to help the students and the faculty to keep pace with the recent developments in their subjects:

- Most of the class rooms are equipped with Projector facility.
- Internet based resource collection is made available to the students.
- Access to e-books and journals is made available to the students and faculties.
- Use of e-learning resources like MOODLE-MOOCS and Open Source Learning are encouraged.
- Some of the departments are equipped with StarBoard, Interactive Panel Board, Visualizer etc. as smart class facilities.

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?

Faculty members are constantly keeping eye on the open source online resources useful to the students and the new resources are brought to the notice of the students. Certain departments, for example, the mathematics department, have created and have been managing the online discussion groups like *ugcnetmath@yahoogroups.com, topologicalalgebras@yahoogroups.com.*

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

Modern Information and Communication Technology (ICT) has oriented traditional classrooms into 24x7 learning place. University has already provided the hostels with Internet connectivity via Wi-Fi. Faculty members use Internet connectivity to share information with students. Students themselves share their ideas via social media like Facebook, Twitter, WhatsApp etc. Some departments give filed projects, so students are engaged in practical learning.

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.

Each of the faculty members acts also as advisor and counsellor to attend the academic as well as other needs (if any) of the students.

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?

It is worthy to note here one of the glaring innovative methods adopted by Biosciences teachers in teaching of Plant Taxonomy. Instead of following the tradition to give the pre determined plant specimen to the students, they encourage the students to look for plant specimen in their field/villages or surrounding. The specimens are assigned to the groups of students for studying.

In CISST, there are many visiting professors associated with teaching. In these cases an e-repository of content is created and maintained.

Majority of the faculty members in each department are using modern teaching aids in teaching learning process. Also they are adopting innovative teaching methods relevant to the subject and suiting to the need of the students. Students are motivated to contact the faculty members by means of social media like Whats-App, Hike, E-groups and Facebook.

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

The University has an established culture of nurturing creativity and scientific temper among the learners. The following are regularly taken up activities for the purpose:

• The successful entrepreneurs, scientists of national repute are invited frequently to the university to deliver expert lectures and to interact with the students.
• Encouraging the students for participation at Youth Festival, Anveshan etc.
• In some departments, the students are required to interact with different types of stakeholders like dairy farmers and households to obtain primary data, during which they learn communication skills,

methods of interviewing, data analysis etc. that develop and strengthen creativity amongst them.

- Gujarati department introduced course paper entitled 'creative writing' for nurturing creativity.
- The University has an active Community Science Centre. The departments encourage the students to visit and participate in the multi-faceted activities of the centre at regular intervals.
- The University has a Museum that attracts students to many programmes organized by it.

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?

In the following departments the project constitutes a mandatory component of the curriculum:

- CISST
- Computer Science
- Electronics
- Home Science
- Pharmaceutical Science
- Physics
- Materials Science
- Statistics
- MBA
- Sociology

In the following departments the projects are offered as an elective to selected students:

- Biosciences
- Gujarati

In Mathematics department, the project work is voluntary and extra over the mandatory credits.

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?

The University has well qualified pool of human resource. Wherever, there is a need on account of superannuation of teachers, the workload is shared by other teachers or a faculty that is appointed on contract basis or help of visiting professors from other universities is sought.

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?

All the faculty members are provided with the computer with Internet connectivity, printer in their offices for developing their computer aided teaching. Most of the faculty members have interwoven the use of ICT and computer aided presentation in teaching.

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?

The evaluation of teachers is done at the end of each semester by the students. The students' feedback forms containing information about the teacher's performance relating to different aspects like punctuality, subject knowledge and motivation etc. are examined. The self-appraisal reports of each of the faculty relating to teaching and research are evaluated, by the university.

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 following measures are taken to update the subjects and teaching skills of the faculty:

- Participation in orientation and refresher courses
- Participation in national and international seminars, conferences, workshops, etc.
- Organization of national seminars, conferences, workshops etc.
- Participation of faculty members in training programmes on emerging trends
- Inviting experts to interact with the faculties

2.4.2 Furnish details of the faculty (Status as per academic year 2014-15)

Highest Qualification	Professors		Associate Professors		Assistant Professors		Total
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	
Permanent teachers							
PhD	06	01	36	05	67	23	138
PG	-	-	-	-	01	07	08

Highest Qualification	Professors		Associate Professors		Assistant Professors		Total
	Male	Female	Male	Female	Male	Female	
Temporary teachers/Ad-hoc/Contractual							
PhD	-	-	-	-	02	05	07
PG	-	-	-	-	03	10	13

The number of new appointment made during last five years is 14.

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

Department/ School	% 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
Biosciences	86	-	14	-
Business Studies	75	25	-	-
Chemistry	77	23	-	-
Computer Science	100	-	-	-
Economics	67	33	-	-
Education	100	-	-	-
Electronics	100	-	-	-
English	100	-	-	-
Gujarati	60	40	-	-
Hindi	40	20	40	-
History	33	33	33	-
Home Science	100	-	-	-
Library & Info. Science	100	-	-	-
Materials Science	100	-	-	-
Mathematics	67	11	11	11
MBA	72	14	14	-
MSW	50	-	50	-
Physics	80	10	10	-
Pharmaceutical Science	100	-	-	-
Political Science	75	25	-	-
Psychology	75	25	-	-
Sanskrit	33	66	-	-
Sociology	80	20	-	-
Statistics	60	20	20	-
BEd	75	25	-	-

2.4.4 How does the university ensure that qualified faculty are appointed for new programmes/emerging areas of study (Biotechnology, Bio-informatics, Nanotechnology, Comparative Media Studies, Diaspora Studies, Forensic Computing, Educational Leadership, etc.)? How many faculty members were appointed to teach new programmes during the last five years?

The university offered three new PG programmes in Earth Science, Biomedical Science and Defense Science in CISST. The applications received are scrutinized and the candidates who have potential for teaching interdisciplinary subjects and can handled research in the area are selected based on their performance of their interview. Some faculty, at entry level, are selected on contractual basis from university's own recourses. Efforts are also made to get faculty positions approved for interdisciplinary teaching and three such faculties are recently approved by Government of Gujarat. Seven faculty members are appointed as contractual basis as per the Government of Gujarat rules.

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

Sr. No.	Department	Name	Scheme	Time Duration
1	Mathematics	Prof SJ Bhatt	NBHM Visiting Professor	01/04/2011 to 31/03/2013
2	Mathematics	Prof SJ Bhatt	UGC Emeritus Fellow	10/02/2015 to 09/02/2017
3	Gujarati	Prof BR Brahmbhatt	Emeritus Fellow	July 2015 to July 2017
4	Chemistry	Prof HS Patel	UGC BSR Faculty Fellow	2014 to 2017

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.)?

The university awards seed grants and interdisciplinary research grants from its own recourses by following a scrutiny system by inviting the proposals from the faculty members. The projects proposals are asked to be presented before panel of experts. The six monthly progresses are also monitored in a review meeting. The details of such grants are given elsewhere. The university facilitates the visits of faculty members abroad for attending conferences for availing short to long visits under exchange programme by invitation. The faculty members are given full salary and duty leave during such visits. The young faculty members are also

encouraged and given duty leave for attending orientation, refresher course, short term training programme at HRDC and other reputed institutes.

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?

Year	No. of Awards	No. of Recognitions
2010-11	07	02
2011-12	02	01
2012-13	03	02
2013-14	02	-
2014-15	01	-

For more details see 3.4.4.

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

Programme	Number of faculty participated
Refresher Courses	44
HRD Programmes/Short Term Programme	26
Orientation Programmes	20
Staff Training conducted by the university	10
Staff Training conducted by the other Institutions	01
Summer/Winter Schools, Workshops, etc.	05

(Please see Annexure–9: for the Details of Staff Development/UGC-HRD Programmes Participated by Faculty Members.)

www.spuvvn.edu/iqac/rar16/annexures/ann-9.pdf

2.4.9 What percentage of the faculty have

been invited as resource persons in Workshops/Seminars Conferences organized by external professional agencies?
    About 50%.

participated in external Workshops/Seminars/Conferences recognized by national/international professional bodies?
    About 70%.

presented papers in Workshops/Seminars/Conferences conducted or recognized by professional agencies?
    About 80%.

teaching experience in other universities/national institutions and other institutions?

About 10%.

industrial engagement?

About 5%.

international experience in teaching?

NIL.

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?

The Examination Reforms Unit conducts on average 1-2 workshops to the faculty members. The faculty members improve their teaching learning methods through the programmes shown in 2.4.8.

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?**

Our faculty and faculty members from other universities are involved in UGC teacher exchange programme for delivering lectures at each other places. The university also invites eminent persons in the campus under I.A. Shertha Scheme, UGC visiting fellow programme and also under the auspices of various chairs created for specialized study. Visiting professors are also invited under the heading of academic activities of SF programmes.

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?

The detail scheme of instructions, syllabi and examination pattern are available for all the courses. Further, the students are briefed by the department regarding the examination pattern and method of evaluation in the beginning of the academic year itself.

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?

- Each of the answer-books used has a Serial No. in the space on the top which also has the Examination No. of the candidate concerned and the Junior Supervisor's signature. All this is flapped by the examinee himself/herself, thereby lending a greater credibility to the system. Recently answer books are bar-coded.

- The answer books are distributed faculty-wise with separate numbers allotted to every faculty to ensure its identity and to foreclose the possibility of the misuse of the answer books. Arrangements have been put in place to maintain the account of the answer books, block-wise at the Examination Centres.

- We have introduced a Hall-Ticket with a given candidate's photograph printed on it for the Junior Supervisor in the Examination Hall could use it to ascertain the examinee's identity. It also lists the subjects in whom he or she would appear alongside day, date, and time of examination etc.

- We publish the Results on the University Website. The university has its own Computer Centre for processing and declaring examination results. All the results are uploaded time to time on the university website immediately after publication of results.

- The bar-coded answer books are secured and the barcode is captured directly to the mark sheet avoiding disclosure of candidate's seat number and identification number.

- The examination papers are printed in the university press on the day session wise and distributed block wise. A separate secured enclosure is established in the university press for the examination. The question papers are supplied to examination centres before 30 minutes to 1 hour.

- A separate four floor Pariksha Bhavan (Gyanoday) is constructed by the university by pooling funds from various sources. This facility enables taking examination of around 2,700 students session wise and completely covered under the surveillance of CCTV. This facility is also used for central assessment when the examination is over.

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.).**

All results are published within 30 days from the last date of examinations. Students can see their results on the university website. The detailed notification of results is sent to respective departments/colleges/institutes immediately after one day of declaration of results. The media is informed about the declaration of results.

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?**

The university follows a flapping system and central assessment for university examinations. Each of the answer-books used has a Serial No. in the space on the top which also has the Examination No. of the candidate concerned and the Junior Supervisor's signature. All this is flapped by the examinee himself/herself, thereby lending a greater credibility to the system. Flapped/bar-coded answer-books evaluated by faculty members. The information inside in the barcode remains as such till the declaration of results.

2.5.5 **Does the university have an integrated examination platform for the following processes?**
- **Pre-examination processes: Time table generation, OMR, student list generation, invigilators, squads, attendance sheet, online payment gateway, etc.**
- **Examination process: Examination material management, logistics, etc.**
- **Post-examination process: Attendance capture, OMR based exam result, auto processing, generic result processing, certification, etc.**

Pre-examination processes:

SPU has been using a tailor made University Management System (UMS). Following the online application and manual admission, the admitted students are registered using UMS. The internal marks are entered online by the departments analysing the same and the online application forms, the hall tickets and student lists are created. Allocation of centres is partially automated.

Examination process:

Examination material inventory is managed; the university press is partially automated.

Post-examination process:

Data entry of marks is carried out at the university Computer Centre followed the central assessment at various centres. Then onwards all the processes till declaration of result, pre and post examination coding of answer books by students applying for reassessment are automated. The process of application of degree certificate to preparation and printing of degree certificate is automated. The printing of mark sheets and degree certificates with several security features is done at computer centre.

2.5.6   Has the university introduced any reforms in its PhD course work evaluation process?

The students pursuing PhD programme are required to complete 3 courses each of 3 credits. A specially constituted committee with subject expert and research guide is responsible for setting the question papers as well as evaluation of the answer books.

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

Yes, the university has made provision for including the name of the college in the degree certificate.

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

The sectional head of the examination section is responsible for addressing the grievances of the students with reference to examinations, taking support from Dean of concerned faculty and answer books are made available for observation on demand. The reassessment of the answer books is allotting under the direct control of Honourable Vice Chancellor. The students are given an opportunity to register their grievances within 10 days after the publication of the results. They can seek recounting or revaluation of their answer scripts. The above process is defined by the university ordinance.

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?

The graduate attributes are clearly attributed while designing and developing course structure and curriculum. The graduate attributes are also developed. The planning and execution of the programme ensure that all graduate attributes are properly addressed. The teaching plan, the methods of tools used in the teaching learning process help in the execution of the programme towards the graduate attributes. The outcomes are accessed in the form of clarity to the students on goal formulation and expectation from the programme. Besides, the success

in placement is a major indicator for assessing the outcome of clarity in Graduate Attributes.

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?

The learning outcome is not formally stated, however, the same is explained by the teacher and through continuous evaluation process.

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

There is a blend of class room teaching, self-learning of the students, group learning, experimentation, field study, discussions and seminars, conduct of academic events, participation in competitions, etc. to achieve intended learning outcomes. The department also plans for continuous and student specific assessment. Regular class tests, assignments etc., are used generally to assess the performance and progress of the students.

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

The university collects and analyses data on student learning through feedback.

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?

The use of ICT enabled lecture delivery and several automated methods as described above for the confidential and fairness in evaluation.
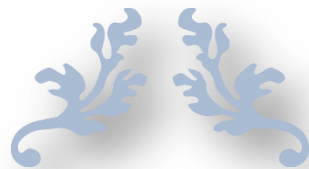
CRITERION III

[RESEARCH, CONSULTANCY AND EXTENSION]

CRITERION-III
[RESEARCH, CONSULTANCY AND EXTENSION]

3.1 PROMOTION OF RESEARCH

3.1.1 Does the university have a Research Committee to monitor and address issues related to research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.

The promotion and administration of research is being taken care of by departmental research committees (DRCs). The university has constituted the committee as per RPG Ph.D. 20 in accordance with UGC regulation 2009. Every post graduate department as well as the constituent college of the University has a DRC consisting of the head of the department as the chairman of the committee and at least three senior faculty members. The dean of the respective faculty is an invited member of this committee. This DRC is constituted by the University on recommendations of the Head of the respective department.

Similarly, setting up the question paper for PhD entrance examination and evaluation of the examination papers are done by the core committee of the respective department/institute. The core committee is constituted as per R.PG.Ph.D.12, by the Head of the department/recognized institute with at least three members and dean of respective faculty. This committee shall set the question paper, provide solution to the test paper, conduct the test, assess the answer sheets, prepare and display merit list based on the results and arrange a counselling-cum-interview session of qualified applicants with the research committee in the PG department/recognized institute concerned, as the case may be.

The fundamental responsibilities of the DRCs include handling framing and changing of course syllabus from time to time, coordinating and conducting the credit courses, counselling and admission of students as well as monitoring the progress of the research students. The committee is also responsible for addressing problems faced by research students.

Recently, Sardar University has taken a number of steps towards the improvement of the quality of PhD thesis and revamped the existing rules according to the recommendations of the University Grants Commission. Most important steps taken in this regard include:

- Introduction of an entrance test for admission to PhD programmes of the University.

- The research committee reviews and guides the proposed work plan of each candidate during the counselling session for admission to PhD programme.
- A mandatory presentation of the work plan along with a thorough review of literature by the research student after registration.
- Two credit courses, one on research methodology and another one related to the subject of PhD to be completed by the research student within a year after admission to PhD programme.
- A mandatory pre PhD presentation (prior to submission of PhD thesis) on the research work done to the faculty and members of the Board of the respective department. The members present can suggest any modifications or corrections in case of any lacunae or unacceptable or doubtful content.

(Please see Annexure-10: for the Composition of DRC/Core Committee)
www.spuvvn.edu/iqac/rar16/annexures/ann-10.pdf

3.1.2   What is the policy of the university to promote research in its affiliated colleges?

- The faculty members serving in the affiliated colleges are encouraged to pursue MPhil/PhD degrees and they are given admission into MPhil and PhD Programmes in the Postgraduate departments/institutes on priority basis. Such candidates are registered as part-time students and are not charged for tuition fees up to eight terms from their registration.
- Affiliated colleges/institutes with a recognized research centre have recognized PhD guides and they are allotted PhD candidates.
- The faculty members working in the affiliated institutes with UGC 2(f) and 12(b) are encouraged to apply for minor and major research projects from various funding agencies.

Following is the list of Faculty members working in affiliated colleges who were permitted to register as Teacher Fellows under UGC's Faculty Development Programme for their PhD degree:

Sr. No.	Name of Teacher Fellow	Institute/ College	Name of the supervisor	Name of funding agency	Date of PhD	
					Registration	Completion
1	Hardik Bhatty	MB Patel college of Science, Anand	Dr Ujjval Trivedi, Dept of Biosciences	UGC, New Delhi	14-04-2004	02-02-2012

Sr. No.	Name of Teacher Fellow	Institute/ College	Name of the supervisor	Name of funding agency	Date of PhD	
					Registration	Completion
2	Umang Bharucha	MB Patel college of Science, Anand	Dr Ujjval Trivedi, Dept of Biosciences	UGC, New Delhi	24-06-2004	13-08-2013
3	Dhruv Dhananjay	NV Patel Science College	Dr BH Patel Dept of Electronics	UGC, New Delhi	04-11-2004	Nov 2015
4	Dr KK Patel	Smt SM Panchal Science College – Talod	Dr KD Patel, Dept of Physics	UGC, New Delhi	15-06-2010	14-06-2012
5	Niharika Gautam	Education Dept	Dr MK Yagnik	UGC, New Delhi	19-05-2014	In progress

3.1.3 What are the proactive mechanisms adopted by the university to facilitate the smooth Implementation of research schemes/projects?

The University is committed to smooth implementation and completion of research projects. The principal investigators of the research projects are given all the required administrative support to make his/her work comfortable for the timely completion of the project.

- The University also takes care about the timely release of grants and timely auditing of Accounts and submission of utilization certificate to the various Funding Agencies.

- A purchase committee has been constituted to simplify the procedure of purchase of equipment etc. from project funds. To facilitate smooth handling of the projects all UGC funded research projects and programmes such as DRS, SAP and CAS are handled by a separate section of the University. Projects financed by the Union Government, the State Government and other public and private sector organizations is handled by the general section of the University to facilitate the release of funding, auditing of Accounts and submission of Utilization Certificate in time.

- To inculcate research attitude and to encourage young and budding researchers to initiate research work, the University, from its own funds, provided "seed grant" up to ₹1,00,000 to faculty members of the Post Graduate departments as well as affiliated institutes.

- Advance financial support was provided to many principal investigators who received projects from various national funding agencies. In case of delay in release of funds by funding agencies,

the University continues financial support from its resources to Investigator and project staff for smooth continuation of the research work.

3.1.4 How is interdisciplinary research promoted between/among different departments/schools of the university and Collaboration with national/international institutes/industries?

The University departments regularly undertake interdisciplinary research involving faculty members from within the departments as well as departments within the University and outside the University. University encourages interdisciplinary research between and among different departments, Industries and also international collaborative research.

To facilitate and approve the PhD registration for interdisciplinary research work, a committee consisting of the Dean of the concerned faculty, Head of the department, concerned guide and a subject expert appointed in consultation with the Head of the department.

A number of interdisciplinary research projects are being pursued by various science departments such as Chemistry, Biosciences, Physics and Home Science. Some of the most common interdisciplinary research programmes include protein and single crystal X-ray crystallography; metagenomics; nanoscience and technology; evaluation of anti-microbial activity and cytotoxicity (bioassay) of synthetic and semi-synthetic compounds; deriving and validating models in Business Management and Finance through statistical tools.

As mentioned in table below, AIIMS, New Delhi; NEERI, Nagpur; IICT, Hyderabad; BARC, Mumbai and IGIB, New Delhi are some of the notable institutes of national repute with which collaborative research programmes have been carried out. Similar programmes have been also carried out between industries such as BASF, India and NGOs such as GUIDE and Pratham.

Sr. No.	Names of national/international institutes / industries collaborating	Nature of collaboration	Major achievements
	National Organization		
1	Collaboration of Prof. Datta Madamwar with Prof TP Singh, All Indian Institute of Medical Science (AIIMS), New Delhi	In the area of Cyanobacterial Phycobilinprotein especially in structure determination of truncated Phycoerythrin	Novel structure and protein sequence of light harvesting protein has been deduced and resulted in publication in high impact journal of International repute

Sr. No.	Names of national/international institutes / industries collaborating	Nature of collaboration	Major achievements
2	Collaboration of Prof Datta Madamwar with Dr Yogesh Shouche, National Centre of Cell Science (NCCS), Pune	In the area of bacterial diversity and metagenomics	The work resulted in deciphering of microbial community structure of different polluted sites which resulted in high quality publications
3	Collaboration of Prof Datta Madamwar with Prof Archna Gayatri, MS University, Baroda	In the field of metagenomics	The study resulted in understating degradation potential of several bacteria and the their diversity at polluted sites, also resulted in high quality publications
4	Collaboration of Prof Datta Madamwar with Dr Hemant Purohit, National Environmental Engineering Research Institute (NEERI), Nagpur	In the area of bacterial metabolomis and bioremediation	Could result in technology development and quality publications.
5	Collaboration of Prof Datta Madamwar with Dr Venkata Mohan, IICT, Hyderabad in the field of bioremediation (Liquid Waste Management and Bioreactors)	In the field of bioremediation (Liquid Waste Management and Bioreactors)	Could result in technology development and quality publications.
6	Collaboration of Prof Datta Madamwar with Dr Vinod Kumar, Bhabha Atomic Research Centre (BRAC), Mumbai	In the area of Cyanobacterial Phycobilinproteins in cloning, purification and crystallization	Could result in technology development and quality publications.
7	Collaboration of Prof Datta Madamwar with Dr MN Gupta, IIT-Delhi	In the area of Biocatalysis (Non-aqueous Enzymology)	Novel processes may be developed for ester synthesis
8	Collaboration of Prof Datta Madamwar with Dr Rakesh Sharama, Institute of Genomics and Integrative Biology (IGIB), New Delhi	In the field of metagenomics	Generation of scientific information and addition of new knowledge

Sr. No.	Names of national/international institutes / industries collaborating	Nature of collaboration	Major achievements
9	Collaboration of Prof Datta Madamwar with Dr MD Imtaiyaz Hassan, Centre for Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia, New Delhi	In the area of cyanobacterial pigment C-phycoerythrin stability and folding	Resulted in publication in high impact journal of International repute
10	Collaboration of Prof Datta Madamwar with Dr Devkar, MS University, Baroda	In the area of Cell Cytotoxicity	Resulted in high quality publications
11	Collaboration of Prof Datta Madamwar with Dr Sarita Gupta, MS University, Baroda	In the area of Cell Cytotoxicity	Resulted in high quality publications
12	Collaboration of Prof Datta Madamwar with Prof Chaitanya Joshi, Head, Animal Genomics and Biotechnology department, Veterinary Science college, Anand Agricultural University, Anand.	In the areas of Metagenomics (Whole Genome Sequestering)	Microbial community structure has been scrutinized and also resulted in high quality publications
13	Collaboration of Prof RB Subramanian with Prof Chaitanya Joshi, Head, Animal Genomics and Biotechnology department, Veterinary Science college, Anand Agricultural University, Anand.	A collaborative research work on High throughput exome sequencing for SNP genotyping in four buffalo breeds of Gujarat	Two PhD thesis and significant scientific information generated has result in high quality publications as well as created prospects for future developmental work.
14	Collaboration of Prof NV Sastry (PC) and VK Aswal (CC), BARC, Mumbai	Studies on Aggregation Behavior of Pyridinium based Amphiphilic Ionic Liquids in Water and in Presence of Aggregate Growth Promoters	Publications and PhD thesis
15	Dr SS Soni and VK Aswal, BARC, Mumbai	Influence of micellar morphology on conductivity of polymer gel electrolytes	Publications and PhD thesis

Sr. No.	Names of national/international institutes / industries collaborating	Nature of collaboration	Major achievements
16	Dr KR Surati and Dr PK Iyer, IIT Guwahati.	Highly efficient Phosphorescent Iridium (III) and Zn(II) Mixed Ligand Complexes for OLEDs: Fabrication and it's Application	Publications and PhD thesis
17	Department of Gujarati, SP University and National Translation Mission, Delhi	Translation & editing (workshop)	Proceeding is prepared and is in press
18	Department of Gujarati, SP University and CIIL, Mysore	Natural language processing (work shop)	A research problem has been developed and a PhD student is working on it.
19	West zone cultural centre, Udaipur	Indian Folk drama presentation & seminar	Book is being prepared.
Non – Government organization			
20	Collaboration of Prof Datta Madamwar with GUIDE, Kuchchh	Joint research project. In the area of bacterial diversity and metagenomics	Microbial community structure has been scrutinized and also resulted in high quality publications
21	Collaboration of Prof RB Subramanian with Dr Darshan H Patel, PD Patel Institute of Sciences, CHARUSAT, Changa, Gujarat	In area of protein engineering	Skill development in this thrust area and enthusing outcomes published as well as presented in conferences which are appreciated by area experts as evident by prizes awarded at International conferences
22	Collaboration of Prof RB Subramanian with Dr Bushra Jarullah, Kadi Sarva Vishwa Vidyalay, Gandhinagar	Phenotyping and molecular screening of Tomato germplasm for resistance to Tomato Yellow Leaf Curl Virus from agro climatic regions of Gujarat	Publications
23	Collaboration of Prof JSS Mohan with Global Technology Mission, Santokpura	Understanding for establishing tissue culture lab for commercial propagation of plantation crops at Santokpura.	Established Commercial Facility for Tissue Culture.

Sr. No.	Names of national/international institutes / industries collaborating	Nature of collaboration	Major achievements
Industries			
24	Collaboration of Prof RB Subramanian with BASF, India.	To check the effects of Headline 20%WG and Cabrio top 60% WG on physiology and growth of tomato and cotton.	Novel fungicides with growth promoting properties were tested against fungal pathogens in Cotton Tomato and Maize. Both dosage and frequency of application were checked. Finally benefits to farmers and consumers were identified and these recommendations were submitted to BASF for necessary action.
25	Collaboration of Prof JSS Mohan with BASF, India.	To check effect of agrochemicals on groundnut and banana.	Around 30 cultivars of Tomato were screened for resistance and susceptibility against Tomato yellow leaf curl virus. It was found that none of the cultivars grown in Gujarat are resistant. A few tolerant varieties were identified. Genes such as Ty1 and Ty2 were found to be responsible for tolerance.

Taking up a novel initiative, the University has established a Centre for Interdisciplinary Studies in Science and Technology (CISST). This centre will serve as a nodal point for carrying out research in interdisciplinary areas of Science and Technology. The centre at present offers post graduate courses in emerging areas of interdisciplinary studies such as Biomedical technology, Bioinformatics, earth science and defence technology. The centre also houses sophisticated instruments as a central facility.

3.1.5 Give details of workshops/ training programmes/ sensitization programmes conducted by the university to promote a research culture on campus.

The activities conducted for sensitization and promotion of research culture on campus are:

- Two Day Symposium on Innovations in Science - SPU research Scholars Meet (ISSPURSM – 2012), 8th – 9th January 2012, Sardar Patel University, Vallabh Vidyanagar.

- National Workshop on Research Methodology: A March Towards Creating Quality through Research, 12–14th March 2012, Sardar Patel University, Vallabh Vidyanagar, under the auspices of KCG, Gandhinagar.

- Department of Business Management has created a 'GHPIBM Research Forum' in 2015 with an objective to promote and facilitate research activities among young teachers in the field of Management and related Social Sciences. This forum has more than 150 registered members, who apart from formal meetings interact through groups formed on popular social networking sites.

- Department of Business Management organized research workshop on, "How to write research paper and publish it?" for teachers working in undergraduate colleges in 2015 in which 120 teachers participated.

- Apart from the above programmes, all departments have regularly organized national/international conferences, where MSc students and research scholars get exposure to contemporary research work presented by invited leading scientists from organizations of repute. In all PG departments have organized 86 such events to sensitize and promote research culture in University campus.

3.1.6 How does the University facilitate researchers of eminence to visit the campus as adjunct professors? What is the impact of such efforts on the research activities of the University?

Many eminent personalities with proven research competencies visited the University on the invitation of various departments. Some of the eminent scientists and researchers who visited various departments of the University include Dr Darshan Pathak, Yale University, USA, Dr. Harish Joshi, Emory University, USA, Prof TP Singh, AIIMS, New Delhi, Shri Hasmukhbhai, Prof VS Vyas, Dr Amritaben Patel, Chairman, NDDB, Anand.

The University has various endowments and chairs under which many experts from various fields of Science, sociology, Economics, Management and language studies were invited to deliver lectures. These include Shri IA Patel Shertha Visiting Professor Fellow

Programme, Sardar Patel Chair and Corporation Bank Chair. Apart from these, a number of eminent scholars were invited under the UGC teacher exchange programme and UGC-CAS, UGC-SAP and UGC-DRS programmes.

A total of 237 scientists/researchers/scholars of eminence visited the University and delivered lectures. The list of researchers of eminence who visited the campus is shown in **Annexure-11** for Details of Lectures Delivered by outside Experts

www.spuvvn.edu/iqac/rar16/annexures/ann-11.pdf

The impact of the visits of such eminent personalities is highly significant as is evident from the research output in terms of contribution of research papers and research projects undertaken by the University faculty members.

Guest lectures delivered in various departments of Sardar Patel University

Department/ Institute	2011	2012	2013	2014	2015
Biosciences	09	02	10	04	04
Chemistry	07	04	02	-	08
Computer science	01	02	03	-	04
Home science	-	-	03	-	-
Material science	03	-	07	-	-
Mathematics	03	02	01	01	01
CISST	-	-	02	02	01
Pharmaceutical sciences	06	02	-	-	01
Physics	08	02	01	01	-
Statistics	-	02	11	-	-
Business studies	02	01	-	01	03
Economics	05	06	02	05	-
Gujarati	04	07	04	03	06
Hindi	01	-	-	-	01
History	05	05	01	06	04
Library science	-	02	-	-	-
MSW	-	07	05	09	07
MBA	03	05	05	04	05
Total	**57**	**49**	**57**	**36**	**45**

3.1.7 **What percentage of the total budget is earmarked for research? Give details of heads of expenditure, financial allocation and actual utilization.**

Sardar Patel University is a State University. Maintenance Grants received from the state government is utilized for creating research infrastructure in the departments, maintenance of research laboratories and purchase of chemicals, glassware and laboratory equipments. The DST funding under PURSE programme, the funding under UGC-SAP, DST-FIST, collaborative projects with industry and research projects received by the faculty from various central funding agencies like UGC, DST, DBT, CSIR, MoEF and state funding agencies such as GUJCOST and GSBTM support research activities in the University

3.1.8 **In its budget, does the university earmark funds for promoting research in its affiliated colleges? If yes, provide details.**

Yes, Seed money policy is available to affiliated colleges for promoting research.

3.1.9 **Does the university encourage research by awarding Post-Doctoral Fellowships /Research Associateships? If yes, provide details like number of students registered, funding by the university and other sources.**

The University encourages research fellows to continue their research work after obtaining their PhD degree as Post-Doctoral Fellows. Though the University has no provision to sanction financial assistance to Post-Doctoral Fellows, it encourages them to apply for various funding agencies like UGC and CSIR to obtain fellowships. Once they obtain a fellowship grant they are given infrastructural support. Support was also provided through DST-PURSE programme to a number of students. A total of 11 students received postdoctoral fellowship in the University. University funded research associate-ship of eight fellows during 2012 to 2015 and total amount of ₹17,38,000 was disbursed as fellowships from DST-PURSE grant received during this period.

(Please see Annexure-12: for the Details of Post-Doctoral/Research Associates in Departments)

www.spuvvn.edu/iqac/rar16/annexures/ann-12.pdf

3.1.10 What percentage of faculty have utilized the sabbatical leave for pursuit of higher research in premier institutions within the country and abroad? How does the university monitor the output of these scholars?

Yes, Provision is available in University rules accordingly, a few faculty members utilized the sabbatical leave to pursue higher research in premier institutions like IISc, Bangalore, Genome Research Centre, MS University of Baroda as well as abroad under the Indo-Hungarian Educational Exchange Programme and WF James Chair Professor of Pure and Applied Sciences.

3.1.11 Provide details of national and international conferences organized by the university highlighting the names of eminent scientists/scholars who participated in these events.

Sardar Patel University organized 86 seminars/conferences/workshops of National and international level **(Please see Annexure-13 for Details.)**

www.spuvvn.edu/iqac/rar16/annexures/ann-13.pdf

Many eminent scholars attended these programmes and delivered talks. To mention a few notable among them:

- **Prof P Balaram**, IISc, Bangalore on Mass Spectroscopy
- **Dr Howard Bath,** Children's Commissioner Northern Territory, Australia, delivered a talk on "Response Ability- How to Build"
- **Mr Samuel Mammen,** Program Manager/Certified Response Ability Pathways Trainer, Oakhill Boys Ranch, Edmonton, Canada: "The Circle of Courage –Programme Overview and Evidence Base"
- **Mr Raghunath Medge**: President, Mumbai Dabbawala Association- "Work is Worship"

The number of the Seminars/Conferences/Workshops/Programmes organized by Sardar Patel University departments are as follows:

Department	2010-11	2011-12	2012-13	2013-14	2014-15
Biosciences	01	-	-	-	-
Chemistry	02	-	02	-	01
CISST	-	01	01	01	02
Home Science	-	01	-	01	-
Material Science	02	01	02	01	-
Pharmaceutical Science	01	01	-	01	-
Physics	-	01	-	01	-
Statistics	01	-	-	01	-
Business Studies	05	02	03	02	01

Department	2010-11	2011-12	2012-13	2013-14	2014-15
Economics	-	02	-	02	01
English	01	02	01	01	-
Gujarati	-	-	01	-	-
Hindi	01	-	-	01	-
Sanskrit	-	-	01	01	-
History	01	01	-	01	-
Political Science	-	-	-	01	01
Psychology	-	-	01	01	01
Social Studies	03	01	03	04	03
Sociology	-	-	02	01	01
MBA	01	01	01	01	02
TOTAL	**19**	**14**	**18**	**22**	**13**

3.2   RESOURCE MOBILIZATION FOR RESEARCH

3.2.1   What are the financial provisions made the university budget for supporting students' research projects?

The MSc Students are encouraged to undertake dissertation projects as a part of their curriculum with a weight-age ranging from 10 to 25 credits either as an elective course or as a core course, mainly during fourth semester of their Master's degree programme. The expenses towards their recurring and analytical needs or hiring services are met from respective department's laboratory expenses budget. The list of students who have pursued research projects during their MSc Programme is given as Annexure-14.

(**www.spuvvn.edu/iqac/rar16/annexures/ann-14.pdf**)

Whenever project requires a student to travel for sample collection, survey or field work, University allows such activities with required financial support.

3.2.2   Has the university taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted?

Teachers are encouraged to patent their research findings few teachers from science faculty of university have filed patent applications listed below and are waiting for the completion of the process. University is providing Financial supports to faculties to file for patents from University own fund.

Sr. No.	Name of Faculty member/s and department	Title of patent	National/ International	Status Filed/ granted	File no./patent grant no and date
1.	Dr RB Subramanian, Department of Biosciences	Process for purifying L-asparaginase from Asparagus officinale	National	Filed	592/DEL/ 2009
2.	Dr KC Patel, Department of Biosciences	Process for the production of a yellow antioxidant pigment from the fungus Colletotrichum	National	Filed	3267/DEL/ 2014
3.	Dr Datta Madamwar, Department of Biosciences	Sophorolipids as enzyme inducers	International	Filed	2007
4.	Dr SS Soni, Department of Chemistry.	Substitude carbazole based dyes for dye sensitized solar cells & other opto-electronic devices	National	Filed	2609/MUM/2013
5.	Dr Kiran Kalia, Paridhi Kalia, Ronak Arora, Richa Gupta	The development of spion conjugated tetracycline hydrochloride coated gtr membranes.	National	Filed	1653/MUM/2013
6.	Dr Amita R Shah, Dr Madhuri Narra, Dr Garima Dixit and B. Velmurugan	Enzymatic hydrolysis of biomass	National	Filed	573/MUM/2015

3.2.3 Provide the following details of ongoing research projects of faculty:

The faculty members of post graduate departments of this university have exhibited their enthusiasm in research and development activities and are very active in approaching external funding agencies for getting their research proposals sponsored. The list of ongoing externally funded research projects is as follows:

Name of the Principal Investigator/Co-investigator	Title	Funding Agency	Amount (in ₹)	Duration
Department of Biosciences				
Prof Datta Madamwar	Molecular assessment of bacterial community structures of long term oil contaminated soil and screening of lipase producers for lipase production and their application in ester synthesis in organic solvents.	UGC, New Delhi	13,80,000	2013-16
Prof Datta Madamwar as Coordinator with Dr RB Subramanian & Dr Hareshkumar Keharia	Molecular and '-omics' technologies to gauge microbial communities and bioremediation of xenobiotic contaminated sites.	DBT, New Delhi	3,07,73,000	2010-16
Prof Datta Madamwar and Dr Imtiyaz Hassan, JMI	Folding and stability of naturally truncated photosynthetic pigment C-phycoerythrin from cyanobacteria *Phormidium tenue.*	DST, New Delhi	2,83,000	2012-15
Dr RB Subramanian and Dr Bushra Jarullah, Kadi Sarva Vishwavidyala, Gandhinagar	Phenotyping and molecular screening of tomato germplasm for resistance to Tomato Yellow Leaf Curl Virus from agro-climatic regions of Gujarat.	GSBTM, Govt. of Gujarat	7,43,968	2013-16
Prof Kiran Kalia	Association of Single Nucleotide Polymorphisms with Type 2 Diabetes and Diabetic Retinopathy in Western Indian Population	UGC New Delhi	13,27,800	2013-16
Prof Datta Madamwar and Dr Karthikeyan, GUIDE, Bhuj.	Ecological perspective of rann of Kachhchh studies on Physio Chemical and Microbial community structure of Soil	DBT New Delhi	78,99,600	2014-17

Name of the Principal Investigator/Co-investigator	Title	Funding Agency	Amount (in ₹)	Duration
Dr Mrs Amita R Shah and Prof Datta Madamwar	An integrated approach for the development of microwave system for pretreatment of lignocellulosic biomass for cellulolytic enzyme and bioethanol production.	DBT, New Delhi	23,70,000	2014-17
Department of Chemistry				
KR Surati and Dr PK Iyer, IIT Guwahati.	Highly efficient Phosphorescent Iridium (III) and Zn(II) Mixed Ligand Complexes for OLEDs: Fabrication and it's Application	DST, New Delhi	25,92,555	2013-15
KR Surati	Novel Coordination Compounds Derived From Pyrazolone Schiff Base and Transition Metal Ions: Design, Synthesis, Characterization and Biological Activities Investigations"	UGC, New Delhi	8,54,800	2012-15
SS Soni	Development of Water based polymer gel electrolytes for advanced devices	DST, New Delhi	25,40,800	2013-16
SS Soni	Scaling up of the dye-sensitized solar cell fabrication.	DST, New Delhi	87,58,816	2014-16
KR Surati	Highly efficient phosphorescent mixed ligand complexes for OLEDs: Fabrication and it's application.	GUJCOST, Gandhinagar	2,20,000	2014-16
Department of Home Science				
Ms Viraj Roghelia	Haematinic effect and antioxidant activity of cactus pear fruit (O*puntia Ficus- Indica)*".	UGC, New Delhi	3,25,000	2014-16

Sardar Patel University, Vallabh Vidyanagar, Gujarat

Name of the Principal Investigator/Co-investigator	Title	Funding Agency	Amount (in ₹)	Duration
Department of Physics				
Dr NK Bhatt (PI)/ Prof AR Jani (CI)	Vibrational response and phase transition in certain non-simple metals and alloys covering wide range of densities	UGC, New Delhi	6,82,800	2013-16
Prof MP Deshpande	Synthesis and characterization of V_2- VI_3 compound in single crystal/nanomaterial/thin film forms.	UGC, New Delhi	11,16,800	2013-16
Department of Statistics				
Dr MB Bhatt	Inferential Problems on non-regular (truncated parameter) family of distributions.	UGC, New Delhi	11,95,800	2013- 16
Department of Gujarati				
Dr SD Rathwa	A comparative study of a Bhili Epic Rom-sitmani Varta and Valmiki Ramayana: A cultural aspect.	UGC, New Delhi	1,66,000	2014-16
Department of MSW				
Dr SD Mishra	Spatial and Regressional Analysis of Determinants of Declining Juvenile Sex Ratio in Urban Gujarat with Spatial refernce to 3 Distrcits - Mehsana, Gandhinagar and Surat.	UGC, New Delhi	8,34,300	2013-15
Department of Psychology				
Prof SM Makvana	To Study Fear Of Death And Well-Being With Reference To Diabetes Challenger.	UGC, New Delhi	1,45,000	2014- 16
Dr SN Pathak	A comparative study of emotional maturity self concept and Psychological well being of tribal secondary higher school students.	UGC, New Delhi	1,65,000	2014-16

Name of the Principal Investigator/Co-investigator	Title	Funding Agency	Amount (in ₹)	Duration
Department of Sociology				
Dr RH Makwana	An impact of tribal-sub plan scheme on the tribal community: A sociological study	UGC, New Delhi	8,02,100	2013-15
		Total	**6,39,35,139**	

3.2.4 Does the university have any projects sponsored by the industry/ corporate houses? If yes, give details such as the name of the project, funding agency and grants received.

The faculty members are encouraged to undertake industry sponsored research projects. The faculty members at Department of Biosciences have undertaken eight industry sponsored research projects and have details of these projects are listed below:

Name of the Principal Investigator/ Co-investigator	Title	Funding Agency	Amount (in ₹)	Duration
JSS Mohan	Evaluation of Physiological Effects of Pyraclostrobin 20% WG in Zea mays L.	BASF India Pvt. Ltd.	1,10,000	2010-11
RB Subramanian	An investigation on the effect of Pyroclostrobin on physiology and growth of Gossypium hirsutum	BASF India Pvt. Ltd.	1,39,000	2011-12
JSS Mohan	Evaluation of physiological effects of Pyraclostrobin 20% WG on Corn. (PI)	BASF India Pvt. Ltd.	1,39,700	2011-12
JSS Mohan	Evaluation of physiological effects of Pyraclostrobin 20% WG on Groundnut. (PI)	BASF India Pvt. Ltd.	1,39,700	2011-12
RB Subramanian	Effect of sequential applications of Headline 20% WG and Cabrio Top 60% WG on growth and physiology of Gossypium hirsutum (Cotton)	BASF India Pvt. Ltd.	1,98,000	2012-13
JSS Mohan	Evaluation of Physiological Effects of Headline 20% WG in corn (Zea mays L.)	BASF India Pvt. Ltd.	1,98,000	2012-13

Name of the Principal Investigator/ Co-investigator	Title	Funding Agency	Amount (in ₹)	Duration
JSS Mohan	Evaluation of physiological effects of Pyraclostrobin 20% WG on Groundnut. (PI)	BASF India Pvt. Ltd.	1,98,000	2012-13
JSS Mohan	Evaluation of physiological effects of Headline 20% WG on Corn.	BASF India Pvt. Ltd.	2,42,000	2013-14
RB Subramanian	An investigation on the effect of Headline 20% WG and cabrio top 60% WG on physiology and growth of Gossypium hirsutum under water stress	BASF India Pvt. Ltd.	2,42,000	2013-14
JSS Mohan	Evaluation of physiological effects of Pyraclostrobin 20% WG on Groundnut. (PI)	BASF India Pvt. Ltd.	2,42,000	2013-14
JSS Mohan	Evaluation of physiological effects of Pyraclostrobin 20% WG on Groundnut. (PI)	BASF India Pvt. Ltd.	2,75,000	2014-15
JSS Mohan	Evaluation of physiological effects of Opera 183g/l SE on Banana. (PI)	BASF India Pvt. Ltd.	2,75,000	2014-15
RB Subramanian	An investigation on the effects of Cabrio Top - 60% WG on growth and phsiology of Tomato (solanum lycopersicon)	BASF India Pvt. Ltd.	3,19,000	2014-15
RB Subramanian	An Investigation on the effect of Xcelora 50% FS and Standak Top 500 g/L FS in combination with Opera 18.3% SE on physiology and growth of maize (*Zea Mays L.*)	BASF India Pvt. Ltd.	2,75,000	2015-16
JSS Mohan	Evaluating the BASF fungicide package of practices: Seed treatment and foliar spray in groundnut for physiological effects and yield	BASF India Pvt. Ltd.	2,75,000	2015-16

The total amount of funding received from above industry sponsored projects is ₹**32,67,400** over a period of last five years.

3.2.5 **How many departments of the university have been recognized for their research activities by national/international agencies (UGC-SAP, CAS, DST-FIST, DBT, ICSSR, ICHR, ICPR, DAE-NBHM etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthroughs achieved by this recognition.**

The following departments are supported by UGC-SAP, CAS, DST-FIST, DBT etc.

Type of recognition	Amount sanctioned (in ₹)	Duration	Major Equipments
Department of Biosciences			
UGC-SAP	47,50,000	2007-12	1. Microlog workstation 2. Herbarium Cabinates and Computer software 3. Solid module for TOC analyzer 4. Rotary microtome
DST-FIST	71,00,000	2009-14	1. Gel Documentation system 2. Ultramicrotome 3. Fluorescent microscope 4. Gradient PCR 5. Fermenter accessories
UGC-CAS	2,47,00,000	2015-20	1. Near ultracentrifuge 2. FTIR 3. Ion chromatography
Department of Chemistry			
UGC-CAS	1,33,08,000	2011-16	1. CHNS /O-Analyser 2. Computer cluster 3. Spectrophotofluorometer
DST-FIST-II	38,00,000	2010-15	Simultaneous Thermal Analyzer (DSC-TGA) Q-600, TA instruments, USA
Home Science			
UGC-SAP-DRS-I	75,00,000	2010 -15	1. Auto analyser, Roche Diagnostic India. 2. Spectroflourimeter, Hitachi, India
UGC-Innovative programme on Nutri-	58,00,000	2010-15	1. Deep Freezer(-80°C), IB Scientific, India 2. Real Time –PCR, Roche, India

Type of recognition	Amount sanctioned (in ₹)	Duration	Major Equipments
genomics			3. Thermal Cycler, Eppendrof, India 4. Sonicator, Sonics & materials, INC, USA
Govt. of Gujarat, Innovative programme on Food Designing and Quality Assurance	39,50,000	2010-15	1. Gas Chromatography-606, Sigma Instruments, India 2. Food colour measurement system, Colourflex, IR Technology, India 3. Texture analyser, Brookfield, India 4. Digital Polarimeter, Rudoph, India. 5. Water activity meter, Empire Enterprise, India

Department of Materials Science

Type of recognition	Amount sanctioned (in ₹)	Duration	Major Equipments
UGC-CAS-II	1,06,00,000	2009-14	-

Department of Mathematics

Type of recognition	Amount sanctioned (in ₹)	Duration	Major Equipments
UGC – SAP – DRS II	59,75,000	2009-14	Not applicable
DAE – NBHM Regional Library in Mathematics (Western Region)	1,50,00,000	2010-15	Not applicable

Department of Physics

Type of recognition	Amount sanctioned (in ₹)	Duration	Major Equipments
DST-FIST	1,35,00,000	2006-11	Single crystal diffractometer
UGC-SAP	85,00,000	2012-17	1. Zeta Sizer nano s-90 2. Photoluminescence spectromerter 3. Potentiostat/Galvonostat 4. Schrodinger software 5. PDXL Qualitative Service Software

Department of Statistics

Type of recognition	Amount sanctioned (in ₹)	Duration	Major Equipments
UGC-SAP-DRS I	31,50,000	2009 -14	-
UGC-SAP-DRS II	82,00,000	2015 -20	-

Type of recognition	Amount sanctioned (in ₹)	Duration	Major Equipments
Department of Business Studies			
UGC-SAP	40,00,000	2013-18	-
Department of Economics			
UGC-CAS-I	50,50,000	2011-16	Photo copying machine, Personal Computers and Printers.
Department of MBA			
UGC-SAP-II	33,00,000	2011-16	Printers
Department of English			
UGC-SAP-DRS-II	30,00,000	2009-14	1. Photocopier 2. Computers and Printers 3. Handycam
Department of Gujarati			
UGC-SAP	25,00,000	05 years	1. Computer 2. Standing camera for library 3. Electronic smart board 4. Xerox machine 5. Scanner etc.

Significant outcomes and breakthroughs achieved:

The financial assistance from such agencies has been utilized to develop better infrastructure and recurring support to faculty members and students for their research, which resulted in improvement in number and quality of publications. On the basis of publications of Science faculty of our University, Department of Science and Technology selected our University for financial assistance under Purse programme. The funds received under Purse programme by DST were utilized to establish a Centre for Interdisciplinary Studies in Science and Technology (CISST).

Four departments (Department of Biosciences, Department of Chemistry, Department of Material Science and Department of Economics) have been recognized as Centre for Advanced Studies by UGC during last five years. Many departments are also inducted into special funding under DRS/SAP by UGC, New Delhi and FIST by DST, New Delhi.

3.2.6 List details of

- **Research projects completed and grants received during the last five years (funded by National/International agencies).**

List of completed and ongoing projects is given in Annexure-15.

www.spuvvn.edu/iqac/rar16/annexures/ann-15.pdf

The faculty members of the University have been actively engaged in research and development activities, which is evident from the number of major and minor research projects received.

Summary of major and minor research projects undertaken

Type of Project	Status	Source of Funds	Funds received/sanctioned (₹)
Major	Completed	External	8,00,87,329
	Ongoing	External	6,38,48,969
Minor	Completed	External	39,32,400
	Ongoing	External	12,08,000
Seed and interdisciplinary projects	Completed	SPU and DST_Purse Grants	30,45,000
		Total	**15,21,21,698**

- Inter-institutional collaborative projects and grants received

During last five years 10 Inter-institutional collaborative research projects have been undertaken of which thirteen have been completed and two are ongoing which are highlighted in the list of research projects. The total amount of funds generated from these projects is ₹**32,67,400**.

3.3 RESEARCH FACILITIES

3.3.1 What efforts have been made by the university to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the needs of researchers in emerging disciplines?

The postgraduate departments of university are constantly striving to improve infrastructural facilities for teaching and research. As a consequence, the departments of sciences and social sciences received financial support from DST-FIST, UGC-SAP, UGC-CAS, CSIR project, DBT/CEIB, UGC XIth Plan, State Government Grant, COSIST, DAE-BRNS-PII programmes for infrastructure development. Major equipments in the research laboratories at Bioscience, have been procured through funding from National organizations for research and development such as UGC, DBT, DST and CSIR. The University

provides financial assistance for any excess cost of equipment, sanctioned by funding agency.

Sophisticated Instruments to conduct research have been procured by Biosciences, Chemistry, Physics, Electronics, Computer Science, Home Sciences, Material Science, Pharmaceutical Science, Library and Information Science under different schemes of various funding agencies. Details about the sophisticated instruments/equipments are given in **Annexure-16.**

www.spuvvn.edu/iqac/rar16/annexures/ann-16.pdf

Each faculty member and research scholar is provided with a computer with internet connection and a printer. A researcher can have access to INFLIBNET services through internet. Also, for MPhil and PhD students computers with these facilities are installed in the Departmental Library. For Postgraduate students there is a Computer Lab at departments with internet facility.

By and large our Departmental Library and experienced faculty members cater the needs of researchers. Postgraduate students and researches have been allowed to use any of the equipment and / services for the academic or research purpose, free of cost

3.3.2 Does the university have an Information Resource Centre to cater to the needs of researchers? If yes, details of the facility.

There is departmental library at each postgraduate department and central library at the university. About 530 Research Journals and magazines are subscribed in a two way viz. the hard copy and soft copy at each postgraduate department and at central library of the university. The head of department make recommendations for journals/e-resources and library subscribes them by following proper administrative procedure. Detail of Research Journals and Magazine Subscribed are given in **Annexure-17.**

www.spuvvn.edu/iqac/rar16/annexures/ann-17.pdf

Number of Soft copy of thesis uploaded on website and Sodhganga every year. The process of uploading PhD thesis was initiated during 2014-15 and total 633 theses have been uploaded by the library staff. Further uploading of PhD thesis is still going on.

The Departmental Library of Mathematics is NBHM Regional Library for Western zone. The library contains around 8,000 books on Mathematics and around 50 journals are subscribed. There is a separate reference section housing the back volumes of the reputed journals.

Library Portal: Library portal is the platform of academic websites which displays open sources and IP (Internet Protocol) authenticated publishers' websites and DELNET consortia. It helps students, researchers and faculty members to search information at one platform. The training (during orientation programme) for utility of library portal is provided to each newly enrolled Master's students in University every year by Library staff of University's Central Library. Single click gives the information of e-Books, e-Resources and bibliographic database. There is single window search system called JCCC for UGC INFONET consortia. INDCAT database and DELNET are bibliographic database of books, journals and non-book material by which Inter Library Loan services are being given. So, Library portal is the unique feature to cater the needs of students, researchers and faculty members.

http://www.spuvvn.edu/administration/service_centres/library/home.php

Central Library subscribes e-resources on the recommendations received from the Head of Department and Principal Investigator for its Projects.

3.3.3 Does the university have a University Science Instrumentation Centre (USIC)? If yes, have the facilities been made available to research scholars? What is the funding allotted to USIC?

University has a University Science Instrumentation Centre (USIC). USIC extends its services for fabrication of Gadgets as per the needs and requirements of Faculty members/Research Scholars in the field of Electrical/Electronics/Mechanical/ Glass Blowing/Vacuum Technology

USIC offers and caters to the maintenance of following kinds and types of Instruments

- Analytical Instruments (like Spectrophotometer, Colorimeter, Ph Meter)
- Process Control Instruments (like Temperature Monitors and Controllers)
- Test and Measuring Instruments (CRO's, Multimeters)
- Power Supplies (SMPS, DC Regulated Fixed/Variable Power Supply)
- Optical Instruments like Microscopes, Optical Mono Pan Balance, Single Pan Balance
- Computers, Monitors, TV's, UPS, CVT's, Servo Stabilizers
- Electrical Instruments (Oven, Magnetic Stirrer, Heating Mental, Incubators)
- Electro Mechanical Devices (Orbital/Rotary Shakers)
- Air Conditioners, Refrigerators, Water Coolers, Deep Freezers

- Repairs and fabrication of Glass Ware like Quartz Glass Ampoules (Fabrication and Sealing), Laboratory Glassware (Corning Glass) - Burettes, Condensers, Round Bottom Flask, Glass Stirrer, Measuring Flask, Chromatography Column, 3 neck RB Flask, Separating Funnel

USIC developed new prototypes during last five years.

- Developed & Fabricated @18 Tissue Culture Racks.
- Designed, Developed and Fabricated a state of the Art LED based Variable Intensity/Variable Wavelengh Configurable Tissue Culture Rack with Power measurement and Timer for GAU – Khetiwadi worth ₹1,02,500.

The details of funding allotted to USIC and revenue generated is tabulated below:

Funds allotted and Revenue generated					
Budget Head	**2010-2011**	**2011-2012**	**2012-2013**	**2013-2014**	**2014-2015**
Repair& Maintenance of Equipment	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000
Consumable Articles	2,00,000	2,00,000	2,00,000	2,00,000	2,00,000
Consumables and Contingencies	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000
Data Sheets, Reference Manuals	60,000	60,000	30,000	30,000	30,000
Seminar, Training / Meeting A/C	27,000	15,000	15,000	15,000	20,000
Instrumentation Maintenance	-	-	-	5,00,000	-
Electricity Charges	65,000	65,000	65,000	65,000	75,000
Total Budget allotted	**5,52,000**	**5,40,000**	**5,10,000**	**10,10,000**	**5,25,000**
USIC Service Charges (Revenue generated) (in ₹)	21,30,256	23,43,662	25,19,966	25,64,987	1,96,750

The USIC has been offering its services to constituent departments as well as Institutions affiliated to University as well as other Institutes in and around Anand district. The types of services include maintenance of scientific equipments as well as fabrication of small equipment and

apparatus through which it generates income which is mentioned under USIC service charges like consultancy head in above table.

3.3.4 **Does the university provide residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates, summer fellows of various academies and visiting scientists (national/international)?**

Research scholars/Post Doctoral Fellow/Research Associate/summer fellowship holders are provided accommodation in quarter at University Colony with necessary furniture. They are given access to computer and internet facility at their concerned postgraduate department. Visiting Scientists are provided accommodation at University Guest House or University Colony depending on the period of visit. The Guest house is equipped with computer and internet facilities.

3.3.5 **Does the university have a specialized research centre/workstation on-campus and off-campus to address the special challenges of research programmes?**

- The department of Biosciences has Department of Biotechnology sponsored Centre of Excellence in Biotechnology (DBT-CEIB) which was established in 2010.
- University has established CISST which houses sophisticated equipment pertaining to experimental sciences.

3.3.6 **Does the university have centre of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories. (Provide details of analytical/library of services availed by the faculty/researchers from other Institutes/University).**

Researchers from neighbouring institutes avail various instrumentation facilities of the several postgraduate departments. In particular, Material Sciences Department is being visited by researchers from National Institute of Pharmaceutical education and Research (NIPER), Central university of Gujarat, Gandhinagar, INDUS University, MS University of Baroda to use analytical equipments for their research. The department of Chemistry extends its facilities and generates fund out of analytical services.

NBHM Regional Library

The NBHM Regional Library in Higher Mathematics for the Western Region, a national facility being developed by the DAE, Govt of India is housed in Department of Mathematics. This is a National facility being continuously developed since 2000; and the Department has taken the

responsibility to serve the mathematics community through this facility. There are only 11 such libraries across India.

This regional library has received total Grants of ₹5 crores approximately till now and there are approximately 8,000 Books, 900 back volumes and 35 theses in the Library. Also about 1,200 books are under the process of cataloguing in the Central as well as Departmental Library. The library subscribes 50 journals which includes three journals are subscribed from the State Government Grants amounting to the tune of ₹2,00,000 **(Please see Annexure-18: for the List of Journals Subscribed under NBHM Programme).**

www.spuvvn.edu/iqac/rar16/annexures/ann-18.pdf

It also includes air-conditioned Library Hall with Reading Room with internet connectivity, reprographic facility and e-contents. The following services are provided by this regional library:

- Books are issued to the students on all working days including vacation.
- Library services provided to around 50 mathematicians outside through photocopying facility/visits to the library.

The Library services were extended to the participants of various meets and students on the campus.

Agro Economic Research Centre and Cost Cultivating Scheme

The agriculture sector is considered as the backbone of Indian economy. From the very beginning of the planning process, the policy makers and planners in India have given high priority to the development of this sector. For better understanding of Indian agriculture, the Agro-Economic Research Centres (AERCs) were established in various agro-climatic regions of the country.

Agro-Economic Research Centre (AERC), Vallabh Vidyanagar was established in 1961 at Sardar Patel University by the Ministry of Agriculture, Government of India to carry out research in agricultural economics in the states of Gujarat and Rajasthan. The Centre is fully funded by the Ministry of Agriculture, Government of India, and it operates under the administrative controller of Vice-Chancellor. This is one of the 15 AERC Centres/Units established by the Government of India.

The Agro-Economic Research Centre (AERC) for the states of Gujarat and Rajasthan was established in July 1961 at the Sardar Patel University, Vallabh Vidyanagar by the Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, New Delhi. It was late Shri HM Patel (ICS retd.) who not only provided the vision for establishing such an Institute but also ensured the much needed support and encouragement for its growth at Vallabh Vidyanagar. AERC has been working as an associate institution of Sardar Patel University and enjoying autonomy status in its working. The Centre has completed 54 glorious years (1961-2015) of its journey marked by both achievements and challenges. During these years, the Centre has emerged as a strong policy feedback centre of the Ministry of Agriculture, Government of India due to hard work and strong commitment of the staff in the Centre. The focus of research effort in the initial stage was on comprehensive village surveys and re-surveys in order to understand the process and direction of change at the village level. Subsequently, the emphasis of research has shifted to problem oriented studies.

The Centre has by now completed 159 problem-oriented studies, 21 village surveys and 4 village resurveys. Most of these research projects have been taken up by Centre on the recommendation of the Government of India and State Governments of Gujarat and Rajasthan. Some of the projects have also been sponsored by other national and international organizations. During its long journey, the Centre has brought remarkable improvement in every aspects of research including methodological base of the studies. The studies have come out with useful findings and policy implications for agricultural and rural development of the states of Gujarat and Rajasthan. Many seminars and conferences were organized by the Centre (jointly with Department of Economics) during these years. Since 1970, the Centre has been also organizing the work of Comprehensive Scheme to Study Cost of Cultivation of Principal Crops in Gujarat entrusted to the Sardar Patel University by the Ministry of Agriculture, Government of India. Ever since its inception, the Centre has been working in close collaboration with the Post-graduate Department of Economics of the Sardar Patel University and so far it has helped/supported about 40 scholars to successfully complete their PhD work in agricultural economics.

The principle objectives of the Centre have been as follows:

- To make continuous study of the change in rural economy by means of surveys of villages each year, to be repeated after an interval of five years.

- To conduct adhoc investigation on problems of interest to the Ministry of Agriculture and Irrigation and the State Governments under their jurisdiction.
- To undertake research on fundamental problems relating to the agricultural economy of the country.
- To give technical advice to the Government of India and to the state Governments on such important issues as with mutual agreement, may be referred to the centre.
- The Area of Coverage of the Centre includes states of Gujarat, Rajasthan and UT of Dadra and Nagar Haveli

Women's Studies Centre

The identification of priorities for Women's Studies Centre at Sardar Patel University is based on the fact that the university is a rural-based one established with the aim of uplifting the educational level of the local population, neighbouring towns and interior villages. Proximity to urban settings such as Baroda and Ahmedabad has led to greater exposure in a section of the local female population here while the other half remains largely backward in all respects. In this background, the major aim and objective of the centre is capacity building in women.

Two categories have been identified namely the educated and employed women and the second group comprising of unemployed women, college goers, teens etc. ranging from the literate to the illiterate. The centre aims at capacity building in the educated, employed woman with regard to managerial abilities such as communication skills, administrative skills, confidence building etc. and along with this facilitating support systems such as research, day-care-centres, old age homes etc. on one hand and on the other, the centre will focus upon entrepreneurship skill building in unemployed women from a slighter wider age group such as adolescents, college girls, housewives and others from different SES. This broadly includes areas such as fabric embellishment including tailoring, popularization of khadi garments, as well as exploring entrepreneurship opportunities through home catering and services etc. Computer literacy has also been identified as an essential skill, which needs to be imparted to women.

Community Science Centre

The Community Science Centre (CSC) was established on 8th of June 2004, and was initially housed in the Department of Physics SPU Vidyanagar. The Centre got its present name after a generous donation of ₹26 Lakhs by Shri Chunibhai Chandubhai Patel (Kotastonewala) of Karamsad. The Centre has been recognized as the Anand District Community Science Centre by the Gujarat Council on Science &

Technology (GUJCOST) Department of Science & Technology govt. of Gujarat, Gandhinagar. The CSC was moved to its present premises in 2007, and has also seen an expansion in terms of infrastructure and facilities as well as scientific activities and programmes spread over the Anand District. This is the only CSC being run under a University set-up in Gujarat.

The Centre works with a broad vision and aim of taking science to people and bringing people to science. Our mission is to create interest, enthusiasm and awareness in science including mathematics, by working for students, teachers and common public. We motivate students and teachers to inculcate and bring out creativity through informal and non-formal programmes. Every opportunity is explored to interact with them to discuss matters and issues related to Science, technology and our development. Regular activities are carried out to support Science and Mathematics education especially in schools in Anand, district. It has also been our objective to collaborate with individuals and institutions in the above tasks, true to the spirit of a Community Science Centre.

Centre aims to carry out almost 175 activities and programmes during a year i.e. about 200 available working days, as per the GUJCOST guidelines. For more details visit:

http://www.spuvvn.edu/academics/academic_centres/community_science_centre/introduction

UGC - Human Resource Development Centre (UGC-HRDC)

The HRDC's main philosophy is to keep in mind that the teacher is central to the system. While it is universally accepted that the teacher is the pivot of the educational system, our system does not provide adequate opportunities for their professional development. It is, therefore, necessary to develop inbuilt mechanisms to provide opportunities for teachers within the framework of knowledge society. It is also accepted that a teacher must not be confined only to transmitting information; she/he must also orient students to meet the challenges of life, to not merely become a trained professional, but also a better citizen.

It was believed in the past that a college/university teacher learnt the 'art' of teaching on the job by emulating outstanding models such as his/her own teachers or senior colleagues. The stock-in-trade of the college/university teacher has always motivated the students. Today, it is no longer possible to expect a newly appointed teacher to acquire the 'art' of teaching by emulating his/her peers.

The Functions of HRDC are to plan, organize, implement, monitor and evaluate orientation courses for newly appointed college/university lecturers within the jurisdiction of one or more universities in a state. An ASC also organizes refresher courses for serving teachers, and orientation programmes for senior administrators and heads of department, principals, officers etc.

In a span of five years, 31 orientation programmes, 38 refresher courses 17 short term courses, 5 Interaction Programme for Ph D students, 2 Principals' meet and 4 capability enhancement programme have been organized successfully. In all, 97 different programmes involving 2,518 participants have been organized up till now. 818 eminent professors and more than 20 former/seating Vice Chancellors visited our college as resource persons. Being a separate autonomous entity of UGC and located on the University Campus, the centre has received the NAAC accreditation in May 2012. In addition to the regular activities, the teaching staff members of the UGC-HRDC-SPU are also contributing to teaching and research in the parent departments of the university. The HRDC strives to achieve excellence in the field of providing training to the teaching and administrative staff of the colleges and universities across India.

The activities of HRDC during last five years are summarized below:

Year	OC[*]	RC[*]	STC[*]	Other Programmes	local participants	Outstation participants	Total Participants
2010-11	05	02	02	02	150	114	264
2011-12	06	05	03	02	182	196	378
2012-13	05	08	01	02	166	190	356
2013-14	06	08	04	03	251	231	482
2014-15	05	10	05	02	184	454	638

[*] RC-Refresher Course; OC-Orientation Course; STC-Short Term Course.

For more details visit **www.hrdcspu.ac.in/gallery.aspx**

Institutional Repository

Knowledge Repository (DSpace) is a Digital Institutional Repository where the digitized content is available. As a first step towards Digital Library, the department of Library and Information of Sardar Patel University has digitized "Gyan Gangotri" a rare University publication of encyclopaedic nature divided into 34 volumes and grouped in subject clusters of Humanities, Social Sciences and natural Sciences. The Department aims to digitize some more publications of the University,

PhD thesis and other intellectual resources make them available through DSpace. **http://172.16.120.118:8080/jspui/**

Indian Diaspora Centre

Postgraduate Department of Sociology has UGC sponsored Centre for Indian Diaspora under which various research studies have been conducted and seminars have been organized. Department also published three books out of studies carried on Indian Diaspora.

Sr. No.	Title of Book	Publisher	Year of publication	Name of editor/s (if any)	ISBN
1	Indian Diaspora in National and Regional Context	University Press, SPU	2012	Dr JM Trivedi	978-93-81386-06-4
2	Indian Diaspora in Various Perspectives (in English)	University Press, SPU	2013	Dr HN Patel	918-93-81386-22-4
3	Indian Diaspora and its Contribution : Indian and Abroad (in English)	University Press, SPU	2013	Dr HN Patel	978-93-81386-33-0

3.4 RESEARCH PUBLICATIONS AND AWARDS

3.4.1 Does the university publish any research journal(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/are listed in any international database.

University publishes five journals. The details of them along with its composition of editorial board, editorial policies etc. are as follows;

- Journal of Education and Psychology (Published by PG Department of Education) ISSN No. 0022-0590; OCLC No. 1782870.
- Arth Vikas - Journal of Economic Development (Published by PG Department of Economics) ISSN: 0004-3567.
- Prajna: Journal of Pure and Applied Sciences (Basic Science), ISSN No. 0975-2595; Indexed in Indian Science Abstracts.
- Prajna: Journal of Humanities, Social Sciences and Business Administration, ISSN No.2250-0901.
- "SYNERGY": A Journal of Management (Published by Business Studies Department and MBA) ISSN No. 0973-922X.

According to University Handbook, the composition of Editorial Board is as follows:

- The Vice-Chancellor
- Deans Of faculties
- Eight persons appointed by the syndicate whom at least one should be principal of one of the members of the Board of Post-Graduate Studies and Research.

Tenure of the members: The term of office of the members appointed under (iii) shall be analogous to the term of the syndicate appointing such members.

In addition, University Library's publication division publishes selected PhD thesis in form of books and in last five years 43 books have been published under this scheme.

PhD thesis published in form of books by University Library during last five years

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Number of Books published	11	13	-	10	09
Amount Utilized (in ₹)	2,20,000	2,60,000	-	2,00,000	1,80,000

3.4.2   Give details of publications by the faculty:

The statistics of the literature published by faculty members of University during last five years is tabulated below:

	Science and Home Science	Social Sciences, Humanities and Languages
Number of papers published in peer reviewed journals (national/international)	**977**	**319**
Chapters in Books	**29**	**25**
Books edited		**36**
Books with ISBN with details of publishers	**17**	**54**
Citation Index - average:	**4.61**	**NA**
Cumulative Impact Factor - range / average:	**Range : 0 – 13 (Avg. = 1.82)**	**NA**
h-index : (Avg.)	**20***	

* According to Web of Science

(The Details of Publications is given as Annexure-19 and Chapters in Books, Books (Edited) and Books Published are given in Annexure-20)

http://www.spuvvn.edu/iqac/rar16/annexures/ann-19.pdf

www.spuvvn.edu/iqac/rar16/annexures/ann-20.pdf

3.4.3 Give details of

Faculty serving on the editorial boards of national and international journals

Twenty nine faculty members of University have been serving on editorial boards of national and international journals. The details are given in table below:

Sr. No.	Name of the faculty	Name of Journal	National/ International	Position
1	Dr Suresh M Makvana	The International Journal of Indian Psychology	International	Editor in-Chief
2	Prof RP Patel	Synergy	National	Chief Editor
3	Prof Datta Madamwar	Bioresource Technology	International	Editorial board member
		Current Biotechnology	International	Editorial Board Member
		Special Issue BIOCATALYSIS of Bioresource Technology	International	Guest Editor
4	Prof NV Sastry	International Journal of Industrial Chemistry and Biotechnology	International	Editorial board member
		Organic Synthesis and Medicinal Chemistry	International	Editorial board member
		International Journal of Physical Sciences	International	Editorial board member
		Journal of Indian Council of Chemists	National	Editorial board member
5	Dr Dayashankar Tripathi	PRAGNA	National	Chief Editor
		Sahitya Parivar	National	Editorial board member
6	Dr RA Vasant	Journal of Intercultural Ethnopharmacology	International	Editorial board member
		Journal of Experimental & Integrative Medicine	International	Editor board member

Sr. No.	Name of the faculty	Name of Journal	National/ International	Position
7	Dr PV Virparia	National Journal of System and Information Technology	National	Editor board member
		International Journal of Research and Reviews in Information Security and Privacy	International	Editor board member
		Research@ICT: International Journal of Information and Computing Technology	International	Editor board member
		International Journal of Computer Applications	International	Editor board member
		National Journal of Engineering and Science : Editorial Board	National	Editor board member
		International Magazine on Advances in Computer Science and Telecommunications	International	Editor board member
8	Dr DB Choksi	PRAJNA	National	Editor board member
		National Journal of Computer Science & Technology (NJCST)	National	Editor board member
		International Journal of Computer Science & Systems	International	Editor board member
		RESEARCH@ICT: International Journal of Information and Computing Technology	International	Editor board member
		International Journal of Research Issues in Computing Sciences (IJRICS)	International	Editor board member
9	Dr PS Sajja	International Journal of Computer Science & Applications, India	International	Editor board member
		International Magazine on	International	Editor board

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Sr. No.	Name of the faculty	Name of Journal	National/ International	Position
		Advances in Computer Science and Telecommunications, Republic of Macedonia		member
		International Journal of Computational Intelligence Techniques, UK	International	Editor board member
		INFOCOMP Journal of Computer Science, Brazil	International	Editor board member
		Research@ICT: International Journal of Information and Computing Technology, India	International	Editor board member
		International Journal of Data Mining and Emerging Technologies	International	Editor board member
10	Dr HJ Panchal	Journal of computational intelligence and electronic systems	International	Editor board member
11	Prof D Lakshminarayana	PRAJNA - Journal of Pure and Applied Sciences	National	Editor board member
12	Dr Rema Subhash	PRAJNA	National	Editor board member
13	Dr Namrita Kola	Asian Journal of Home Science	International	Editor board member
14	Dr Vinayak H Patel	Pragati: Compilation of Researches in Home Science	National	Editor board member
15	Prof LM Manocha	Bulletin of Carbon Science(Korea)	International	Editor board member
		Russian Journal composites and Nanostructures	International	Editor board member
		Eurasian-Techno chemical journal of chemical Science	International	Editor board member
16	Dr (Miss) RH Patel	Journal of Materials Science	International	Editor board member
17	Prof SJ Bhatt	Mathematics Today	National	Editor board member

Sr. No.	Name of the faculty	Name of Journal	National/ International	Position
		Banach Journal of Mathematics	International	Editor board member
		Mathematics Student	National	Editor board member
18	Dr HV Dedania	Banach Journal of Mathematics	International	Editor board member
19	Prof AB Patel	Mathematics Today	National	Editor board member
20	Prof AH Hasmani	Mathematics Today	National	Editor board member
21	Prof HP Trivedi	Vidyapeeth Samayik	National	Editor board member
		International Journal of Multi-Disciplinary	International	Editor board member
		Artha Vikas-Journal of Economic Development	National	Managing Editor
22	Dr JM Trivedi	KCG e-journal of social sense	International	Chief Editor
23	Prof DJ Chauhan	Artha Vikas-Journal of Economic Development	National	Managing Editor
24	Dr Sonal Bhatt	Artha Vikas-Journal of Economic Development	National	Assistant Editor
25	Prof NP Patel	PRAJNA	NATIONAL	Editorial board member
26	Dr HN Patel	Prajna,Research Journal, SP University	National	Editorial board member
		International Journal of Interdisciplinary Approaches	International	Editorial board member
		Samaj Veeganiki	National	Editorial board member
		Samajgosti	International	Editorial board member
27	Dr RH Makvana	A Journal of Asia for Democracy and Development: A Quarteriy Journal of Social Sciences	National	Editorial board member
28	Dr IM Macwan	Ideal research an international Multi disciplinary e-journal	International	Editorial board member

Sr. No.	Name of the faculty	Name of Journal	National/ International	Position
29	Dr Shivani Mishra	Journal of Social Welfare and Management	International	Editorial board member
		International Journal of Scientific and Engineering Research, Houston, Texas, USA	International	Editorial board member

Faculty serving as members of steering committees of international conferences recognized by reputed organizations/societies

Sr. No.	Name of Department	Name of Faculty member	Position in Steering Committee	Name of Conference	Name of organization/Society organizing the conference	Year
1	Biosciences	Prof Datta Madamwar	Advisory Committee Member	International Conference on Industrial Biotechnology at Patiala, India	Biotech Research Society of India (BRSI)	2012
2	Biosciences	Prof Datta Madamwar	Advisory Committee Member	International Conference on 'Advances in Biotechnology & Bioinformatics at Pune, India	BRSI	2013
3	Biosciences	Prof Datta Madamwar	Advisory Committee Member	International Conference on Emerging Trends in Biotechnology (ICETB-2014) at Delhi, India	BRSI	2014
4	Biosciences	Prof Datta Madamwar	Advisory Committee Member	Third Global Sustainable Biotech Congress at Jalgaon, India	Global Biotech forum	2014
5	Biosciences	Prof Datta Madamwar	Advisory Committee Member	International Conf. on New Horizons in Biotechnology at Trivandrum, Kerala, India	BRSI	2015

Sr. No.	Name of Department	Name of Faculty member	Position in Steering Committee	Name of Conference	Name of organization/Society organizing the conference	Year
6	Biosciences	Prof Datta Madamwar	Advisory Committee Member	International Conference on Recent Trends in Applied Sciences: Building the Institutional and Industrial Avenues (ICRTAS-2015)	Charotar Education Society, Anand	2015
7	Mathematics	AH Hasmani	National Organizing Committee	International Conference on Differential Geometry and General Relativity	Department of Mathematics, Aligarh Muslim University, Aligarh and Tensor Society of India	Dec 2012
8	Mathematics	AH Hasmani	National Organizing Committee	International Conference on Recent Advances in Mathematics	Department of Mathematics, RTM Nagpur University, Nagpur	Jan 2013
9	Mathematics	AH Hasmani	National Organizing Committee	International Conference on Differential Geometry and General Relativity	Department of Mathematics, Gorakhpur University, Gorakhpur and Tensor Society of India	Nov 2014
10	Education	Dr KS Likhia	Member	Prabuddhan International Seminar	All India Association of	2013-14

Sr. No.	Name of Department	Name of Faculty member	Position in Steering Committee	Name of Conference	Name of organization/Society organizing the conference	Year
					Education Research, Gujarat Chapter	
11	Education	Dr MK Yagnik	Member	Prabuddhan International Seminar	All India Association of Education Research, Gujarat Chapter	2013-14
12	Education	Dr MA Chotalia	Member	Prabuddhan International Seminar	All India Association of Education Research, Gujarat Chapter	2013-14

3.4.4 Provide details of

- **research awards received by the faculty and students**

  The totals of 26 research prizes/awards have been received by faculty members and 58 reaccrch prizes have been received by research students of the University. The details of research prizes and awards received by the faculty members and PhD students are given in Annexure-21.

  www.spuvvn.edu/iqac/rar16/annexures/ann-21.pdf

- **national and international recognition received by the faculty from reputed professional bodies and agencies**

  Good numbers of faculty members have received awards and recognitions as mentioned below:

2010-11

- Prof Datta Madamwar conferred Fellow of Association of Microbiologists of India in 2010.
- Dr NJ Parmar received an India International Friendship society, New Delhi's SHIKSHA RATTAN Award.
- Dr MP Patel was awarded Shiksha Rattan Puraskard by India International Friendship Society, New Delhi on 21-01-2011 for Metitorious Services, Outstanding Perfomance and Remarakable Role in the field of Chemistry.
- Prof SJ Bhatt conferred Fellow of Indian Academy of Sciences since December 2009.
- Prof SJ Bhatt was also awarded Hans Raj Gupta Award by Indian Mathematical Society in the year 2010.
- Dr GM Deheri was awarded Dolar Rai Mankad Award (Saurashtra University) for Excellence Research in Science.
- Prof SH Chaki was awarded "Hari Ohm Ashram Prerit Shri Bhaikaka Inter University Smarak Trust" prize of Sardar Patel University for the year 2008-2009 in Materials Science subject for research paper entitled "Electrical Properties and Surface Microtopographic Studies of Tungsten Disulfide Single Crystals Grown by CVT Technique".
- Prof Ajit Thakor was awarded Sarswat Gaurava Sanman By Somanath Sanskrit University; Sep 2010 Veraval.

2011-12

- Prof LM Manocha was elected Vice-President of Gujarat Science Academy; Vice-President of Indian Carbon Society; Chairman of MRSI (Gujarat Chapter).
- Prof (Mrs) S Manocha received Sardar Patel International Award-2011 by International Sardar Vallabhbhai Patel Foundation for Life time Achievement in Excellence in Technology Development.
- Prof CK Sonara received Rashtra Gaurav Award – 2011 – By Yuva Samuh Prakashan, Agrasen Press, Shivaji Chowk, Vardha (Maharastra).

2012-13

- Prof Datta Madamwar was conferred Fellow of Association of Biotechnology and Applied Pharmacy.
- Prof TV Raman Rao was conferred Fellow, Association of Biotechnology and Pharmacy (ABAP), Conferred on Dec. 2012.
- Prof TV Raman Rao received Dr CK Shah Award for the research Paper entitled "Banana fruit ripening as influenced by edible coatings" authored by Neeta B Gol and TV Ramana Rao in Plant

Sciences (Botany/Agriculture Botany/Plant Biotechnology) for the year 2011-2012.

- Dr SS Soni received with DST-FAST track Young Scientist Award.
- Dr RM Makwana was awarded Dr Ambedkar award & One Lakh rupee from Government of Gujarat in 2012.

2013-14

- Prof Kiran Kalia received 8th International Prestigious Sardar Patel Award 2013 in the Field of "Woman Empowerment".
- Dr AS Reddy received Outstanding Botanist award by the National Conference Committee on Recent Emerging Trends in Plant Sciences-2013.

2014-15

- Dr Manoj Soni was awarded Global Award For Distance Learning Leadership 2015, by the World Education Congress.

3.4.5 Indicate the average number of successful MPhil. and PhD. scholars guided per faculty during the last five years. Does the university participate in Shodhganga by depositing the PhD theses with INFLIBNET for electronic dissemination through open access?

The details of number of PhD/MPhil awarded during the last five years are as follows:

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	**Total**
MPhil	82	95	109	133	119	538
PhD	21	54	84	95	69	323
					Total	861

- Grand Total of PhDs and MPhils produced in the last five years = 861
- Total Number of Faculty in University All together = 158
- Average number of PhD/MPhil per faculty member during the last 5 years: 861/158 = 5.45

The list of PhD/MPhil Degrees awarded with title of the PhD thesis is given in Annexure-22.

www.spuvvn.edu/iqac/rar16/annexures/ann-22.pdf

3.4.6 **What is the official policy of the university to check malpractices and plagiarism in research? Mention the number of plagiarism cases reported and action taken.**

Plagiarism and malpractices in research are serious matter of concern; hence University has procured a registered access to **URKUND** software provided by **INFLIBNET**. The software is available for PhD Supervisors and students to get their documents scanned as a precautionary measure. The research scholars are educated regarding the plagiarism by their supervisors as well as a module on plagiarism is included in mandatory pre-PhD coursework on Research Methodology.

3.4.7 **Does the university promote interdisciplinary research? If yes, how many interdepartmental / interdisciplinary research projects have been undertaken and mention the number of departments involved in such endeavours?**

To promote interdisciplinary research within campus of University, following interdisciplinary research projects were awarded from its own funding:

Sr. No.	Principal Investigator/ Department	Principal Collaborator/ Department	Titles
1.	PC Vinodkumar, Physics	BY Thakore, Physics PK Priyan, MBA	Applications of Quantum Field Theory Methods in Financial Market Dynamics
2.	TR Shah, Pharmaceutical Sciences, SPU	Rita V Vora, Shree Pramukh Swami Medical College, Karamsad	Hydrogel Thickened Microemulsion of Methotrexate for the Treatment of Psoriasis: Formulation and Clinical Implications
3.	PK Priyan, MBA	RB Subramaniam, Biosciences	Incubation Centre and Inter-departmental Collaborations: Mechanism for Making Research into Fruition
4.	HJ Panchal, Computer Science	Brijesh Patel, Computer Science	Heli-PyD, a Comprehensive Database for *Helico Bactor Pylori*
5.	KR Surati, Chemistry	KD Patel, Physics	Synthesis of Materials Based on Mixed Legends Complexes and their Evaluation as Solid-state Electroluminescent Devices

Sr. No.	Principal Investigator/ Department	Principal Collaborator/ Department	Titles
6.	UH Patel, Physics	SS Soni, Chemistry	Synthesis and Single Crystal X-ray Characterization of Catalytically Active Ionic Liquids
7.	VS Vaishnav, Electronics	-	Thin Film Semi-conductor Gas/Vapour Sensor
8.	SS Bhatt, Biosciences	JM Patel, Mathematics SJ Bhatt, Mathematics	An Investigation on Fractality in Some Biological Systems and Processes
9.	HV Dedania, Mathematics	SJ Ghevariya, Mathematics	An Investigation into Some Mathematical Aspects in Financial Derivatives
10.	AVRLN Acharya, Biosciences	NV Sastry, Chemistry	Exploratory Investigations for the Removal of Fluoride ions from Water using Organic Biowaste.

An interdisciplinary team consisting of members from Departments of MBA, Economics, Statistics and MSW prepared a District Human Development Report of Dang and Panchmahal districts assigned by Government of Gujarat under UNDP grant.

Departments of Management and Social work carried out pre- and post-election surveys of voters assigned by Election Commission of India, Government of Gujarat.

Centre of Indian Diaspora study at Sociology Department organized four International seminars which included inter-disciplinary studies presented by various faculty members from different disciplines.

Faculty members of social sciences from Departments of MBA, Economics, Commerce, Sociology, Psychology, Political Science, MSW, Library and Information Science and Education have undertaken several inter-disciplinary studies and the outcomes have been published in form of research papers.

The University also sanctions duty leave to faculty for visiting national/International institutes.

3.4.8 Has the university instituted any research awards? If yes, list the awards.

The University has instituted the following research awards:

Hari Om Ashram Best Research Paper Award:

To encourage the faculty and students for publication of good quality work, Best Research Paper Award has been instituted. The best paper is selected after evaluating them by external subject expert in the respective discipline. The awards are presented in the annual functional meeting.

Best Thesis Award:

The Best Thesis award has been constituted for the research scholar of Chemistry Department in memory of Late Prof BN Mankad. The selection criteria for this award are lead down by Departmental Research Committee (DRC) and thesis is evaluated by subject expert of the department.

3.4.9 What are the incentives given to the faculty for receiving state, national and international recognition for research contributions?

The university has constituted a personal and professional development fund (PPDF) and a budget code is created for each faculty member. The fraction of overhead component (@20%) of research grants obtained by corresponding faculty member is deposited in their PPDF account. The PPDF fund can then be utilized by faculty member for the purpose of research and professional development with the permission of University administration.

3.5 CONSULTANCY

3.5.1 What is the official policy of the university for structured consultancy? List a few important consultancies undertaken by the university during the last four years.

The University encourages consultancy to industries by its faculty members. There is a dedicated University-Industry Interaction cell called the UI cell, which is responsible for structured consultancy. The UI cell prepares the information brochure about the expertise and infrastructure available in the University. The same is circulated among various industries and organizations. Most faculty members provide analytical services (using Departmental facilities and also offering Industrial consultancy) in the form of analysis of samples and data.

3.5.2 Does the university have a university-industry cell? If yes, what is its scope and range of activities?

As mentioned already the "University-Industry Interaction cell" headed by the Hon. Vice-Chancellor takes care of building, maintaining and enhancing relationships between University and industry. The specific objectives of University and Industry Interaction Cell (UIIC) are:

- To create database on Need Analysis of Industries in the state
- To create database on expertise/facilities on the campus
- To co-ordinate R & D projects/consultancy/sponsored projects/to address technical problems facing the Industry and the University and exploring technology transfer of the new processes and technology developed by the University Departments.
- To assist in signing of MOU, promote patent awareness and development of IPR/Patents by the University faculty based on their products and processes developed
- To help testing/characterizations of the materials or samples of Industrial applications
- To offer training programs/to co-ordinate Seminars relating to research outcomes with potential Industrial Applications.
- To characterize, test and analyse industrial products
- To keep liaison with various funding agencies and Govt. organizations
- To make aware about the expertise resources available with the University

The University and Industry Interaction Cell (UIIC) take care of promotion of consultancy activity in the campus, by encouraging the faculty members to take up consultancy works.

3.5.3 What is the mode of publicizing the expertise of the University for Consultancy Services? Which are the departments from whom consultancy has been sought?

Areas of expertise / specialization and infrastructural facilities available in various departments are regularly updated in the website. Faculty members also make their own efforts in interacting with industries relevant to their expertise.

3.5.4 How does the university utilize the expertise of its faculty with regard to consultancy services?

Yes, The University encourages all the faculty members to involve in consultancy services. The procedural processes are minimized through the UIIC. The faculty members are permitted to visit the industry and spend the required time to deliver the consultancy services qualitatively

without affecting the regular teaching responsibilities like Pavan Chakki & Solar Systems Developed in University.

3.5.5 **List the broad areas of consultancy services provided by the university and the revenue generated during the last four years.**

The post graduate departments offer mainly analytical consultancy services to both industries and institutions. These include

- Mass spectrometric analysis of organic samples.
- Particle size analysis
- NMR analysis for structure elucidation
- Scanning Electron Microscopic analysis
- Modelling of Plasma Atomization in Powder Metallurgy
- English language studies
- Social work

Prof (Dr) HJ Jani and Dr Raju M Rathod render their consultancy service in preparing State wise Analysis of Accreditation Reports of Gujarat, Published by NAAC, Bangalore and prepared by NACC & Knowledge Consortium of Gujarat, published in March 2014.

Management Department is rendering consultancy service to Krishna Medical Hospital run by Charotar Arogya Mandal for creating professional corporate culture among the employees and to other local Small and Medium Scale Industries.

b) **Revenue generated by consultancy/analytical services during the last five years (2010 to 2015):**

Name of the Department	Amount generated (in ₹)
Chemistry	19,54,700
Physics	1,93,320
Material science	61,100
CISST	32,140
MSW	10,00,000
Total	**32,41,260**

(Please see Annexure-23: for the Details of Consultancy Services Rendered and Revenue Generated.)

www.spuvvn.edu/iqac/rar16/annexures/ann-23.pdf

3.6 EXTENSION ACTIVITIES AND INSTITUTIONAL SOCIAL RESPONSIBILITY (ISR)

3.6.1 How does the university sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience during the last four years.

The University at both departmental as well as at University level organizes several programmes in order to sensitize its faculty and students towards Institutional social responsibilities. The following programmes are organized regularly

The University organizes Youth festival every year in which students from all post graduate department as well as students from affiliated colleges of this University participate in various events such as music, dance, one act play, skits, painting, collage making, sculpture, debate, rangoli, photography, etc. The winners in these events are sponsored for inter-university youth festival events.

Various university departments organize blood donation camps round the year with the help of Red cross society, sports events, cultural events such as Garba celebration during Navaratri, Ganesh Utsav, etc,

The departments also organize tree plantation programmes, sky gazing, etc on different occasions,

The community science centre of the university organizes several community based science programmes involving students of university as volunteers. These activities include: science activities and competitions for school students, health and nutrition related awareness drives for women and children, Science exhibitions, Workshops, sky gazing, bird watching, sensitization towards natural resources and their conservation, etc. On an average about 150 to 200 such activities are organized round the year.

The department of Home Science organizes regularly: Diet counselling for various diseases, weight reduction, etc.; Furnishing, interior decoration aspects etc. for extension in local Mahila Mandals; Training programmes on hygiene and sanitation for mess-workers; Need-based programs in old age home, Mahila Mandals, etc.; Finding out prevalence of anaemia, diabetes, cardiovascular diseases among adult population of Anand and VallabhVidhyanagar.

The Department of Mathematics is instrumental in conducting state level A R Rao a talent search examination in Mathematics under auspices of Gujarat Ganit Mandal for the students of B.Sc.(Mathematics) and M.Sc.(Mathematics).

In MBA Department all faculty members routinely interact with students in group and individually after class sessions on various issues faced by society and corporate. The syllabus incorporates issues on environment, social responsibility, social cost and other such topical subjects. Clean India programmes, road safety, cyber safety, digital India and other such issues are discussed on various forums in the department. Students are also encouraged to work on research projects on contemporary issues in management and international standards as well.

The NSS section of University regularly organizes several activities involving students of University departments and affiliated colleges. They are

- Tree plantation
- Cleaning of Village Street, pond and wells
- Pollution control program
- Environmental sanitation and disposal
- Provision of safe mass immunization
- Population education and family welfare programs
- Health education, Aids awareness and medical camp
- Women empowerment
- Free eye check up camp
- Blood donation camp
- Thalassemia test
- Swachh Bharat Abhiyan
- Personality development programs
- Youth leadership program
- Betibacho beti padhao abhiyan
- Street play on prevailing issues of community
- Organized developmental activity in school
- NSS day celebration
- Sharmdan
- Women's self defense

Prof. Datta Madamwar is associated with Kendriya Vidyalaya as VC Nominee, Chairman and involved in improvement of school education. He is also associated with syllabus preparation at Under Graduate at State Level as well as e-content preparation of MSc Microbiology at UGC.

3.6.2 How does the university promote university-neighbourhood network and student engagement, contributing to the holistic development of students and sustained community development?

University at regular interval organizes events which are open to all even people outside university can attend such events. It organizes Gujarat's folk cultural even- 'Dayro' on convocation day which is open to all people staying in neighbourhood.

Science exhibition is organized every year which is open to all.

University has a campus radio station, through which it broadcasts programmes for community development, such as awareness on contemporary issues in society, science popularization, cultural programmes and awareness about activities of University.

The University publishes monthly magazine 'Sheel Shrutam' covering important news and events of University, which is widely circulated.

The department of Home Science conducts dietary survey of vulnerable group of the society and organizes community awareness programmes for low cost nutritious recipes through demonstration. It also organizes sensitization programmes for women with an objective of skill development for income generation.

The department of Economics as well as MSW conduct various activities where students have to interact with residents in neighbourhood of University and some of these activities have been highly appreciated and have resulted in significant outcomes with reference to community development, for example, unutilized medicine collection from neighbourhood residential areas.

3.6.3 How does the university promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International programmes?

General Section of University and Physical Education Section of the university regularly inform students about the various extension activities organized by International, National and state level agencies. Faculty Co-ordinators of extra-curricular activities at Postgraduate departments communicate to the students about these activities and motivate them to participate in such activities. University has constituted Shree Aurobindo Chair of Integral Studies, Corporation Bank Management Chair, Pujya Mota Chair, Gandhian Studies Centre, Dr. Baba Saheb Ambedkar Chair, Shree Bhaikaka Adhyayan Prakalp, and Sardar Patel Chair to promote research and extension activities in specific areas.

3.6.4 **Give details of social surveys, research or extension work, if any, undertaken by the university to ensure social justice and empower the underprivileged and the most vulnerable sections of society?**

The Home Science department regularly conducts:

- Block placement in various institutions like old age homes, institutions for the mentally and physically challenged, preschools, etc.
- Community nutrition practicals like demonstration of low cost recipes in the Anganwadi training centre.
- Income generating activities like tie and dye, card making, handicraft items, nail art.
- Activities related to art and craft and cognitive development for persons with disabilities in "Andh Apangjan" school at nearby vicinity are carried out as part of practicals by Human Development students.

Faculty members of Departments of Education, MBA, Bioscience and Commerce conducted a survey to check the viability of Contributory Personality Development (CPD) program launched by Gujarat Technological University for students pursuing MCA, Degree and Diploma in Pharmacy and Engineering. Data was collected from 27 Educational Institutes in Anand and Kheira District. This survey assigned by Indian Institute of Teacher Education, Gandhinagar was conducted during 1st November 2013 to 7th November 2012.

Faculty members of MBA and MSW departments under the guidance of Prof (Dr) HJ Jani undertook a 'Knowledge, Attitude, Behaviour, Belief and Practices' (KABBP) -Base line Election Survey assigned by Election Commission of India during Assembly election of Gujarat, July-September 2012. On the basis of findings of this study, Election Commission designed various communication campaigns that helped to increase the voter's turn out ratio.

The above team also KABBP of Voters in Gujarat End line Election Survey, February-April 2013. The out-come and implication of both the studies have been published in form of detailed report as a part of Systematic Voters Education Programme.

Team of Sardar University prepared reports on District Human Development of Dang and Panchmahal district under project assigned by Government of Gujarat under UNDP grant. This project was aimed to identify the under privileged and vulnerable sections of these districts for

3.6.5 Does the university have a mechanism to track the students' involvement in various social movements/activities which promote citizenship roles?

Each post-graduate department has a forum for organizing co-curricular and extra-curricular as well as extension activities. The student's representatives are selected to act as secretaries facilitating various activities which are supervised by faculty members as Teacher-in-charges. Activities such as sports events, debates, elocution competitions, article writing on contemporary issues, social awareness programmes and active citizenship promotion projects in association with local NGOs and various centres and cells of university such as Community science centre, Woman's cell, etc. To promote citizenship role, Blood donation camps, Women safety awareness, career counselling, traffic awareness, health awareness, Investor's awareness, rural development, consumer protection, human rights and vote for India campaign, Clean India Mission, International Yoga Day, anti-narcotics campaign have been organized by individual departments or at University level. Several of these activities are organized with active support of organizations such as Red Cross, Rotary club, Lion's Club, JCI, SPICMACAY, Vallabh Vidyanagar nature club, etc. The activities are recorded in annual reports of each post-graduate department and students are felicitated for their exceptional performance on Annual Day celebration each year.

Many departments run student's club as well to address specific issues, for example MBA department runs consumer protection club.

Community Science Centre has more than 100 registered student volunteers, who are deputed in various sections of society for science related activities.

3.6.6 Bearing in mind the objectives and expected outcomes of the extension activities organized by the university, how did they complement students' academic learning experience? Specify the values inculcated and skills learnt.

In Department of Home Science many students take up community based work that includes finding out the prevalence of anaemia among school going children and adolescents, cardiovascular diseases, diabetes and osteoporosis. Here they get an opportunity to know the dietary pattern of these subjects and simultaneously educate them regarding the foods that should be avoided and included in their diets. Moreover students also interact with the enrolled subjects in their intervention

programs wherein they educate them regarding the nutritional as well as therapeutic importance of the developed product. The students who work with disabled persons get an opportunity to develop tools related to their cognitive development.

In general through extension activities students

- Get sensitized towards contemporary social issues
- Develop leadership qualities
- Learn to work in groups and time management
- Learn regarding bottlenecks in field work and how to overcome them
- Communication skills with different types of people
- Event management
- Develop to be a socially responsible citizen

3.6.7 How does the university ensure the involvement of the community in its outreach activities and contribute to community development? Give details of the initiatives of the university which have encouraged community participation in its activities.

The University ensures involvement of the community in its outreach activities through university's community science centre, SPU community radio-station (90.4 FM) and several local NGOs such as Vidyanagar nature club, Patriotic club of India, Vivek club, Energy conservation club, etc. The volunteers in addition reach to community and ensure community participation in University programmes through extensive use of social networking media.

3.7 COLLABORATION

3.7.1 How has the university's collaboration with other agencies impacted the visibility, identity and diversity of activities on campus? To what extent has the university benefitted academically and financially because of collaborations?

The collaborations between the faculty of the department of Biosciences and various institutes/industry have resulted in acquiring knowledge and expertise in the following areas of research:
- Metagenomics and bioinformatics
- Protein engineering and metabolic engineering
- Crop physiology
- Dye sensitized solar cells
- Photo-responsive materials

In the projects funded by BASF, fellowships were provided to the research fellows apart from grant for consumables and travel. These

collaborative programmes also enhanced interaction among scientists working in various areas of specialization.

CISST has collaboration with PRL, Ahmedabad for teaching and practical work. Several faculties from PRL were invited to deliver lectures as well as impart practical training to students at CISST.

The department of Gujarati has organized several activities in collaboration with Sahitya Academy, New Delhi.

3.7.2 Mention specific examples of how these linkages promote

- PRL and SAC, Ahmedabad; AIIMS, New Delhi; ARDE, Pune have contributed significantly in designing of curricula for MSc courses in Earth Science, Defence Science and Biomedical Science and Technology. One of our students spent a summer stay there and also did his project work for fulfilment of MSc degree. The same student is now pursuing PhD there.
- Scientists from PRL and SAC, Ahmedabad, are invited as visiting faculty at Department of Physics and CISST.
- Scientists from the above institutes are co-guides to MPhil and PhD in physics.

3.7.3 Has the university signed any MoUs with institutions of national/international importance/other universities/industries/ corporate houses etc.? If yes, how have they enhanced the research and development activities of the university?

Yes, the MoUs signed by University with other organizations are listed below:

- University has signed MOU with Government of Gujarat and District Collectors of Dang and Panchmahal district on mutual responsibility for preparation of DHDR. The DHDR has been prepared and submitted to Government of Gujarat.
- University has signed MoU with University of Turku, Finland and Tooltech Global Engineering Pvt. Ltd., to develop 'Centre of Excellence in Biotechnology for Affordable Health'. This MoU was signed at the National Education Summit at Gandhinagar, Gujarat on 10th January 2014.
- University has signed MoU with The Papua New Guinea University of Technology represented by it Vice-Chancellor Dr Albert Schram in December 2015, to facilitate academic and research co-operation, exchange of expertise between the two institutes and sharing and access of research facilities and infrastructure.
- R&D support services, Inc., USA has signed an LoI with SPU for running academic, research and short term training programmes in

multidisciplinary and interdisciplinary areas of Science and Technology.

- Our University has signed MoU with IIT, Powai, for Spoken Tutorial Project funded by Government of India on 22nd July 2015. The tutorials are provided by IIT Bombay and are available on www.spokentutorial.org. Upon successful completion of course, the certificate is issued to candidates by IIT Bombay.

3.7.4 Have the university-industry interactions resulted in the establishment/creation of highly specialized laboratories/facilities?

The interaction currently is mainly for undertaking analytical services and pilot projects. Till now, no specialized facilities have been created out of University and Industry interactions, However, the efforts are on to establish an Incubation centre which will create a platform for active interaction between industry and academia.
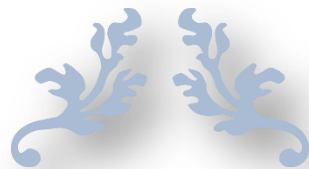
CRITERION IV

[INFRASTRUCTURE AND LEARNING RESOURCES]

CRITERION – IV
[INFRASTRUCTURE AND LEARNING RESOURCES]

4.1 PHYSICAL FACILITIES

4.1.1 How does the university plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar

BLUE INDICATES UNIVERSITY CAMPUS

N

30.	Home Science Dept.
31.	University Press.
32.	Bhaikaka Library
33.	Mathematics Dept.
34.	S.P. University Office
35.	Dept. of Pharmaceutical Sciences (Proposed)
37.	Chemistry Dept.
37(A)	Materials Science Dept.
38.	Radio Station
39.	Electronic Dept.
40.	H.M. Patel Inst. of Rural Development
49.	Physics Dept.
49(A)	Computer Centre
50.	M B Patel Education College
51.	USIC
52.	Humanities Building
57.	Health Centre.
58.	University Museum
59.	Hindi Dept.
60.	University Guest House
61.	University Ladies Hostel
63.	Student Centre
74.	Old Hostel
103.	Central School
104.	Business Administration Dept.
105.	Computer Science Dept.
106.	BRD School of Bio-Sciences
107.	Sardar Patel Maidan
108.	Nehru Hall Hostel
109.	MBA (NRI) Hostel
110.	Community Science Centre

MASTER PLAN OF THE UNIVERSITY

Authorised Signatory

Under the chairmanship of Honourable Vice Chancellor, the university has several major policy making committees. The future requirements are discussed and plans are carried out for the development of next five years about landscaping, strengthening infrastructure and learning resources of the university. The Building Committee, Finance and Establishment and other statutory committees plan for various aspects of the same. The university has adequate infrastructural facilities for the faculty, research scholars, and students, to carry out curricular, co-curricular, research and extension activities. The facilities in the Research Laboratories in various departments are extended to the students of other departments on a regular basis as a part of the course curriculum and also for research. A central facility like housing of sophisticated equipments has been created at CISST. Other central facilities like Bhaikaka Library, Computer Centre, Health Centre , Guest House, Examination Wing (as known as Gyanodaya Pariksha Bhavan) Auditoria, Gymnasium,YUVI Sports Complex, CC Patel Community Science Centre, University Museum, 'RADIO CAMPUS'

90.4 FM Community Radio Station and others are catering to the diversified specialized needs of various stakeholders. Many of the facilities like Seminar Halls, Auditoria, and Gyanodaya examination building of the university are also made accessible to other Government and private sectors with the minimal services charges by establishing appreciable rapport with them and also used for academic collaborative programmes. The following table presents the details of various buildings on the campus:

- **Campus Area**

Sr. No.	Name of the building	Construction area in Sq. Mt.	Year of Construction	Number of floors	UGC plan period
1	University Administrative Building	3,209.00	1963	G+2	02
		439 .00	2007	G+2	10
		1,906.12	1974	G+1	04
		953.12	1979	SF	05
2	Old Bio Sciences Building	299.75	1980	Base ment	05
		336.72	2002	G+2	09
		114.17	2002	GF	09
		336.72	2002	G+2	09
		475.10	1965	GF	02
3	Press Building	208.75	1973	GF	04
		192.00	2002	G+1	09
4	MB Patel College of Education	2,315.16	1965	G+1	02
		528.90	1981	SF	05
5	USIC /Workshop	504.53	1963	GF	04
		317.20	1978	G+1	05
6	Bhaikaka Library	4,309.24	1966	G+3	02
7	Hindi Bhasa Bhavan	926.52	1985	G+2	06
8	Business Studies/Mathematics /Statistics Building	2,219.00	1980	GF	05
		4,437.00	1981	FF+SF	05
9	Home Science Department	1,740.00	1990	G+2	07
10	Electronics Department	2,294.07	1987	G+2	06
11	Senate Hall/Vice-Chancellor Office Wing	832.80	1980	G+1	05
12	Humanities Department	3,259.14	1964	G+1	02
		773.91	1979	G+1	05
13	Animal House for Home Science	210.17	1978	GF	05
14	Computer Centre	925.02	1986	G+2	06

Sr. No.	Name of the building	Construction area in Sq. Mt.	Year of Construction	Number of floors	UGC plan period
15	University Museum	432.00	1994	G+2	08
		254 .00	2010	GF	11
		1,079.40	1994	G+2	08
16	Materials Science Department	567.09	2005	G+2	10
		360.00	2010	G+2	11
		2,198.62	1966	G+1	02
		1,099.31	1974	SF	04
17	Chemistry Department	448.16	1974	GF	04
		1,185.19	1981	G+2	05
		134.70	2002	GF	09
		134.70	2004	FF	10
18	HM Patel College of Economics and Agro Economics	2,490.05	2000	G+2	09
19	Vice Chancellor Bungalow	377.24	1963	G+1	02
20	University Womens' Hostel-1	4,080.25	1966	G+2	02
21	University Womens' Hostel-2	650	2006	GF	10
		1,300	2010	FF+SF	11
22	Faculty Guest House	1,024.66	1983	G+2	06
		111.52	2000	FF	09
23	V.I.P. Guest House Old	334.33	1973	G+1	04
24	V.I.P. Guest House New	297.78	2000	G+1	09
25	University Health Centre	631.20	1964	G+1	02
26	University Consumer Store (Apna Bazar)	422.68	1963	GF	02
27	Non Resident Students Centre	422.68	1964	GF	02
28	Canteen	45.00	2007	GF	10
29	Toilet Block for MP Patel Auditorium	33.78	2010	GF	11
30	University Men's Hostel-1	2,829.00	1962	G+2	02
		229.50	1985	G+2	05
31	Academic Staff College Building	5,831.45	1963	G+1	02
32	Overhead Water Tank	1.51 Lakhs Litre Capacity	2008	FF	09
33	Pump Man Quarter	30.31	1986	GF	06
34	Guest House Attendant Quarter	30.31	1978	GF	05
35	Driver quarter	30.31	1978	GF	05

Sr. No.	Name of the building	Construction area in Sq. Mt.	Year of Construction	Number of floors	UGC plan period
36	Community Science Centre	402.45	2004	G+1	10

- **Details of University Staff Quarters**

Sr. No.	Name of the Building	Attach Toilet/Toilet	Bath-room	Number of WC		Number of Wash Basins	Number of Taps
				WC	EWC		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	A Quarters-12	24 (0 / 24)	12	12	12	24	204
2	B Quarters-8	24 (8 / 16)	08	16	08	24	112
3	C Quarters-16	16 (16 / 0)	-	16	-	32	176
4	D Quarters-80	80 (0 / 80)	80	80	-	80	560
5	D Quarters-22	44 (22 / 22)	22	22	22	22	220
6	E Quarters-10	10 (0 / 10)	10	10	-	10	90
7	F Quarters-24	24 (0 / 24)	24	24	-	-	144
8	G Quarters-63	63 (0 / 63)	63	63	-	-	189
9	H Quarters-12	12 (0 / 12)	12	12	-	24	192
10	I Quarters-16	16 (0 / 16)	16	16	-	16	96
11	J Quarters-8	08 (0 / 8)	08	08	-	08	48
12	T Quarters-72	72 (0 / 72)	72	72	-	-	288
	Total	393(46/347)	327	351	42	240	2319

- **Details of University Land**

Sr. No.	Property Description	Land Area (in Sq. Mt.)
1	University Staff Colony (including Balwadi, Kendriya Vidyalaya, Open Ground, Botanical Garden)	1,17,074.34
2	Main Campus Area	85,253.10
3	Satellite Campus Area Computer Science Department (Survey No. 2095)	12,739.50
	Central School Staff Quarters & Adjoining Land (Survey No. 2089-2090)	11,529.49
	Department of Bio Sciences & Sardar Patel Maidan, UV Sports Complex, Proposed Swimming Pool (Survey No.1152/2)	1,21,406.00
	Total Land Area (Sq. Mt.)	**3,48,002.43**

4.1.2 Does the university have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.

Our university has a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment.

Sardar Patel University was established in 1955 with the major donations from farmers of surrounding villages and the landscaping, planning and construction of various buildings of university were constructed using a huge donation amount. Continuing from the beginning the university is progressing in all dimensions.

In recent five years the university has step forwarded through new constructions and renovation for enhancing qualitative teaching-learning environment.

Here are mentioned some major features of the Infrastructural development of the University in last five years of accreditation period.

- The major buildings where all the departments are facilitated with all latest infrastructure. They are buildings of Home Science, Library Science, Mathematics-Statistics-Business Studies, CISST, Material Science, Chemistry, Electronics, Economics, Bio Sciences, MCA, MBA, BEd Physics, Humanities, Hindi.
- There are 5 Auditoria on the campus and each department has well equipped Conference room.
- Easily accessible public transportation is available to reach each department with RCC road and Paver blocks inside compounds of each building.
- Beautification and gardening of each department is specially taken care of through annual contract.
- Almost all departments are equipped with the Interactive (Smart) boards.
- Every department has Digital Projectors in most of the class rooms.
- Every department has Internet Connectivity extended to the students.
- There is a Central Cyber Café for the students.
- Most of the Department have their own Departmental Library housed in the Department.
- The departmental libraries, NBHM Regional Library in Mathematics, ICT Facilities, Language Laboratories, Psychology Lab, Computing Labs, Research Labs, Reprographic Facility, Digitalization Facility at the Library and Information Science Department and other facilities are well taken care of for enhancing qualitative teaching-learning.

Under the sanctioned 11th plan of UGC the major renovations and new construction carried out by university are as follows:

Year 2009-10

- The new building of examination known as Gyanodaya of 6735 Sq. Mt., near University office building was constructed under the grant of 11th plan of UGC and with support of university fund. Also, in this year the renovation of Humanities building was done.

Year 2010-11

- The renovation of Department of Education was done.
- Home science department and Physics was carried out.
- In this year the new construction of extension of Computer Science's building of 251 Sq. Mt., toilet block of MP Patel Auditorium of 33.78 Sq. Mt., extension of Museum's building of 254 Sq. Mt., New Eklavya hostel of 3,011.03 Sq. Mt., were done by the University.

Year 2011-12

- In this year the new construction of Yugpurush Swami Vivekanand Sports Complex of 689 Sq. Mt. including multipurpose gymnasium, basketball court, tennis court, and table tennis court for enhancing sports facilities for staff, and students and community.
- The beautification of main campus with an arc of entrance was developed during this year.
- The renovation work of Material Science department, administrative office, Department of Education, modernization of library, civil renovation work of computer centre including E governance, and Dept. of Mathematics was completed.
- The construction of new women's hostel building of 27,558.33 Sq. Ft., construction of extension of Mathematics department of 241.0 Sq. Ft., Civil work of department of education and construction of Guest house of 845.85 Sq. Ft., at Academic staff college was completed.

Year 2012-13

- In this year the renovation work of Economics department was completed under the UGC SAP-1 grant.

Year 2013-14

- In this year the civil renovation work and roofing of Central Assembly Hall at M. B. Patel College of Education, extension work for existing Computer centre of 1,213.13 Sq. Ft., two side paver fitting at Yugpurush Swami Vivekanand sports complex, was completed under the 11th plan grant.

- Recently, infrastructural facilities are being upgraded in various departments in form of fixing tiles, flooring, new pipelines for drainage, toilet block and paver blocks in the exterior etc.

Year 2015-16

- Recently, a new project of a state-of-art swimming pool with the financial support of ₹3.91 crores by the UGC XIIth plan have been initiated.

Thus, all departments are infrastructurally well equipped for promoting qualitative teaching learning processes and University is committed to generate a general conducive ambience on the campus.

4.1.3   How does the university create a conducive physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services?

All the departments of Science have adequate science laboratories for post graduate students and research students. According to the latest requirements all the laboratories are upgraded, renovated and well maintained. The laboratories are fully equipped with all sorts of instruments to inspire research. The faculties too are highly engaged in teaching-learning and conducting major research projects received from many national agencies. All the Social science and humanities departments have computer laboratories; language departments are having language laboratories as per their requirements. The Bhaikaka library extends its services to all the departments by providing E resources, e-Journals and e-Material to enhance qualitative teaching-learning processes. The university has a well developed computer centre for assisting all kinds of computing facilities to the faculties. The financial funding and support is provided for all resources of laboratories through UGC, state government and through endowment funds.

All the faculties at departments have personal cabin for sitting arrangement and they are provided with all upgraded physical facilities. There are air conditioned auditoria, seminar rooms and smart classrooms at all the departments. The departments share the technologically equipped auditoria and seminar rooms for exchanging teaching-learning thoughts among teachers and students, for intra departmental activities and sharing of learning. There are other facilities like Community Radio station, Community Science centre, under the university to explore the talent of students and faculties on the campus and extend the expertise of the university to the society.

4.1.4 Has the university provided all departments with facilities like office room, common room and separate rest rooms for women students and staff?

The university has provided all departments with all supportive facilities like Office room, common room and separate rest rooms for women students and staff. The faculties at each department has separate cabin as their seating arrangement. Each department has well equipped and furnished administrative office. At university building too women administrative staff has all facilities available. The summery of various facilities at departments are as follows:

	No. of Class-rooms	No. of Common rooms			Rest Room for Staff	Committee Room
		Boys	Girls	Common		
Total	**106**	**10**	**14**	**6**	**12**	**14**

4.1.5 How does the university ensure that the infrastructure facilities are disabled-friendly?

The physically impaired students are considered as special students of the university. The university ensures them all available facilities. The buildings have ramp and each department has wheel chair facility for physically challenged students. The classrooms are arranged at ground floor wherever there is no lift facility available. Scholarships from various agencies are made available for visually impaired students. Lift facility is available at the Centralized Examination centre Gyanodaya, Computer centre and department of computer science.

In other departments barrier free facilities are planned out and will be available in near future.

4.1.6 How does the university cater to the requirements of residential students? Give details of capacity of the hostels and occupancy (to be given separately for men and women)

University has three hostels for women with 100% occupancy of students and five hostels for men including NRI and SSF hostel with 100% occupancy of students. All the facilities are availed to students in all hostels. The details are presented in the following table.

Sr. No.	Name of Hostel	Type of Hostel	Capacity	Occupancy
1	Womens Hostel-1	Women's Hostel	300	100%
2	Womens Hostel-2	Women's Hostel	60	100%
3	Womens Hostel-3	Women's Hostel	96	100%
4	Men's Hostel-1 (Nehru hall	Men's Hostel	156	100%

Sr. No.	Name of Hostel	Type of Hostel	Capacity	Occupancy
	Hostel)			
5	Old Hostel (Men's Hostel-2)	Men's Hostel	200	(Under Renovation)
6	CTE Hostel	Men's Hostel	78	100%
7	MBA NRI Hostel	Men's Hostel	52	100%
8	SSF Hostel	Men's Hostel	16	100%
9.	Eklavya Hostel for ST students	Men's Hostel	200	100%
10.	Vivekanand Samras Hostel (Possesion Awaited)	Women's Hostel Men's Hostel	500 500	Will be allotted from the Academic year 2016-17
	Total		2,158	

Recreational facilities in hostels like Gymnasium, Yoga centre, etc.

Sports ground facilities are available on the campus for both men and women. Indoor games are available at the hostels. At women hostels, shibirs and orientation for yoga and exercise are arranged frequently. Apart from this the university has its own Sports complex-Yugpurush Swami Vivekanand sports complex where all the fitness facilities are available both for men and women.

Broadband connectivity Wi-Fi/facility in the hostels

In the first phase of the Men's hostel, Nehru Hall is made Wi-Fi and the other hostels will be made Wi-Fi in consequent phases.

4.1.7 Does the university offer medical facilities for its students and teaching and non-teaching staff living on campus?

Yes. The university has fully equipped health centre and have a full time permanent doctor (MD Physician) and well equipped laboratory and qualified lab technician, pathologist and nursing staff. The details of which are given in the following table:

Hon Medical officer	One (Permanent)
Staff Nurse	One
Pharmacist cum Compounder	One
Assistant Compounder	One
Lab Technician	One
Lab Assistant	One
Dresser cum Peon	One
Sweeper	One
Sweeper	One

Helper	One

Specialist consultants like Physician, Gynaecologist, Ophthalmologist etc. have their visiting hours at health centre, the details of which are as under:

Dr Ravindra Parikh : Physician (Wednesday)
Dr Nayana Patel : Gynaecologist (Wednesday)
Dr Shyam Kumar : Ophthalmologist (Wednesday)
Dr Anita Singh : Gynaecologist (Thursday)

The health check-up of university staff is carried out every year and is counselled for further treatment. The awareness campaign and seminars too are organized by the health centre.

The following describes statistically the services rendered by the University Health Centre during 2014-2015:

Sr No	Month	New	Old	Total	Student	Staff
1	April-2014	213	487	700	453	247
2	May-2014	145	434	579	376	203
3	June-2014	146	421	567	390	177
4	July-2014	493	616	1,109	743	366
5	Aughust-2014	473	538	1,011	668	343
6	September-2014	525	688	1,213	815	398
7	October-2014	243	359	602	405	197
8	November-2014	260	526	786	524	262
9	December-2014	259	497	756	508	248
10	January-2015	258	383	641	430	211
11	February-2015	558	689	1,247	829	418
12	March-2015	373	616	989	657	332
	Total	**3,946**	**6,254**	**10,200**	**6,798**	**3,402**

The health centre facility is also extended to retired staff of university and also students registered in affiliated colleges/institutes.

4.1.8 What special facilities are available on campus to promote students' interest in sports and cultural events/activities?

Sports facilities:

- The Sardar Patel University Maidan has state of art sports facilities for the students and staff.
- This sports ground has an area of over 40,000 Sq. Mt.

- Various University level annual sports tournaments are organized here. It includes well established sports facilities for fitness and different types of sports which are as under:

The University has constructed new Indoor Sports complex named as Yugpurush Swami Vivekanand Sports Complex since 2014-15 having following Facilities:

- Multi-purpose court with a provision for games of:

  INDOOR

  - Basket ball
  - Hand ball
  - Volley ball
  - Kho-Kho
  - Prokabbadi
  - Tennis

  OUTDOOR

  - Athletic track (400 meters for all events including Cricket and Football)
  - Tennis court (cement court)   : 01
  - Kabbadi grounds   : 02
  - Kho-kho grounds   : 02
  - Hand-ball ground   : 01
  - Volley-ball grounds   : 02
  - Basket ball grounds (cement)   : 02
- Table Tennis hall with three pairs of tables
- Badminton courts : 02

Moreover the University is in process of establishing an Olympic size swimming pool and the details of which are as under:

  Venue   : University Maidan
  Size   : 50m x 21m
  Tendered cost   : 3.91 crore
  Funding agency : UGC under 12th 5 year plan

This swimming pool premise also includes a multigym fitness facility with a well equipped gymnasium hall of 200 Sq. Mt.

The board of Sports and Welfare of the university and physical education section looks after all sports activities and tournaments carried out at university.

Every year the students of the university and affiliated colleges enthusiastically participate in sports activities.

Achievements in Sports Activities

Sardar Patel University has secured Bronze Medal in the West Zone Inter University Kho-Kho (Women) Tournaments held Mumbai, After qualifying at the West Zone Level, our team has participated at the All India Inter University Kho-Kho (Women) Tournament held at M G Kashi University, Varanasi Uttar Pradesh.

The details of students participation above university level in last five years is listed below:

Sr. No.	Year	Name of the Student	Name of the Game/Event	Level
[2014-15]				
1	2014-15	Kalpeshkumar N Patel	Cricket	Zonal
2	2014-15	Viren H Patel	Handball	Zonal
3	2014-15	Vijaykumar K Thapa	Air Rifle Shooting	National
4	2014-15	Ajaykumar A Sharma	Air Rifle Shooting	National
5	2014-15	Harin N Desai	Volleyball	Zonal
6	2014-15	Rahul R More	Volleyball	Zonal
[2013-14]				
7	2013-14	Jwalant N Yagnik	Chess	Zonal
8	2013-14	Chirayu S Shastri	Badminton	Zonal
9	2013-14	Pratima J Sharma	Badminton	Zonal
10	2013-14	Krishna B Inamdar	Handball	Zonal
11	2013-14	Keyurbhai H Mitaliya	Volleyball	Zonal
12	2013-14	Kishan D Sodha	Table Tennis	Zonal
[2012-13]				
13	2012-13	Karn K Vyas	Basketball	Zonal
14	2012-13	Nayan C Patel	Basketball	Zonal
15	2012-13	Swapnil D Patil	Cricket	Zonal
16	2012-13	Krishnakumar B Inamdar	Handball	Zonal
17	2012-13	Niyatiben S Patwa	Table Tennis	Zonal
18	2012-13	Nikitaben R Patel	Kabaddi	Zonal
[2011-12]				
19	2011-12	Shastri Hardik	Badminton	Zonal
20	2011-12	Chirayu Shastri	Badminton	Zonal
21	2011-12	Patel Darshit	Badminton	Zonal
22	2011-12	Niraj H Patel	Basketball	Zonal

Sr. No.	Year	Name of the Student	Name of the Game/Event	Level
[2010-11]				
23	2010-11	Arun I Sharma	Football	Zonal
24	2010-11	Girdhari Singh	Football	Zonal
25	2010-11	Sunny C Patel	Football	Zonal
26	2010-11	Maniash Kant	Football	Zonal
27	2010-11	Shastri Chirayu	Badminton	Zonal
28	2010-11	Patel Darshit	Badminton	Zonal

Cultural Activities

Sardar Patel University is committed to overall development of the students and therefore gives adequate opportunities to the students to participate in various cultural activities and celebrations organized time and again at the departmental level.

The University has been organizing University Youth festival as per the guidelines of AIU since last 25 years. More than 50 teams from University departments and affiliated colleges participate in this annual event.

Various competition events like Cartooning, Classical Dance, Classical Instrumentation Solo (Non Percussion), Classical Instrumentation Solo (Percussion), Classical Vocal Solo, Clay Modelling, Collage, Debate, Elocution, Flute, Folk Dance, Folk Orchestra, Group Song Western, Groups Song Indian, HOLI day celebration, Kite-Flying , Light Vocal Solo, Mime, Mimicry, On the Spot Painting, On the Spot Photography, One Act Play, Poetry writing, Poster Making, Rangoli, Singing, Skit, Solo, Western Vocal Solo are organized. The winners form University team for the zonal competition.

Sardar Patel University has Organised West Zone Inter University Youth Festival, three times, last being, 08th to 12th January, 2016. Our University Secured 2nd position in Skit, Debate, Western Vocal Solo and on the Spot Photograph in the West Zone Inter University Youth Festival held at our University. Thereafter our Team of Skit, Debate, Western Vocal Solo and on the Spot Painting participated in the National Inter University Youth Festival during 15th -19th February, 2016 held at Mysore University, Mysore. We have also secured a Third Position in the event of Skit, Debate and Fourth in Western Vocal Solo at the National Level.

The student's participation and achievements in various cultural events are listed in the table below:

Sr. No.	Year	Department	Name	Name of the Game/Event	Prize	Level
1	2014-15	Home Science	Ms. Yogini Chauhan	Poster Making	First	University
2	2014-15	Home Science	Ms. Meera Barasara	Drawing Competition	Second	University
3	2014-15	Physics	Anand P Joshi	Solo	First	University
4	2014-15	Gujarati	Nayan Boghra	Debate	Second	University
5	2014-15	Gujarati	Kamlesh Parmar	Poetry Writing	First	University
6	2014-15	Gujarati	Manisha chavda	Essay Writing	Second	University
7	2013-14	Home Science	Ms. Yogini Chauhan	Poster Making	First	University
8	2013-14	Gujarati	Farhanabanu Diwan	Rangoli	second	University
9	2013-14	Gujarati	Deval Shah	Rangoli	Third	University
10	2012-13	Home Science	Jinal Panchal	Collage	Second	University
11	2012-13	Home Science	Ami Brahmbhatt	Light Vocal Solo	Third	University
12	2012-13	Home Science	Group of Students	Group Dance	Second	University
13	2012-13	Gujarati	Nitin Patel	Rangoli	Third	University
14	2011-12	Home Science	Ms Ami Brahmbhatt	Light Vocal Solo	Third	University
15	2011-12	Gujarati	Jashvant Panchal	Youth Festival	First	University
16	2011-12	Gujarati	Nitin Patel	Youth Festival	First	University
17	2011-12	Gujarati	Dipak Patel	Youth Festival	First	University
18	2011-12	Gujarati	Manish Gadhavi	Youth Festival	First	University
19	2011-12	Gujarati	Hiren Gadhavi	Youth Festival	First	University
20	2011-12	Gujarati	Ragini Rami	Youth Festival	First	University
21	2011-12	Gujarati	Bhumika Rami	Youth Festival	First	University
22	2011-12	Gujarati	Sailesh Tambodiya	Youth Festival	First	University
23	2011-12	Gujarati	Manisha Chavda	Youth Festival	First	University
24	2011-12	Gujarati	Ankita Patel	Rangoli	Second	University
25	2010-11	Gujarati	Jignesh Joshi	Youth Festival	Second	University

Sr. No.	Year	Department	Name	Name of the Game/Event	Prize	Level
26	2010-11	Gujarati	Nimesh Gadhavi	Youth Festival	Second	University
27	2010-11	Gujarati	Narendra Patel	Youth Festival	Second	University
28	2010-11	Gujarati	Dharmishta Kakadiya	Youth Festival	Second	University
29	2010-11	Gujarati	Priskilla Chauhan	Youth Festival	Second	University
30	2010-11	Gujarati	Hiran Gadhavi	Youth Festival	Second	University

Apart from these the students also participate in other extracurricular activities organized on campus like Annual Day, Blood donation camp, Departmental cleaning, Essay-writing, Fresher and Farewell, Quiz, Teacher's day celebration, Tree plantation etc.

The University Community Science Centre (District level centre funded by GUJCOST) organizes various Science popularization programs where students of departments and affiliated colleges participate as well as work as volunteers.

4.2 LIBRARY AS A LEARNING RESOURCE

BHAIKAKA LIBRARY

The Central Library named as Bhaikaka Library is a unique facility of Sardar Patel University.

Bhaikaka Library, named after the illustrious founder of the educational township as well as the University, came into existence in 1957, with the purchase of 3,000 books. A grant of ₹10 lakhs was provided by UGC for the construction of the library building and purchase of furniture and equipments. The present library building was inaugurated by the Late Prime Minister, Shri Lal Bahadur Shastri on 31st October, 1964.

Bhaikaka Library is a four-story building, with two large reading rooms and one women's reading room. The capacity of reading room/women's reading room is 350 students each. The stack area is divided in four parts with holding capacity of the 3,00,000 documents. The students can access the documents like books, periodicals, theses, dissertations, reference books, donated books and non-book material.

The membership of the Bhaikaka Library is available to the students, teaching staff, non-teaching staff as well as staff and students of affiliated colleges. The University has extended the library membership to retired teachers of the University also.

NBHM-DAE REGIONAL LIBRARY IN HIGHER MATHEMATICS IN THE DEPARTMENT OF MATHEMATICS

National Board for Higher Mathematics (NBHM) is an autonomous Board under the Department of Atomic Energy (DAE), Government of India. The NBHM has an ambitious plan of developing a network of rich high-level regional library system on higher mathematics in the country. The regional library for the western region is getting developed in the Department of Mathematics as a national facility.

Highlights:

- Housed in the department with separate cataloguing.
- Funded by the National Board for Higher Mathematics, Department of Atomic Energy and Government of India.
- Annual Grant ₹32,00,000 (Total grant so far in tune with ₹2.1 Crores).
- About 5,000 books of Teaching and Research Level in Mathematics.
- 46 Journals subscribed; Back volume of 50 Journals.
- Free membership to anyone interested in Mathematics.
- Access to the library to visitors (up to extended hours on request).

- Two High Speed Photocopying Machines with Computer Connectivity.
- Internet Connection with access to e-resources through INFLIBNET.
- Supply of photocopies on request.
- Circulation of Library News Letter for to update users outside SPU.
- MATHSCINET.
- SOUL Server.

4.2.1 **Does the library have an Advisory Committee? Specify the composition of the committee. What significant initiatives have been taken by the committee to render the library student/user friendly?**

Yes, The Library has library committee which is established under the ordinance no. 93C of the University Act.

Details of Library Committee:

The Library committee is consisting of:
 (i) The Vice-Chancellor
 (ii) Heads of University Post Graduate Departments
   - Two head of departments from Basic Sciences
   - Two head of departments from Languages
   - Two head of departments from Social Sciences
 (iii) Two Principles of Degree Colleges
 (iv) Such other persons not exceeding three nominated by syndicate.

Tenure: The term of office of members under (ii), (iii) and (iv) shall be analogous to the term of Syndicate appointing each member. Librarian is the secretary to the committee.

Library committee frames the rules regulations time to time. It advises and makes the recommendations for the development of library. It also accepts the suggestions made by the librarian.

 Functions of library committee are as following:

- The Library committee subject to the control of the syndicate manage the library and advise the syndicate on any matter connected with the library or referred to it by syndicate. In particular and without prejudice to generality of the foregoing power the committee have power to make recommendations to the syndicates (a) as to the administration of the funds set apart for the library and (b) other matters connected with library.
- The committee report to the syndicates for information, the purchase of books and disposal of such books as in the opinion of the committee are worthless, unserviceable or otherwise useless. For the

purpose of this ordinance, books include manuscripts and periodicals.

- The library committee have power to make rules governing the use of the library from time to time and amend them. Such rules and changes made there in, be reported to the Syndicate
- The library committee keep on account of all funds provided for the purpose of the library and forward a statement of such accounts to registrar for submission to syndicate every three months.

Some of the major resolutions carried out by library committee in last five years are as under:

- Library membership rules and regulations and its fee structure is amended for Students/Teachers/Administrative staff of affiliated colleges as well as Self financed/Adhoc teachers.
- Resolution was passed to sign MoU with INFLIBNET for Shodhganga project.
- Digitization and Digital Archiving of Printed Theses will be provided.
- Reference material shall not be issued. To any staff member of the university and affiliated colleges.
- Resolution was passed for installation of CCTV camera in 2012.
- Teaching staff of Sardar Patel University now onwards entitle for issuing five books only and the tenure of two months. And those who have already issued more than five books should return their issued books. The books shall be renewed time to time.
- DELNET Membership continued.
- University has accepted the centre for ILL (Inter Library Loan) through INFLIBNET centre.

4.2.2   Provide details of the following:
- **Total area of the library (in Sq. Mt.)**
- **Total seating capacity**
- **Working hours (on working days, on holidays, before examination, during examination, during vacation)**
- **Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**
- **Clear and prominent display of floor plan; adequate sign boards; fire alarm; access to differently-abled users and mode of access to collection**

Total area of the library: 4309 Sq. Mt.

The area of the departmental libraries is shown in the following table.

Sr. No.	Department	Carpet Area (Sq. Mt.)	Seating Capacity
1	Department of Biosciences	85.94	25
2	Department of Chemistry	348.39	40
3	Department of Computer Science	83.61	25
4	Department of Electronics	111.48	35
5	Department of Home Science	37.16	12
6	Department of Materials Science	37.16	12
7	Department of Mathematics	201.23	45
8	Department of Physics	92.90	27
9	Department of Statistics	48.77	10
10	Department of Business Administration	485.88	50
11	Department of Business Studies	18.58	05
12	Department of Economics	55.74	15
13	Department of English	167.23	45
14	Department of Gujarati	74.32	20
15	Department of Hindi	27.87	08
16	Department of History	9.29	02
17	Department of Political Science	41.81	12
18	Department of Psychology	185.81	45
19	Department of Education	139.35	35
20	M B Patel College of Education		
Total Carpet Area (of all departmental libraries)		**2,218.52**	

Total seating capacity: 700+

Working hours: The Library is kept open on all days of the year including Sundays and Saturdays, except on national holidays and on days declared as holiday by the University. It is kept open for 14 hours a day from 8 am to 10 pm.

Timings   : Reading Room: 8.00 a.m. to 10.00 p.m. (14 Hours)
On working days   : 8.00 a.m. to 10.00 p.m. (14 Hours)
On holidays   : 8.00 a.m. to 10.00 p.m. (14 Hours)
Before examination : 8.00 a.m. to 10.00 p.m. (14 Hours)
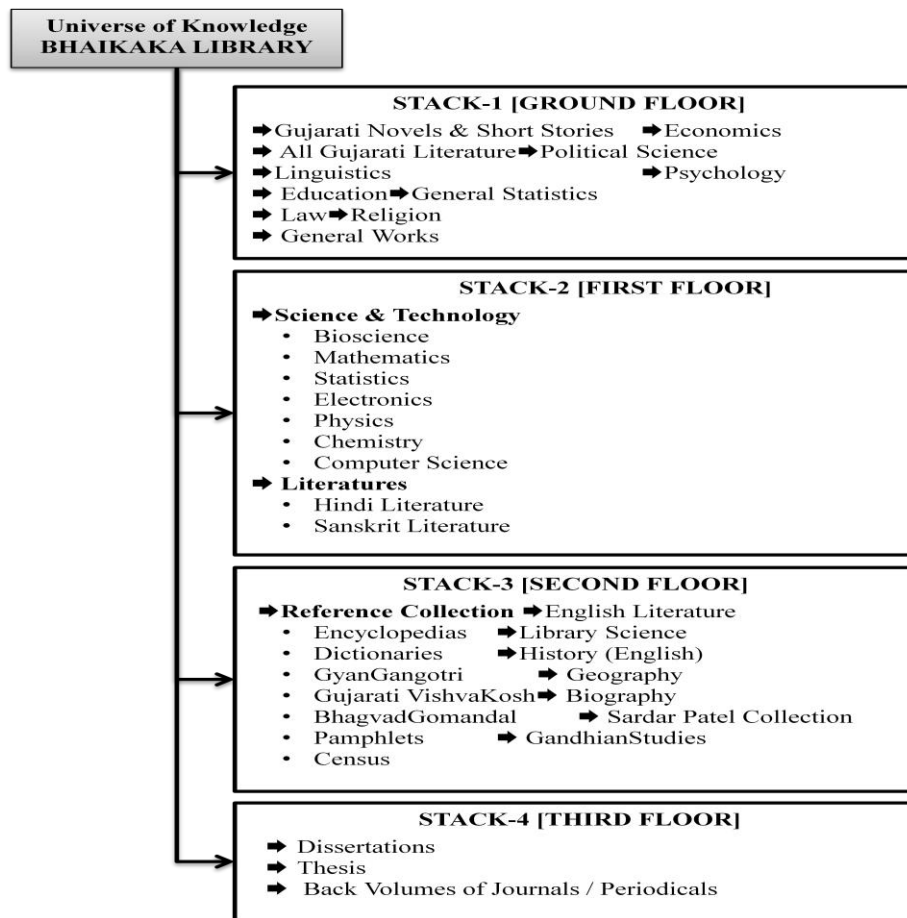During examination : 8.00 a.m. to 10.00 p.m. (14 Hours)
During vacation   : 8.00 a.m. to 10.00 p.m. (14 Hours)
Circulation / Reference Section: 10.00 a.m. to 5.30 p.m. (07 Hours)
(Excluding 2nd & 4th Saturdays, Sundays & Public Holidays)
Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone or accessing e-resources)

Map of Stack Areas


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Universe of Knowledge
BHAIKAKA LIBRARY

STACK-1 [GROUND FLOOR]
➡ Gujarati Novels & Short Stories    ➡ Economics
➡ All Gujarati Literature ➡ Political Science
➡ Linguistics                        ➡ Psychology
➡ Education ➡ General Statistics
➡ Law ➡ Religion
➡ General Works

STACK-2 [FIRST FLOOR]
➡ Science & Technology
   •  Bioscience
   •  Mathematics
   •  Statistics
   •  Electronics
   •  Physics
   •  Chemistry
   •  Computer Science
➡ Literatures
   •  Hindi Literature
   •  Sanskrit Literature

STACK-3 [SECOND FLOOR]
➡ Reference Collection ➡ English Literature
   •  Encyclopedias        ➡ Library Science
   •  Dictionaries          ➡ History (English)
   •  GyanGangotri          ➡ Geography
   •  Gujarati VishvaKosh ➡ Biography
   •  BhagvadGomandal         ➡ Sardar Patel Collection
   •  Pamphlets          ➡ GandhianStudies
   •  Census

STACK-4 [THIRD FLOOR]
➡ Dissertations
➡ Thesis
➡ Back Volumes of Journals / Periodicals
```

- **Signboards:** For facilitating the users, the plan of each floor is graphically displayed at the entrance of first floor. Signboards are adequately placed and utilized at the premise to assist the users.
- **Fire Alarm:** Fire safety tools are available.
- **Access to differently-abled persons:** Differently able students are provided and availed of help in informal ways. Library personnel facilitate differently able learners according to their learning needs. There is a ramp for the physically challenged students to go upstairs on the first and second floors. This ramp is available in the side ways of the ground floor.
- **Accessing e-resources:** An e-recourses be accessed from any place on the campus through campus network. Some of the e-resources that can be accessed include Science Direct, JSTOR, Project Muse, Springer Link, Taylor and Francis, Wiley Blackwell Publishing, IEEE *Xplore* Digital Library, Cambridge University Press and Oxford University through INFLIBNET and Shodhsindhu.

The following are the details of Mode of Access to Collection:

Sr. No.	Name Of Database
01	American Chemical Society
02	American Institute of Physics
03	American Physical Society
04	Annual Review
05	Cambridge University Press
06	Economic & Political weekly
07	Emerald
08	Institute of Physics
09	ISID
10	JCCC
11	JSTOR
12	MathSciNet
13	Nature
14	Oxford University Press
15	Portland press
16	Project Euclid
17	Project Muse
18	Royal Society of Chemistry
19	Science Direct
20	SIAM
21	Springer Link
22	Taylor & Francis
23	Web of Science
24	Wiley-Blackwell
25	DELNET

4.2.3 Give details of the library holdings:

a) Print (books, back volumes and theses)

The total number of books in possession in the Bhaikaka library is approximately **2,40,000.**

The total number of Print books, back volumes and theses added in the last five years at the Bhaikaka library is shown in the following table.

Print Books	**20,024**
Theses	**881**
Back Volumes	**834**
Total	**21,739**

b) Average number of books added during the last three years

In the last three years total **12,436** new books are added to the Bhaikaka library.

c) Non Print (Microfiche, AV)

The services of microfiche are not available. There are total 158 audio and video cassettes available on varied topics from different disciplines.

d) Electronic (e-books, e-journals)

Total e-books   : 87,368
Total e-journals : 9,442

e) Special collections (e.g. text books, reference books, standards, patents)

Category of collection	Books
American Special collection	158 Printed books
Sardar Patel Special collection	214 (Approximate)
Ghadhian Special collection	300 (Approximate)
Non material Collection	120

Bhaikaka Library is looking after all the activities related to Publication since the inception of University.

The University has been publishing the following Journals/Bulletins on regular basis:

- Sheel Shrutam (Monthly news bulletin of the University) (Bhaikaka Library).
- Vocational Guide (University Employment Bureau).
- Journal of Education and Psychology (Department of Education, Sardar Patel University, Vallabh Vidyanagar).
- ArthaVikas (Department of Economics, Sardar Patel University, Vallabh Vidyanagar).
- PRAJNA-University Journal of Basic Sciences.
- PRAJNA-University Journal of Social Science and Business Studies.
- Journal of Engineering and Technology (Birla Vishwakarma Mahavidyalaya).
- Mimansa-Journal of English Literature (Department of English, Sardar Patel University.
- Synergy-Journal of Business Studies Administration (Department of Business Administration, Sardar Patel University).

192 books have been published so far by the Publication Section of Bhaikaka Library, Sardar Patel University, Vallabh Vidyanagar.

GyanGangotri Gujarati Publication (A Book of Knowledge in Gujarati language)

The GyanGangotri series, a book of Knowledge is a valuable publication of our university from the generous grant received from the Central and State Government and Donations from Hari Ohm Ashram and others has came to be just such an Encyclopaedia but with a different knowledge and information embodied in the essays of various subject, arranged and collected in different volumes. The series has been widely acclaimed as unique collection. The University naturally feels gratified for having answered the need of such books. So far thirty (30) volumes in Gujarati and five in Hindi have been published. The list of the publications is availed on the Website of Sardar Patel University.

f) Question Banks

The question papers of previous years are uploaded on university websites.

The question sets of university examinations are maintained by departmental library.

4.2.4 What tools does the library deploy to provide access to the collection?

The University Library has electronic Resource Management Package which generates efficient access to –

OPAC

Online public access catalogue using SOUL (Software for University Library) is available at Bhaikaka Library and all departmental libraries. All the sections of the library can access the library OPAC through LAN from any section. For users, the access to OPAC is as below:

WEBOPAC (From the Department also any one can access)

Web link: http://172.16.120.5/webopac/main.aspx

Electronic Resource Management package for e-journals

The Bhaikaka Library uses the software package for effective Resource Management. The e-journals and e-books are accessible through the following:

- Library Portal
- UGC-INFONET
- DELNET

The University is having collaboration with various e-resources.

Federated searching tools

Federated searching tools are available to search articles in multiple databases.

Library Website

http://www.spuvvn.edu/administration/service_centres/library/

In-house/remote access to e-publications

One can access the list at **http://www.spuvvn.edu/pub-pdf.pdf.**

4.2.5 **To what extent is ICT deployed in the library? Give details with regard to**
- **Library automation**
- **Total number of computers for general access**
- **Total numbers of printers for general access**
- **Institutional Repository**
- **Content management system for e-learning**
- **Participation in resource sharing networks/consortia (like INFLIBNET)**

Bhaikaka Library is using Soul 2.0 Software for library automation.

The following Services are provided in the library for ICT use:

- Reading Room Facilities
- Internet Facilities
- Cyber Café
- Women's Reading Room Facilities
- Documentary Delivery Services
- Photocopying facilities
- Membership with
    1. INFLIBNET(UGC INFONET Consortium)
    2. DELNET
- Reference Services
- Online Public Access Catalogue (OPAC
- Scanning Facilities
- CD Writing
- Current Awareness Services
- Selective Dissemination Information (SDI)
- Wi-Fi Services

Total number of computers for general access

The total number of computer for general access is 25+.

Total numbers of printers for general access

There are total 11 printers and 02 Barcode printers.

Internet band width speed

Internet Bandwidth is provided by University's G H Patel computer centre. The band width speed is 1Gbps line under NMPICT Project from NIC which provides 100 Mbps downloaded speed and 50 mbps upload speed.

Institutional Repository

Library is in process of making Institutional repository to enable the online access to our own library resources/publications.

Content management system for e-learning

E learning resources are in the process of preparation.

Participation in resource sharing networks/consortia (like INFLIBNET)

Library has document delivery centre from INFLIBNET by which we are serving documents (Books or Journals in any form) at free of cost to rest of Indian universities. Services are provided on request basis.

4.2.6   Provide details (per month) with regard to
- **Average number of walk-ins**
- **Average number of books issued/returned**
- **Ratio of library books to students enrolled**
- **Average number of books added during the last four years Average number of login to OPAC**
- **Average number of login to e-resources**
- **Average number of e-resources downloaded/printed**
- **Number of IT (Information Technology)literacy trainings organized**

Average number of walk-ins

Following table shows the average number of walk-ins in the library.

Year	2010-11	2011-12	2012-13	2013-14	2014-15	**Total**
No. of Walk-Ins	12,400	9,000	9,138	7,638	9,734	**47,010**

Average number of books issued/returned

Following table shows the average number of books issued/returned in the library.

Year	2010-11	2011-12	2012-13	2013-14	2014-15	Total
Issue	10959	6426	5671	6215	5926	**35,197**
Return	11436	7695	6312	6056	5862	**37,361**
Total	**22,395**	**14,121**	**11,983**	**12,271**	**11,788**	**72,558**

Ratio of library books to students enrolled

The following table shows the details of Ratio of books to students enrolled.

Year	2010-11	2011-12	2012-13	2013-14	2014-15
Students	2191	2300	2216	2473	2356

Average number of books added during the last four years

In the following table the books added during last five years is shown.

Year	2010-11	2011-12	2012-13	2013-14	2014-15	Total
Books	4,555	3,033	6,153	2,871	3,412	**20,024**

Average number of login to OPAC

The WEBOPAC service is available during office hours. Readers and students are availed of these facilities as per their needs.

Following is the link for WEB OPAC.

Link:**172.16.120.5/webopac2/main.aspx**

Average number of login to e-resources

Average number of login to e-resources is shown in the following table.

Sr. No.	Name of Database	Total hits received				
		2010	2011	2012	2013	2014
01	American Chemical Society	10,860	9,478	11,972	10,901	10,263
02	American Institute of Physics	436	1,038	1,116	549	839
03	American Physical Society	2549	4,452	2,348	1,750	1,500
04	Annual Review	247	54	526	429	569
05	Cambridge University Press	306	305	513	412	449
06	Emerald	-	173	180	1,068	133
07	Institute of Physics	2,808	3,317	3,161	1,898	1,537
08	JCCC	29,316	5,653	4,753	2,134	301
09	JSTOR	5,185	5,188	4,115	3,572	2,284
10	MathSciNet	352	743	1,424	3,178	5,034
11	Nature	344	482	456	461	522
12	Oxford University Press	2,164	1,972	2,077	1,550	1,537

Sr. No.	Name of Database	Total hits received				
		2010	2011	2012	2013	2014
13	Portland press	-	07	-	-	-
15	Project Euclid	32	25	39	18	28
16	Project Muse	430	299	456	276	75
17	Royal Society of Chemistry	1,890	2,333	4,902	6,059	5,749
18	SIAM	07	04	-	01	01
19	Springer Link	12,694	17,009	14,332	15,209	10,307
20	Taylor & Francis	4,830	2,835	4,786	3,824	2,857
21	Web of Science	1,032	6,148	3,111	2,250	3,749
22	Wiley-Blackwell	5,476	8,785	-	3,459	7,234
23	Elsevier	609	57,367	58,694	55,757	54,559

The library provides services of Shodhganga and Shodhsindhu. The library has signed MOU with INFLIBNET for these services. It facilitates the university research scholars for qualitative research.

The details about the access of these two services are shown as under

Access to Shodhganga	2,400 uploaded (Approximate Theses)
Access to shodhsindhu	Provided by INFLIBNET 15000+eJournals

Average number of e-resources downloaded/print

The service is available and students and researchers use it as per their requirement.

Number of IT (Information Technology) literacy trainings organized

The demands of the IT (Information Technology) literacy trainings are taken care of by the Department Of computer Science and computer centre of the university. The academic and administrative personnel of the university are trained for acquiring techno savvy skills as per the requirements of their roles. The details are under.

Training for freeware

The University has begun to train students in the effective use of relevant freeware. The use of the technical software LaTEX is taught to MPhil/PhD scholars in the University Departments of Mathematics, Statistics, and Physics with a view to equip them with the necessary skills to be able to prepare technical material.

Training in specialized software

Relevant computer courses with practical training on computers are offered in many Departments. Besides computer programming course of varying degrees of sophistication, also include training students in effective use of readily available specific software like FORTRAN in

Physics, MATLAB and MATHEMATICA in Mathematics, SPSS in Statistics, SOUL in Library Science etc.

4.2.7 **Give details of specialized services provided by the library with regard to**
- **Manuscripts**
- **Reference**
- **Reprography/Scanning**
- **Inter-library Loan Service**
- **Information Deployment and Notification**
- **OPACS**
- **Internet Access**
- **Downloads**
- **Printouts**
- **Reading list/ Bibliography compilation**
- **In-house/remote access to e-resources**
- **User Orientation**
- **Assistance in searching Databases**
- **INFLIBNET/IUC facilities**

The details related to above points are mentioned in the following table.

Services	Yes/No	Details
Manuscript	Yes	• 06 Manuscripts (in Gujarati Department). • Varied sized folders of 136 sets of published manuscripts, 99 sets of unpublished manuscripts and 163 sets of printed manuscripts are available with University Museum.
Reference Services	Yes	• Library orientation program: To aware the students, faculty members and researchers about primary and secondary sources available in the library.
Reprographic/Scanning	Yes	• On Request Basis.
Inter Library Loan Service	Yes	• On Request Basis.
Information Deployment	Yes	• Important and current information are communicated through Notice Board.
OPAC	Yes	• http://172.16.120.5/webopac/main.aspx
Internet Access	Yes	• Through Cyber café.
Download	Yes	• Download is free of charge. • No restrictions or Download limits.
Printout	Yes	• On Request Basis.

Services	Yes/No	Details
Reading List/Bibliographic compilation	Yes	• Available through OPAC and Internet.
In-house/remote access to e-resource.	Yes	• Through Cyber café.
User Orientation	Yes	• It is conducted since 2009 in the month of July or August and continuous for One Month. Time is scheduled at convince of department.
Assistance in searching database.	Yes	• Personal attention.
INFLIBNET/IUC		• Through Cyber café

Our library is recognized as document delivery centre. So, we are always ready to provide the information on request basis. The library also provides inter library loan services. The details are available here.

Library loan services

Sr. No.	Date	Name of ILL Requester	Requested title of articles	Call nos.
1	12-03-2010	Dr Sangeeta Kaul, Network Manager, DELNET, New Delhi	Overcoming loss of accuracy when using correct finite element By McLeod R.	541 W4 M2 105840
2	13-10-2010	G Sharath (Research Student) Deptt.of Studies in Mathematics University of Mysore Mysore.	Indian Journal of Mathematics	Vol.47, No.1, Year-2005, pp.99-122.
2012				
3	05-04-2012	M. M. Kher BRD School of Biosciences S.P.University, V.V.Nagar Article Received From: Rajesh Singh, Deputy Librarian Uni. Of Delhi, Delhi	Regeneration whole Fertile Plants from 30,000-y-old Fruit Tissue Buried in Siberian Permafrost	Proceedings of the National Academy of Sciences of the United States of America Vol.109, No.10, Year-2012 Pages-4008-4013
4	05-04-2012	K.S. Rao BRD School of Biosciences S.P. University V.V.Nagar	The Unfold Protein Response : From Stress Pathway to Homeostatic	Science Vol.334 No.6059 Year-2011 Pages- 1081-1086

Sr. No.	Date	Name of ILL Requester	Requested title of articles	Call nos.
		Article Received From: Rajesh Singh, Deputy Librarian Uni. Of Delhi, Delhi	Regulation	
5	09-07-2012	Rita Mahapatra, Res. Student BRD School of Biosciences S.P. University Article Received From : Rajesh Singh, Deputy Lib. Uni. Of Delhi, Delhi.	Identification and Characterization of Maize pathogenesis related proteins.	Plant Molecular Biology Vol.11, No.4 Year-1988 pp. 529-538
6	03-08-2012	Dr. M. B. Bhatt Deptt. Of Ststistics S.P. University Article Received From : DELNET, New Delhi.	• Carbonization and Graphitization • Optical Anisotrophy in Cokes from High-rank coals • Development of Optical Anisotrophy in vitrains during carbonization	(1) Carbon Vol.22 No.6, pp.521-541 (2) Fuel, May-1988, Vol.67 (3) Fuel, July-1973, Vol.52,
7	25-09-2012	Dr. M. B. Bhatt Deptt. Of Statistics S.P. University Article Received From : Nagireddy Y. Librarian, University of Hyderabad	Distributions Determined by Conditioning on a pair of order Statistics	Metrika Vol.39, No.1 Year-1992 pp.107-112
8	08-10-2012	Barot Rinkesh A. (Res. Student) Deptt. Of Physics S.P. University Article Received From : Rajesh Singh, Deputy Lib. Uni. of Delhi	Copper(II) Complexes of Sulfanilamide Derivates	Transition Metal Chemistry Vol.4, No.5 Year-1979 pp.285-288
9	15-10-2012	Dr. S.H. Mandalia Bhaikaka Library S.P. University Article Received From: Banasthali University, Banasthali Vidyapith.	Vitamin C : Newer Insights into its Biochemical Functions	Nutrition Reviews Vol.49, No.3 Year-1991 pp. 65-70

Sr. No.	Date	Name of ILL Requester	Requested title of articles	Call nos.
2013				
10	10-10-2013	Mr. Mukesh (Res.Student) Deptt. Of Mathematics S.P.University Article Received From: Rajesh Singh, Deputy Lib. Uni. of Delhi	Numerical Modelling of Magnetic Fluid-based Squeeze Film between Rotating Transversely Rough Curved Circular Plates	International Journal of Computational Materials Science and Surface Engineering Vol.4, No.3, Year-2011 pp.185-204
11	14-12-2013	M. S. Ravikumar Dr.B.R.Ambedkar Memorial Lib.-Acharya Nagarjuna University Nagarjunanagar	Control Charts for Simultaneous Monitoring of Unknown Mean and Variance of Normally Distributed Processes	Journal of Quality Technology Vol.45, No.4 Year-2013
12	19-12-2013	Shailashree S. Vanaki (Prof.) Basavanal Library, Karnataka University, Karnataka	Penetration of Scheduled Commercial Banks in Rural Areas : A Comparative Study	Indian Journal of Finance Vol.7, No.1 Year-2013 pp.38-43
2014				
13	03-02-2014	Jignesh Gondaliya (Res.Student) Deptt. Of Statistics S.P. University, V.V.Nagar Article Received From: INFLIBNET Centre, Gandhinagar	Sequentially Balanced Three-Squares Cross-Over Designs	Statistics in Medicine Vol.15, Oct.1996 pp. 2143-2147
14	05-06-2014	Amir Hussain Deptt. Of Social Work	Handicrafts of Meghalaya : An Analysis of the Marketing Practices	Indian Journal of Mareketing Vil.-43, No.5, pp.49-57.
15	07-06-2014	JCCC@UGC-INFONET	Use of Electronic Information Resources in Adesh in Punjab, India : A Case Study	PEARL – A Journal of Library and Information Science, Vol.7, No.4, Year : 01-12-2013

Sr. No.	Date	Name of ILL Requester	Requested title of articles	Call nos.
16	30-6-2014	Sanjeev, (Res. Student) Centre for Social Works, Panjab University	Sanitation Through Toilet	Science Reporter Vol.50, No.11 Year-2013
17	01-07-2014	Irawwa Gokak, Botany Deptt. Karnatak University, Karnatak	Effect of Mn Doping on Microstructure and Optical Properties of Nanocrystalline ZnO	Nano Journal Vol.8, No.6, Pub.Date : 1-12-2013
18	22-09-2014	Dr. Narendra Sharma, Uni. Of Rajasthan, Jaipur	Accessing Pattern of Electronic Journals through UGC-Infonet by the Faculty Members and Research Scholars in Alagappa University : A Study	PEARL – A Journal of Library and Information Science Vol.7, No.1, Pub. Date: 1-3-2013
19	18-10-2014	Sushil Kumar Chaudhari Devilal University, Sirsa	Investors' Perception about Mutual Funds in India : An Empirical Study	Indian Journal of Finance Vol.7, No.1 Pub. Date: 1-1-2013
20	22-12-2014	Dr M. B. Bhatt Deptt. Of Statistics, S.P. University Article Received from: DELNET, New Delhi	Estimating the Mean of Selected Uniform Population	Abstract from : Estimating the Mean of Selected Uniform Population
2015				
21	20-01-2015	Dhani Ram, Central Uni. Of Himachal Pradesh, Dharamshala	Comparative Study of Open Source Software in Library Automation Network in Academic Institutions of Andhra Pradesh : A Survey	PERL- A Journal of Library and Information Science Vol.7, No.4, Pub.Date : 1-12-2013

Sr. No.	Date	Name of ILL Requester	Requested title of articles	Call nos.
22	21-01-2015	Aditya Ram Central Uni. Of Gujarat, Gandhinagar	Collection Development in the University Libraries of Gujarat State : An Evaluative and Comparative Study	PERL- A Journal of Library and Information Science Vol.7, No.2, Pub.Date : 1-6-2013, pp.128
23	23-01-2015	Dr. M. B. Bhatt, Deptt. Of Statistics, S.P. University, V.V.Nagar	Sequential Estimation in two-truncation Parameter Family of Distributions under Type II Censoring	Statistical Methods and Applications Vol.3, No.3 Pub.Date: 1-10-1994 pp.385-396
24	27-01-2015	Dr. M. B. Bhatt, Department of Statistics, S.P. University, V.V.Nagar	Shortest Confidence Interval Estimation for Families of Distributions Involving Two Truncation Parameters	Metrika Vol.37, No. 1 Year : 1990 pp.353-383
25	23-02-2015	Prof. D.C. Tiwari Jiwaji University, Gwalior	Effect of Airborne Contaminants on the Wettability of Supported Graphene and Graphite	Nature Materials Vol.12, No.10 Pub.Date: 1-10-2013 pp.925-931
26	25-02-2015	Pukhrambam, Dipak	Effect of airborne Contaminants on the wettability of supported grapheme and graphite	Journal of Nature Materials
27	04-03-2015	Manupriya, UIAMS, A C Joshi Library, Punjab University	Measuring Customer Based Brand Equity Using Aaker's Model	Indian Journal of Marketing Vol.43, No. 3 Pub.Date : 1-3-2013 pp.5-13.

BHAIKAKA LIBRARY ILL (Inter Library Loan) Services

Sr. No.	Date	ILL Requester Name	Requested Title of Book	Call Nos.
[2011]				
1	18-07-2011	Dr.T.S.Kumbar, Librarian Dhirubhai Ambani Instt. Of Info. & Communication Technology	The Psychology of Music	781.15 S3 P8 25001
[2012]				
2	30-05-2012	Dr. M.B. Bhatt Deptt. Of Statistics Book Received From DELNET, New Delhi.	Order Statistics and Inference By N.Balakrishnan	519.2 B2 O7 30246
[2013]				
3	22-01-2013	DELNET, New Delhi.	Photoelectrochemical Solar Cells	621.31244 S2 P4 169136
4	27-05-2013	DELNET, New Delhi.	Ratlam ka Pratham Rajya	H.954.2 R2 R2 85488
[2014]				
5	15-09-2014	DELNET, New Delhi	Control of Food Quality and Food Analysis	664.07 B4 C6 135952

4.2.8 **Provide details of the annual library budget and the amount spent for purchasing new books and journals.**

The following table indicates the details related to annual library budget and amount spent in Rupees for purchasing new books and journals.

Year	2010-11	2011-12	2012-13	2013-14	2014-15
Budget(Under UGC Plan) (XI,XII Plans) Amount in ₹	126.00 Lac (2007-2012)		86.00 Lac	64.00 Lac (2013 to 2017)	
Amount spent on Books (in ₹)	39,86,211	35,06,817	86,00,000	17,52,131	16,05,567
Amount spent on Journals (in ₹) (Recurring & SAP Grant)	71,33,840	74,21,946	76,96,702	66,46,268	51,81,895
e-books (in ₹)			5,28,426		
e-Journals(in ₹)	54,599	59,239	17,81,954		14,20,350

4.2.9 **What initiatives has the university taken to make the library a 'happening place' on campus?**

Following Initiatives has been taken to make the library a 'Happening Place':

- Internet connectivity is given by University Authorities. Cyber café and Wi-Fi facility is provided.
- MoU is signed for Shodhganga project.
- Infrastructure like building renovation has been done. Women reading room is being separated. Server Room, Periodical section, OPAC Room, Audio-Visual Room and Meeting Room is renovated and reorganized. Wooden cupboard had been constructed. As per the requirement electrification is done. Journals Display cupboards are given.
- Computerized overhead projector with white screen (Tripod) is given. So, we can organize Library Orientation Programme.
- A separate unit named as Career corner for students preparing for competitive examinations is created.
- Electricity Generator is available.
- XEROX and its maintenance is given by the University.
- RO facility is installed.
- Capture of data and its sending to users on demand via social media is initiated.

4.2.10 What are the strategies used by the library to collect feedback from its users? How is the feedback analyzed and used for the improvement of the library services?

For improving the facilities of the library and creating a learner friendly conducive climate, the library collects feedback from the readers and students in informal ways. At the outset of each academic year an orientation programme for the students and faculty members is organized. At the end of the programme, student representatives from each discipline shares the views and accordingly improvements are made.

4.2.11 List the efforts made towards the infrastructural development of the library in the last five years.

The Bhaikaka library had made the correspondence/presentations with University and INFLIBNET and NAAC committee and have developed facility of Electricity Generator, Cyber café, Women reading room, periodical section, , OPAC Room, Audio-Visual Room, Meeting Room, Good Flooring, Parking facility, RO System (Clean Drinking Water) and reprographic (Xerox) services are developed in the last five years.

4.3 IT INFRASTRUCTURE

G H Patel Computer Centre is the hub responsible for automation in the University. It is also responsible for establishing ICT facilities in the University. The new developments that have taken place in the academic 2014-15 year include:

- The university has implemented web-based portal for automation of core university processes. Computer Centre has played a pivotal role for successful implementation of the portal and also continuing support for troubleshooting.
- Many departments are provided Wi-Fi facilities. The networking infrastructure is strengthened. Total internet users have gone up to 1000 including Wi-Fi users.
- The Work Flow System was developed and will be functional from the next academic year. This system will help in fast movement of files and help to establish a paperless environment.

The Computer Centre staff viz. Data Entry Operators were trained on the new process of data entry.

The details of ICT infrastructure at the departments and university office is given in the following table:4-A.

Sr. No.	Department	No of Computers	ICT Enabled Classrooms	No. of LCD Projectors in Dept.	IT Enabled Seminar Halls	Student Computer Ratio
1	Biosciences	59	06	06	01	03
2	Business Studies	66	06	07	01	07
3	Computer Science	209	08	10	02	01
4	Chemistry	40	06	06	02	03
5	Economics	35	01	02	01	05
6	Education	15	01	01	01	02
7	Electronics	51	02	03	01	01
8	Gujarati	19	01	01	01	07
9	Hindi	08	01	01	Shared Basis	20
10	History	03	01	01	Shared Basis	55
11	Home Science	25	03	04	Shared Basis	05
12	Library & Information Science	38	02	03	Shared Basis	01
13	Materials Science	25	02	02	01	01
14	Mathematics	105	08	10	01	03
15	Business Administration (MBA)	113	07	08	02	01
16	Social Work (MSW)	21	01	04	01	25
17	Physics	88	01	06	01	02
18	Political Science	03	01	01	Shared Basis	09
19	Psychology	05	01	01	Shared Basis	98
20	Pharmaceutical Science	26	03	03	01	01
21	Sanskrit	05	01	01	Shared Basis	22
22	Sociology	08	01	01	Shared Basis	20

Sr. No.	Department	No of Computers	ICT Enabled Classrooms	No. of LCD Projectors in Dept.	IT Enabled Seminar Halls	Student Computer Ratio
23	Statistics	152	08	10	02	01
24	University Instrumentation Centre (USIC)	04				
25	Centre for Interdisciplinary Studies in Science & Technology (CISST)	24	02	02	01	10
26	IQAC	02		01	01	
27	University Administrative Building (Main Office)	88				
28	Computer Centre	67	01	02		
29	Bhaikaka Library	31		01		
30	Humanities Building Office	49				
31	University Press	13				
32	University Museum	03		01	01	
33	M B Patel College of Education	33	01	03	01	06
34	University Health Centre	03				
35	Agro Economics Research Centre	43	01	02	01	
36	C C Patel Community Science Centre	02		02	01	
37	Community Radio Station	01				
	Total	**1482**	**77**	**106**	**25**	

4.3.1 Does the university have a comprehensive IT policy with regard to IT Service Management?

Yes, a consistent IT policy is used for the entire campus for providing hardware, software, Internet infrastructure and services, Antivirus solution, etc.

The University has always laid stress on the usage of Information and Communication technology in the entire campus to improve the teaching-learning and administrative processes. Laptops, Desktops, printers and scanners are provided to almost all the faculty members and state-of-the-art computer laboratories are established in many departments with 24x7 Internet facilities. The Computer Centre facilitates Internet services to all the departments and administrative sections of the University. University Website is regularly updated with help of the Computer Centre. An ICT network is established in the University that connects all departments on-campus as well as satellite campuses. Wi-Fi is provided in many departments and Students hostels.

The Computer Centre helps in establishing LAN, policies of providing Internet services, installation of software, troubleshooting of hardware and network problems.

Information Security

Information security is provided on each node by installing centrally administered Antivirus solution (the University has already used MacAfee, Trend micro and Quick Heal Antivirus Solution).

Network Security

For network security Cyberoam (an appliance for network security) is installed. A uniform IT policy is devised on the usage of websites in the entire university and Internet speed on each node in the network.

Risk Management

Appropriate backup infrastructure is developed at the Computer Centre to avoid loss of data in unforeseen circumstances

Software Asset Management

Certain licensed software available with computer centre and computer science department is provided to the users on need basis.

Open Source Resources

University has always insisted to use either licensed software or free open source software wherever it is required to use. Sardar Patel University has established collaboration with IIT Bombay Spoken

Tutorial program. Under this collaboration, an opportunity to conduct Software Training Program, free of cost to all affiliated colleges and university departments of Sardar Patel University.

The details about the MOU of this collaboration can be accessed through the following link:

http://www.spuvvn.edu/academics/computer_science/iitmum.pdf

In this way, university has promoted the use of Open Source Resources wherever possible.

The department of Computer Science has initiated a policy to purchase IT resource through the appropriate channel and after the approval of authority, the purchase process is initiated.

Green Computing

For green computing, some measures like power switch off the computers/printers when not in use, printing on both sides of a pages and other general information for less use of papers, energy, ink, and toner are followed.

4.3.2 **Give details of the university's computing facilities i.e., hardware and software.**
- **Number of systems with individual configurations**
- **Computer-student ratio**
- **Dedicated computing facilities**
- **LAN facility**
- **Proprietary software**
- **Number of nodes/ computers with internet facility**
- **Any other (please specify)**

Number of systems with individual configurations

Sr. No.	Processor/RAM	Make/ Brand	Total
1	Core (TM) i7/4gb	HP	04
2	Core (TM) i5/4gb	HP/Dell	17
3	Core (TM) i3/4gb	HP/Dell	10
4	Dual Core /4gb	HP/Dell/Acer	25
5	Core 2 Duo/2gb	HP/Dell/Compaq	03
		Total	**59**

Laptops

Processor	Make/Brand	Total
Core 2 Duo/2gb	HP	03
Core (TM) i5/4gb	Dell	01
Total		**04**

Servers

Sr. No.	Brand	CPU Type	Make	OS
1	Power Edge E410	Intel (R) - Xeon(R) CPU E5620	Dell	Windows 2008(R)
2	HP Proliant DL 380	Intel (R) - Xeon(R) CPU 2.8	HP	Windows 2003(R)

Exclusively for Online System				
3	IBM System x3650 M4 (3 Nos.)	System	IBM	Windows 2012
	TS 2900 Tape Auto Loader	System Storage	IBM	
	IBM DS 3512	Storage Device	IBM	

Printers

[A] Heavy Duty Printers

Sr. No.	Brand	Make	Total
1	HP Laser Jet 4250 dn	HP	3
2	HP Laser Jet 9040 dn	HP	4

[B] Xerox Cum Printers

Sr. No.	Brand	Make	Total
1	Image Runner 2530	Canon	2

[C] Colour Printers

Sr. No.	Brand	Make	Total
1	HP Desk Jet 1180 C	HP	1
2	HP Laser Jet CP 2025	HP	1
3	HP Laser Jet 500 Color M551	HP	1

[D] Laser Printers

Sr. No.	Brand	Make	Total
1	Laser Jet Pro M 202 DW	HP	2
2	EPL N 2500	EPSON	1
3	HP 2055 DN	HP	1
4	HP P 3015	HP	1
5	HP Laser Jet P 1606 DN	HP	1
6	HP Laser Jet 1320	HP	1
7	HP Laser Jet P 2015	HP	1

Scanners

Sr. No.	Brand	Make	Total
1	Image Runner 2530 A/3 Network Scanner	Canon	2
2	HP Scan Jet - C7710 A	HP	1
3	HP Scan Jet - 5590	HP	3

Reprographic Service

Sr. No.	Brand	Made By	Total
1	Image Runner	Canon	2

UPS

Sr. No.	Brand	Capacity	Total
1	APC	1.5 KVA	29
2	APC	0.6 KVA	02
3	Emerson Network Power UPstation (GXT AV)	2 KVA	01
4	APC Make Long Time Backup Battery System		01

Computer-student ratio Please Refer Table: 4-A

Dedicated computing facilities Please Refer Table: 4-A

LAN facility

Sr. No.	LAN Name	No. of Connected Nodes
1	MIS	50
2	UMIS	10

Proprietary software

Sr. No.	Name of Software
1	SPU Management System
2	Office 2007
3	Adobe Creative Suite 6
4	Visual FoxPro 9
5	Windows Server 2012
6	Windows Server 2003
7	MS SQL
8	Windows Server 2006 R
9	Symentac Backup Recovery

Number of nodes/ computers with internet facility

We are getting 1 Gbps Line under NMEICT Project from NIC which provides 100 Mbps download speed and 50 Mbps upload speed.

Internet Node Information

Year	Internet Node Existing	Add	Speed Given to User
2010-2011	300	180	2Mbps
2011-2012	480	173	2Mbps
2012-2013	653	198	1Mbps
2013-2014	851	320	512Kbps
2014-2015	1171	129	256Kbps

Server Information

Sr. No.	Server Name	Model
1	Application Server	IBM System x3650M4
2	Backup Server	IBM System x3650M4
3	Database Server	IBM System x3650M4
4	Backup Server for MIS	Dell PowerEdge T410
5	UMIS Server	Dell Vostro 200
6	Antivirus Server	Dell Optiplex 3020

Internet Facility

- NKN has provided 1 Gbps connectivity the University through BSNL
- BSNL 5Mbps specially for online system
- Total Nodes connected : 1300
- Internet connectivity to satellite campuses like Biosciences, CSC, UGC-HRDC (ASC) and Agro Economics is provided through radio link.
- There are around 1300 nodes are connected to the internet through Fibre optic and UTP Cable and WiFi.
- The Computer Centre has an appliance which takes care of uniform distribution of bandwidth to all the users.
- The computer centre is responsible to keep the network free of viruses. The antivirus software Seqrite End Point Security is used.

4.3.3 **What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

The Director, Computer Centre shoulders the responsibility for developing institutional plans and deploying strategies for upgrading IT infrastructure and associated facilities. The university has Gujarat Info. Petro Ltd. (GIPL) committee for outsourcing. The committee suggests the requirements and it is fulfilled through GIPL.

The University is planning to have its own data centre that will provide access to the required information.

The university web portal is accessed on this link: **http://www.spuportal.in/SPLogin.aspx**

The Complete Enterprise Resource Planning (ERP) is available through University Management Information System. The strategies for deploying and upgrading the IT infrastructure and associated facilities are as under

Software Development

The Computer Centre has been helping the university in automation by developing software for various administrative, academic and research purposes. Software developed in-house for:

- Payroll, PF calculation, CTD calculation
- Income Tax calculation and printing of related forms
- Service book automation
- Automation of fixation and calculation of arrears
- Human resource Information

- Pre Examination Work
- Student record preparation
- On Examination Work
- Marks Entry
- Result Processing
- Preparation of Mark sheets (pre, post printed)
- Post Examination Work
- Statistical analysis for decision making
- Merit List
- Budget Preparation
- Annual account preparation
- Establishment schedule preparation
- Examination remuneration processing
- Cash & Bank book generation, trial balance generation etc.
- Computerization of admission procedures in various departments
- Merit list preparation
- Other reports

In the year 2004, a web based system was developed for various sections in-house under the supervision of the Computer Centre which worked successfully till the year 2014 in intranet. At present, a web based portal is in use.

Due to the changes in the hardware and software technologies and meet the needs of the students and other stakeholders an ERP for University Management (www.spuportal.in) was developed by outsourcing to a third party (GIPL, Gandhinagar) but the computer centre acts as the interface between the sections and the developer of the system in testing and implementing the system.

Networking Services

The centre established the campus-wide computer networking using a fibre optic backbone having a capacity of 1GB.

- Assist in establishment and maintenance of Local Area Network in Departmental Laboratories.
- Assist in establishment and maintenance of network between the departments and the Computer Centre.
- Assist in providing radio links to the satellite campuses of the University.

Internet Services

- The University is sanctioned 10 Mbps bandwidth under the NMEICT scheme. The Computer Centre provides internet services to all the departments, administrative sections and Hostels of the University. Internet services provided to the users vary from cabled to Wi-Fi. The computer centre is maintains the infrastructure required for providing internet services. The bandwidth management is also the responsibility of the Computer Centre. It is managed using Cyberoam. Three agencies are involved in providing Internet services which include Cyberoam, BSNL & NIC and the networking agency. The computer centre has to co-ordinate with these agencies to provide internet services 24*7 to the entire university.
- The internet nodes connected through cabled network are 952 and the internet nodes connected through Wi-Fi are 352 .

Website and University Portal Management

The Computer Centre manages the website of the university **www.spuvvn.edu** and is also responsible to maintain the University portal **www.spuportal.in.** The centre acts as the interface between the sections and the developer of the portal.

4.3.4 **Give details on access to on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching, learning and research.**

The Computer Centre was recognized as Nodal Centre by the UGC, New Delhi for providing practical training to the students of M.Sc. (Biosciences), M.Sc. (Home Science), M.A. (Psychology), students of Education department, etc. The computer centre has provided services to all these departments and helped them to setup their own computer laboratory. Presently, these services are provided to Home Science Students only.

At present computer centre provides training to the staff of the university and affiliated colleges on the usage of the portal installed for university administration.

Access to on line resources for students

Teaching of courses like Computers and Statistical methods in the Department of Biosciences, Department of Home Science and Departments of Social Sciences helps learners acquire important analytical ability for experimental studies as well as enable them to use

many modern scientific equipments with which computers remain attached effectively in modern times.

The Department of Computer Science and Technology trains students in the design and development of software.

Access to on line resources for teachers

The teachers of the university are equipped with techno savvy skills. The use of multimedia in classroom teaching is a regular feature of teaching–learning processes. Faculty members of Departments have succeeded in designing software to meet their needs like to prepare their PowerPoint presentation slides; to facilitate classroom teaching; and to keep assignments as well as reading materials on servers so that soft copies can be accessed through work stations. Most Departments have software tools required for developing computer-aided teaching-learning materials. The Department of Computer Science and Technology designs computer-aided instructions packages as aids for teaching and learning.

Furthermore Dr D J Karia of Mathematics Department has initiated **E-Groups** and is coordinating the following academic e-groups for qualitative academic interactions. The details of these e groups are ugcnetmath@yahoogroups.comand topologicalalgebras@yahoogroups.com.

Recently, to establish LAN connecting all Departments, all administrative units and the library for fast and efficient data transmission is planned. Exploring the possibility of online teaching and examination is under process.

4.3.5 What are the new technologies deployed by the university in enhancing student learning and evaluation during the last four years and how do they meet new/future challenges?

University Management Information System (UMIS) is online web-based management software for university, affiliated colleges and departments. This software helps in undertaking various administrative activities like

Academic Section Management:

- PG Enrolment and UG Registration
- Fee Management
- PEC, FEC Generation
- PG Admission

Exam Section Management:

- **Pre-examination activities:** Time Table Generation, Examination Appointment, Seat No. Generation and Hall Ticket Preparation.
- **Post-examination activities:** Marks Entry, Result Processing, Result Declaration, Mark sheet Management, Convocation Management (Degree Certificate)

MIS Reports:

- Different Statistical Analysis Reports.

UMIS helps us to streamline management and University college functioning, eliminate errors and delays in storing/retrieving information, automate validation, improve communication between University & affiliated colleges, provides different reports. This software helps us to monitor the status and priorities on action plan. It reduces redundancy & paper work, saves time and provides accuracy. It provides quick response to students.

4.3.6 What are the IT facilities available to individual teachers for effective teaching and quality research?

Laptops, Desktops, printers and scanners are provided to almost all the faculty members and state-of-the-art computer laboratories are established in many departments with 24x7 Internet facilities.

4.3.7 Give details of ICT-enabled classrooms/learning spaces available within the university? How are they utilized for enhancing the quality of teaching and learning?

Majority of the departments have classrooms with projection/smart boards**.** Some departments also have WiFi network and structured cabling. Regular classes are taken on PowerPoint presentation along with audio visual aids. e-Learning resources are provided to the students from library as well as online. The centralized cyber café in library and computer centre are also available to the students. Moreover the students also have their own laptops and network access.

The details of these facilities available at various departments are given in the Table-4A.

4.3.8 How are the faculty assisted in preparing computer- aided teaching-learning materials? What are the facilities available in the university for such initiatives?

The faculty members utilize the ICT facilities as mentioned above in 4.3.6 for preparing the material for classroom teaching and demonstration of experiments.

The physical facilities are mentioned in Table 4-A.

4.3.9 How are the computers and their accessories maintained?

The University does not give Annual Maintenance Contract. The Computers and its peripherals in the University Administrative Sections are maintained by the Computer Centre. In case of complicated problems, private agencies are entrusted the work.

The Network is maintained by the Computer Centre. The maintenance committee at the computer centre looks after the maintenance of computer and their accessories both for university and various departments.

4.3.10 Does the university avail of the National Knowledge Network connectivity? If so, what are the services availed of?

Yes, the University is member of NKN through NMEICT project.1 GBPS Internet connectivity is given by NKN to the University. The G H Patel Computer centre has Involvement with KCG. e-Content development workshops were conducted by the university with KCG under NMEICT project. Internet Bandwidth is given by BSNL under NME-ICT project by NKN.

The Computer Centre has updated the equipment and now the University has sufficient bandwidth for its users. The e-Journal can also be accessed through INFONET under their scheme. The Computer Centre is now directly connected with various Departments and sections of the University. The expenditure for Net-workers was incurred from the 11[th] Plan grant received by the Computer Centre. The new software to process the result under Choice Based Credit System is developed under implementation & testing by the Computer Centre.

Apart from the regular MIS activities, the computer centre provides assistance in purchasing of computer hardware and software to the entire university.

4.3.11 Does the university avail of web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?

Yes, University avails all the web resources through central internet connectivity from the computer centre of the University. Wikipedia, E-journals and other education enhancing resources are available freely in the computers for all the departmental students and staff members. Also, students are given Wi-Fi connection in their personal laptops for internet in the Bhaikaka library.

4.3.12 Provide details on the provision made in the annual budget for the update, deployment and maintenance of computers in the university.

The maintenance of computers at the department is done by USIC and computer centre department and expenditures are incurred from working expense budget of the departments. Also the Maintenance and up-gradation, repair, etc. is done through lab expenses grant, major research projects, working grants, self-finance grants and other grants received from different funding agencies.

4.3.13 What plans have been envisioned for the gradual transfer of teaching and learning from closed university information network to open environment?

Continuous up gradation of campus network infrastructure is done from time to time for the gradual transfer of teaching and learning from closed university information network to open environment.

SANDHAN- BISAG and EDUSAT facility for live interactive lectures series has been in use for various subjects. The university faculty is involved in delivering expert lectures. The students of our university as well as others are benefitted, at the same time the students get opportunities to listen to the other experts.

4.4 MAINTENANCE OF CAMPUS FACILITIES

4.4.1 Does the university have an estate office / designated officer for overseeing the maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.

Yes. The university has an estate office/designated officer for overseeing the maintenance of buildings, classrooms and laboratories.

The estate department of the university is structured as under:

The university has building and estate committee under the chairmanship of vice chancellor constituted for the construction, renovation and maintenance of all buildings and assets of university.

Here are a few campus initiatives carried out recently.
- Aluminium section window fitting was done at Bhaikaka Library.
- Rain water pipe fitting to prevent leakage at Mathematics Department and Bioscience Department.
- Water proofing treatment at M. B. Patel College of Education to prevent leakage.
- New FRP doors fitting at necessary toilet/bathrooms.
- New drainage pipe line fitting at Nehru hall hostel.
- Toilet blocks renovation with water proofing at hostels and dept.
- Paver block fitting at library and departments.

4.4.2 How are the infrastructure facilities, services and equipments maintained? Give details.

The university has generated a continuous monitoring system for maintenance of its infrastructure. The university spent a total amount of ₹1,07,40,000 for the maintenance of its infrastructure from the annual budget. The building and estate committee of the university looks after the requirements of new construction, maintenance and renovation of university assets. The university engineer manages the expenditure of budget according to the requirement of maintenance of infrastructure and physical facilities passed through the committee.

The Learning resource facilities like equipments and instruments are maintained under the supervision of University Science Instrumentation Centre (USIC) department.

The infrastructure at departmental level is maintained through the Departmental Development Fund and other grants. The Computer centre maintains the E-resources of all the departments at university level. In some circumstances, as and when required, the university and the departments extend the maintenance contract to external agencies annually.

The following table shows the details of amount spent on infrastructural Maintenance during the year 2014-15

Item	Amount (in ₹)
Repairs & Maintenance of Buildings (Budget Code : 51208)	56,40,000
Maintenance of Gardens, Roads & Drainage (Budget Code : 51209)	6,50,000

Electricity Charges & Water Supply (Budget Code : 51211)	15,00,000
Repairs & Spare of Electrical Motors & Pumps (Budget Code : 51212)	1,00,000
Additions, Alterations to Bore (Budget Code : 51213)	2,00,000
Miscellaneous Contingencies (Budget Code : 51214)	1,50,000
Panchayat Charges & Contribution etc. (Budget Code : 51215)	25,00,000
Total	**1,07,40,000**
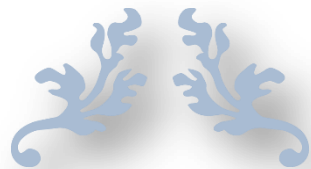
CRITERION V

[STUDENT SUPPORT AND PROGRESSION]

CRITERION-V
[STUDENT SUPPORT AND PROGRESSION]

5.1 STUDENT MENTORING AND SUPPORT

5.1.1 Does the university have a system for student support and mentoring? If yes, what are its structural and functional characteristics?

Yes, the university has a system for student support and mentoring. The following are the features of the system:

- Pre-admission counselling
- Orientation programme
- Teacher(s)-in-charge (take care of the day-to-day issues of the students related to classroom and laboratory facilities of the respective stream)
- Remedial classes
- Coaching programme for SC/ST
- Talent Search and Nourishment
- Ragging free campus
- Women cell
- Placement cell
- Hostel accommodation
- Health care
- Youth welfare and Cultural activities
- Physical education
- Industrial visit
- Soft skill development
- Ethical character building
- Socialization
- Life enrichment

5.1.2 Apart from classroom interaction, what are the provisions available for academic mentoring?

Apart from class room interaction, several mechanisms are being adopted for academic mentoring:

- Students are provided an opportunity to meet the concerned faculty member for further discussion/clarification in the subject concerned.
- Expert talks are organized.
- Seminar/Group Discussion/Soft Skill development, etc. are arranged as per the need.
- For understanding project work, teacher guides are allotted to a group of students.

- Students are provided an opportunity to interact with the faculty member through weekly contact hours as shown in the time table.

5.1.3 Does the university have any personal enhancement and development schemes such as career counselling, soft skill development, career-path-identification, and orientation to wellbeing for its students? Give details of such schemes.

Yes, the university has personal enhancement and development schemes such as career counselling, soft skill development, career-path-identification, and orientation to its students. The individual department provide several opportunities to the students for their participation in extracurricular and socialization activities that are organized under a society consisting of faculty members and all the students. Lectures by eminent persons are arranged on topics other than the curricular aspects to improve the personality development and also awareness programs. Each department has a placement cell which looks after the liaison work between the student and prospective employers. Placement based test and interviews are arranged and the students are counselled for their best performance. Separate programs are organized in some of our social science and humanities departments, for improving soft skills. NET/SLET coaching classes are arranged. The students are appraised about the unique features of the department in a orientation cum welcome programme. Annual days are regularly organized and the best performing students are recognized by rewards.

5.1.4 Does the university provide assistance to students for obtaining educational loans from banks and other financial institutions?

Yes, the university provides assistance to students for obtaining educational loans from banks and other financial institutions. Moreover, the university awards fellowships and free-studentships to the deserving and needy students.

Following are the sources from where the financial assistance from other than banks can be availed:

- Scholarships offered by Government of Gujarat
- Senior and Junior Fellowship
- SC/ST Scholarship
- EBC Scholarship
- SF Fellowship
- Rajiv Gandhi Fellowship for MPhil and PhD students
- National and International Fellowship

The campus has its own bank branch of Corporation Bank. The needy students are counselled to approach this bank for loan. The process of loan application is facilitates by the department and the university by providing identity, surety and any other required formalities by the bank.

5.1.5 **Does the university publish its updated prospectus and handbook annually? If yes, what is are main issues/activities/information included/provided to students through these documents? Is there a provision for online access?**

Yes, the university publishes its updated prospectus annually. University regularly announces this information through University Website and softcopy of the common prospectus for all courses is uploaded on the site, which can be accessed from the following link:

http://www.spuvvn.edu/students_corner/admissions/Prospects-2014-15-FINAL.pdf

Prospectus includes academic programs offered by the university, eligibility criteria, admission procedure, hostel facility, faculty details, infrastructure details, academic rules and regulations, placement details, fees structure, pre and post admission information and contact details of each department.

The university handbook is also updated and published time to time. All the information to be disclosed is covered under the handbook is being kept in the office of PIO, RTI Cell for personal inspection. The copy of the handbook is made available on demand.

5.1.6 **Specify the type and number of university scholarships/freeships given to the students during the last five years. Was financial aid given to them on time? Give details (in a tabular form) for the following categories: UG/PG/M.Phil./Ph.D./Diploma/others (please specify).**

The University awards fellowships and free-studentships to the deserving and needy students as described in 5.1.4.

The details of financial assistance provided by the university for the last five years are mentioned below:

[A] Scholarships/Fellowships/Free-Studentships etc. (in ₹)						
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**Total**
Dr.Taraben N.Patel Scholarship				10,800	11,200	22,000
Private Endowment Scholarship	8,340	14,400				22,740
Ratilal Vallavjibhai Doshi Parivar Scholarship				14,400	14,400	28,800
Self-finance free Studentship	7,60,000	10,54,500	9,48,900	9,02,700	9,21,800	45,87,900
University fellowship	6,000	3,600				9,600
University free studentship	48,000	2,400				50,400
Total	**8,22,340**	**10,74,900**	**9,48,900**	**9,27,900**	**9,47,400**	**47,21,440**

[B] Research Scholarships/Fellowships (in ₹)						
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**Total**
CSIR (Council of Science and Industrial Research)	4,78,802	9,54,165	13,97,658	11,34,708	6,86,123	46,51,456
Deputation				1,54,724		1,54,724
Dr D S Kothari Postdoctoral fellowship Scholarship	1,68,935	1,59,600	7,67,648	6,90,967		17,87,150
Indira Gandhi Scholarship for Single Girl Child	1,60,000	1,40,000	30,000			3,30,000
Inspire Fellowship				12,32,581	21,00,000	33,32,581
JRF (Junior Research Fellowship)	-2,44,641	22,63,113	20,11,059	17,95,871		58,25,402
NBHM	72,000					72,000
PG Merit for	1,70,000					1,70,000

[B] Research Scholarships/Fellowships (in ₹)						
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**Total**
Rank Holder Scholar						
RGNF (Rajiv Gandhi National Fellowship)	1822440	38,75,831	16,55,560	6,97,365		80,51,196
Total	**26,27,536**	**73,92,709**	**58,61,925**	**57,06,216**	**27,86,123**	**2,43,74,509**

[C] Category wise Scholarship (in ₹)						
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**Total**
Baxipanch Scholarship	8,73,942	6,22,121	13,14,084	16,18,510	34,29,965	78,58,622
EBC Scholarship	20,400	24,000	21,600			66,000
Gujarat Higher Education Scholarship	1,000	13,000	600			14,600
Handicap Scholarship	3,000	18,000	27,000	30,000	18,000	96,000
Minority Scholarship	46,500					46,500
Miscellaneous Scholarship	1,76,570	5,000	5,000			1,86,570
SC Scholarship	8,14,543	19,05,063	40,06,992	33,09,985	36,50,162	1,36,86,745
ST Scholarship	90,785	27,24,461	43,66,508	44,62,704	59,75,270	1,76,19,728
Total	**20,26,740**	**53,11,645**	**97,41,784**	**94,21,199**	**1,30,73,397**	**3,95,74,765**

5.1.7 **What percentage of students receives financial assistance from state government, central government and other national agencies (Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow, etc.)?**

The following table shows the percentage of students received financial assistance:

Year	Scholarships/ Fellowships/ Free-Studentships etc. (in %)	Research Scholarships/ Fellowships (in %)	Category wise Scholarship (in %)
2014-15	04		52
2013-14	03	02	36
2012-13	03	01	27

Year	Scholarships/ Fellowships/ Free-Studentships etc. (in %)	Research Scholarships/ Fellowships (in %)	Category wise Scholarship (in %)
2011-12	03	01	27
2010-11	03	01	22

List of the candidates Availed Financial Assistance under various schemes are shown in Annexure-24

www.spuvvn.edu/iqac/rar16/annexures/ann-24.pdf

5.1.8 Does the university have an International Student Cell to attract foreign students and cater to their needs?

The university has established a separate office named the International Students Centre (ISC) to cater to the needs of International students. The International Students Centre (ISC) of Sardar Patel University was founded in the academic year 2004-05 through a University Circular No. D-E/10/1197 dated 29.5.2004 with the twin objectives of (a) assisting the International Student Community by providing information about the various courses offered, admission procedure, eligibility criteria, fee to be charged etc, and (b) arranging for their admissions, helping them settle down quickly and happily in their studies, and taking care of their welfare.

The University attracts quite a good number of foreign students every year. The fact that the cost of living and education in Vallabh Vidyanagar is easily manageable is an additional reason for international scholars joining this University for studies.

Since its inception, the ISC coordinates all the activities related to the admission of international students through a Single Window System. It coordinates with Indian Council for Cultural Relations (ICCR), Union Ministry of External Affairs (MEA), Union Ministry of Human Resource Development (MHRD), Union Ministry of Home Affairs (MHA), and with different Embassies and Consulates for various purposes including assisting the international students to obtain Student or Research Visa, Scholarships etc.

The detail of foreign students is given elsewhere.

5.1.9 What types of support services are available for

Provide the details for the following, if applicable:

For whom	Type of support services available
Overseas students	• International Student Centre (ISC), Sardar Patel University provides general support. • Logistic support is provided with the consent of the university. • International Student Centre has provided accommodation in the University staff colony with separate rooms. Also we provide furniture, electric equipments like refrigerator, water purifier, and hot water geyser.
Physically challenged / differently-abled students	• Ramp facility. • In Gynodaya Examination Building and Department of Computer Science, lift facility is available. • Extra time, efforts and guidance is given to the needy students. • Special arrangement in classrooms as well as in the laboratories. • Information pertaining to their financial and other academic benefits is provided in time.
SC/ST, OBC and economically weaker sections	• SC/ST & OBC fellowship (State Government Sponsored) is given to these students. • UGC NET Coaching Centre at University level. • Stakeholders are informed via circular from the University for Reservation Policy and various scholarships.
Students participating in various competitions/conferences in India and abroad	• Students are motivated by senior faculty for attending various competitions/conferences and necessary guidance about Government monetary system is also given. • By providing the financial support from the department as per university rules.
Health centre, health insurance etc.	• University Health Centre (UHC). • UHC operates medical checkup and provides free medicines. • Students are also provided information about nearby hospitals to take the advantage. • Medical check-up.
Skill development (spoken English, computer literacy, etc.)	• Different educational training programmes or awareness programmes by placing the relevant information's time to time on student notice board as received directly or indirectly from Government/Non-Government Agencies/Institutions etc. • In Humanities and Social Science departments, a course is offered for all students to develop computer skills.

For whom	Type of support services available
Performance enhancement for slow learners	• Re internal test is available for slow learners. • Remedial Classes are conducted as and when required. • Extra classes and personal guidance is given to slow learners. Students can contact faculty as and when required for guidance. • Assignments, personal guidance is provided by subject teachers.
Exposure of students to other institutions of higher learning/ corporate/business houses, etc.	• Department encourages students for participation in various academic, co-curricular activities. • Students are also permitted for attending conferences, workshop and symposium etc.
Publication of student magazines	• Students are provided an opportunity to publish their articles or other materials to display on the departmental notice board.

5.1.10 Does the university provide guidance and/or conduct coaching classes for students appearing for Civil Services, Defence Services, NET/SET and any other competitive examinations? If yes, what is the outcome?

Yes, Sardar Patel University runs centre for coaching classes of NET/SLET, which provides guidance and conducts such coaching classes, especially for the benefit of SC, ST, OBC and minority students. Moreover, students are encouraged for such competitive examination and also required materials are made available.

Data of successful candidates at UGC-NET examination:

Year	Category	No. of Students Attended	No. of Students Passed
2014-15	SC	51	01
	ST	24	
	SEBC	65	03
	Minority & PH	06	
	OPEN	94	05
2013-14	SC	53	09
	ST	30	01
	SEBC	57	06
	Minority & PH	01	
	OPEN	111	12
2012-13	SC	30	11
	ST	17	01
	SEBC	40	05
	Minority & PH		02
	OPEN	115	16

Year	Category	No. of Students Attended	No. of Students Passed
2011-12	SC	Students have reported for the participation directly.	07
	ST		
	SEBC		01
	Minority & PH		
	OPEN		08
2010-11	SC	Students have reported for the participation directly.	07
	ST		
	SEBC		04
	Minority & PH		
	OPEN		14

Data on successful candidates at other examinations:

Year	GATE/GPAT	NET JRF	SLET	GPSC	NBHM
2014-15	07	02	10	01	
2013-14	07	04	21	03	01
2012-13	16	03	13	05	
2011-12	37	01	09		
2010-11	07	03	15		
Total	**74**	**13**	**68**	**09**	**02**

Overall summary:

Year	UGC-NET	NET JRF	Other Examinations (GATE,SLET,GPSC,NBHM)
2014-15	09	02	08
2013-14	28	04	13
2012-13	35	03	09
2011-12	16	01	06
2010-11	25	03	03
Total	**113**	**13**	**39**

5.1.11 **Mention the policies of the university for enhancing student participation in sports and extracurricular activities through strategies/schemes such as additional academic support and academic flexibility in examinations special dietary requirements, sports uniform and materials any other (please specify).**

Yes, Sardar Patel University regularly organize Intercollegiate tournament for Men and Women. Winners are also motivated and supported to participate at the West Zone/All India Inter University tournament. Moreover, university also conduct coaching camps for various games in order to provide practices to participants who are participating the West Zone/All India Tournament. The duration of the camps is 15 to 25 days in two sessions in morning and evening. The budgetary provision is made for diet of the student during Coaching

Camp of the both session. When our team participates at West Zone/All India Inter University Tournament Students are given Sports Kit (T-Shirt & Shots) and Track Suite printed with University Logo. The team which achieves any position or qualify for the All India Level Tournament they are given Blazer along with University crest. The University sanctions TA and DA to the students for attending zonal and national meets. The travel mode is relaxed in case of emergency.

The following are the practices applied at the department level in order to motivate the students for sports and extracurricular activities:

Additional academic support and academic flexibility in examinations:

- Academic support like leave, compensation in attendance, etc are given as per the feasibility and university rules.
- If student is participating in any University or State Level events, the teaching and laboratory hours are adjusted during holidays or in extra time. In some important events the special slot for the examination also provided to the Student.
- Financial support to participate in various events of youth festival like dance, rangoli, collage making, poster making, etc.

Sports uniform and material are provided to the qualify participant any other :

- Sports week/day celebration.
- Indoor/Outdoor sports facility.
- Participation certificate are provided as an encouragement.
- Trophies and certification are awarded during annual day celebration
- Kite flying celebration in few departments.

5.1.12 Does the university have an institutionalized mechanism for students' placement? What are the services provided to help students identify job opportunities, prepare them for interview, and develop entrepreneurship skills?

A Career and Counselling Cell (CCC) of the University centrally coordinates the departmental level cells in managing the placement related activity. The university has well-defined structure for managing placement related process. Most of the departments also take care about the placement related activities themselves. University supports required facility in order the scatter the needs of placement at department level. The Industry requirements are also informed to the concern department through notices. Moreover, the university has U&I Cell, which acts as bridge between the university and industry level. Sometimes job
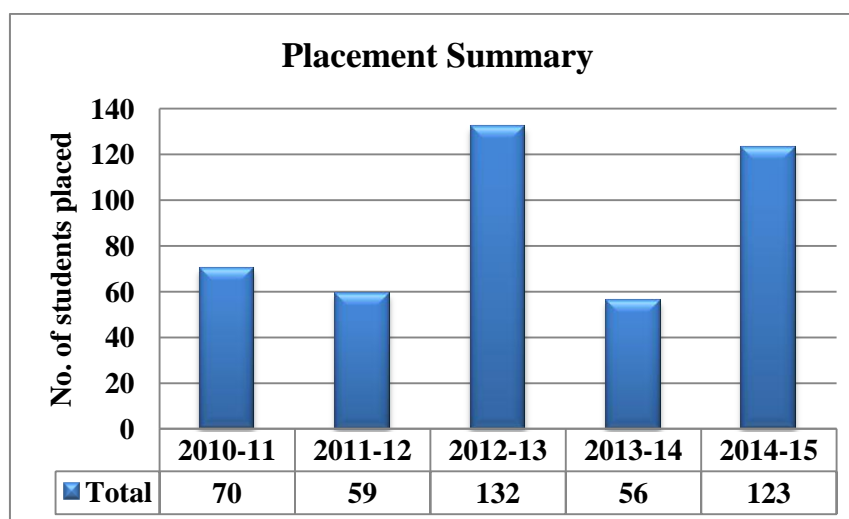
opportunities are observed through the Alumni of the department. Department regularly displays the relevant information of placements regarding fellowship and job vacancies at different organizations/institutes etc. Department interact with the industry people themselves or via CCC cell of the university in order to obtain the job requirement and improvement in the existing curriculum. The placement cell helps student identify job opportunities, runs entrepreneurship skill-development workshops, where students are taught soft skills, conducts special competitive test. **Details about the number of companies visited can be accessed through Annexure-25.**

www.spuvvn.edu/iqac/rar16/annexures/ann-25.pdf

5.1.13 **Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).**

Graphical representation of the number of students selected for last five years:

Placement Summary

	2010-11	2011-12	2012-13	2013-14	2014-15
Total	70	59	132	56	123

No. of students placed

The details about number of students selected during campus interviews by different employers are given in Annexure-26.

www.spuvvn.edu/iqac/rar16/annexures/ann-11.pdf

5.1.14 **Does the university have a registered Alumni Association? If yes, what are its activities and contributions to the development of the university?**

The university at central level has recently registered an alumni association named, "**S. P. UNIVERSITY BHUTPURVA CHHATRAMANDAL**", even though some of our individual departments have registered alumni association as independent units. The periodical meets of alumni are arranged at department level and the

alumni are encouraged to participate and give suggestions in finding more opportunities for job placement. Interactive sessions of alumni and present students are arranged for giving useful tips in facing the interview and group discussion etc.

There is a SPU alumni association at USA and they keep in close touch with the university and this unit has recently donated ₹1 crore for the strengthening of academic & research activities of academic and research activities. A tradition of gathering of alumni and just passed out studies on the eve of convocation day at department is rigorously maintained. During this visit informal discussion and informal feedback are also taken. Some of our alumni maintain groups on social media such as Facebook & Whats-App.

5.1.15 Does the university have a student grievance redressal cell? Give details of the nature of grievances reported. How were they redressed?

Yes, Sardar Patel University has central mechanism for student grievance redressal cell. As per the guidelines provided by the State Government, University Grants Commission (UGC), university regularly implements the required policies. These are well taken care by the department as and when department receive any grievance(s) raised by the student via suggestion box or any hand written application. Each department has a Grievance Redressal Committee, which addresses grievances related to quality of education, amenities, admission, discrimination on the basis of caste, race, etc. Various cells like Common Grievance Cell, Women Grievance Cell, Anti-ragging Committee, Anti-Harassment Cell exist in the departments.

5.1.16 Does the university promote a gender-sensitive environment by (i) conducting gender related programmes (ii) establishing a cell and mechanism to deal with issues related to sexual harassment? Give details.

Yes, the university promotes a gender-sensitive environment by establishing a Woman's Cell and Sexual-harassment cell. Most of the department has lady teacher representative in this cell to promote a gender-sensitive environment. Each department has their own Woman's Cell and Sexual-harassment cell as per the UGC guidelines. The activities of these cells are covered under the University mandate as directed by the Supreme Court of India and the Government of India.

5.1.17 Is there an anti-ragging committee? How many instances, if any, have been reported during the last four years and what action has been taken in these cases?

Yes, the university has department level anti-ragging committee. During the last four years no such instances are reported. Department regularly display the role and responsibility of the anti-ragging committee and students are aware regarding the anti-ragging committee members and their contact details.

5.1.18 How does the university elicit the cooperation of all its stakeholders to ensure the overall development of its students?

Sardar Patel University is a model for rural development, obliviously university has a key focus on the overall development of the students. In the year 2015, the university has crossed the 60 years (Diamond Jubilee) of its establishment, the sufficient number of stakeholders are exist in the surrounding as well as in the International Level. These stakeholders regularly remain in touch with the University via Alumni Association or in other form to co-operate the university. The department make conscious efforts to build a healthy relationship with all its stake holders at large. The university has a mechanism to facilitate the top rankers on the eve of Convocation Day with their parents. Also their feedbacks are taken in the august presence of Heads of the Department, their parents and other invitees to improve the educational process.

5.1.19 How does the university ensure the participation of women students in intra- and inter-institutional sports competitions and cultural activities? Provide details of sports and cultural activities where such efforts were made.

The girl/woman students are encouraged to participate in intra- and inter-institutional sports competitions and cultural activities. The faculty members take due care of the safety and security of participants during the events. Musical evening and annual "Garba" events are arranged for woman students. Following are the events, games where students actively participated:

- Badminton
- Collage
- Drawing
- Essay Writing
- Handball
- Kabaddi
- Light Vocal Solo
- Poster Making
- Rangoli

- Table Tennis
- Youth Festival.

5.2   STUDENT PROGRESSION

5.2.1   What is the student strength of the university for the current academic year? Analyse the Programme-wise data and provide the trends for the last five years.

The student strength of the University for the Current Academic Year (i.e. 2014-15) is shown as below:

Current Academic Year (2014-15)	
Programmes	**Number of students admitted**
PG	1897
M. Phil.	139
Ph. D.	208

Student Progression	2013-2014	2012-2013	2011-2012	2010-2011
No. of students (PG to M.Phil.)	92	139	116	195
No. of students (PG to Ph.D.)	95	84	54	21

5.2.2   What is the programme-wise completion rate during the time span stipulated by the university?

The program-wise completion rate is close to 95%.

5.2.3   What is the number and percentage of students who appeared/qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defense, Civil Services, etc.?

Please refer the answer of this question is already specified in the item **5.1.10.**

5.2.4 Provide category-wise details regarding the number of Ph.D./D. Litt./D. Sc. thesis submitted/ accepted/ resubmitted/ rejected in the last four years.

Category wise details of Ph. D. (full time) students						
	Year	OPEN	SC	ST	SEBC	Total
Category-wise details regarding the number of Ph. D./D. Litt./D. Sc. thesis submitted	2014-15	26	01	03	06	78
	2013-14	44	01	08	11	85
	2012-13	32	07	02	10	82
	2011-12	21	05	01	03	66
	2010-11	03	-	-	-	58
Category-wise details regarding the number of Ph. D./D. Litt./D. Sc. thesis accepted	2014-15	63	02	03	10	78
	2013-14	58	05	06	14	83
	2012-13	59	08	02	12	81
	2011-12	55	07	01	03	66
	2010-11	57	-	-	01	58
Category-wise details regarding the number of Ph. D./D. Litt./D. Sc. thesis resubmitted	2014-15	-	-	-	-	-
	2013-14	01	-	-	01	02
	2012-13	01	-	-	-	01
	2011-12	-	-	-	-	-
	2010-11	-	-	-	-	-

5.3 STUDENT PARTICIPATION AND ACTIVITIES

5.3.1 List the range of sports, cultural and extracurricular activities available to students. Furnish the programme calendar and provide details of students' participation.

Following are the list of sports, cultural and extracurricular activities available to students:

Category	Name of activities/events
Sports	Sport day celebration, Badminton, Cricket, Football, Kabbadi, Kho-Kho, Table Tennis, Volleyball, Chess
Cultural	Cartooning, Classical Dance, Classical Instrumentation Solo (Non Percussion), Classical Instrumentation Solo (Percussion), Classical Vocal Solo, Clay Modelling, Collage, Debate, Elocution, Flute, Folk Dance, Folk Orchestra, Group Song Western, Groups Song Indian, HOLI day celebration, Kite-Flying , Light Vocal Solo, Mime, Mimicry, On the Spot Painting, On the Spot Photography, One Act Play, Poetry writing, Poster Making, Rangoli, Singing, Skit, Solo, Western Vocal Solo

Category	Name of activities/events
Extracurricular	Annual Day, Blood donation camp, Departmental cleaning , Essay-writing, Fresher and Farewell , Quiz, Teacher's day celebration, Tree plantation

Student's participation

Sr. No.	Year	Name of the Student	Name of the Game/Event	Level
1	2014-15	06	Cricket, Handball Air Rifle Shooting	Zonal/National
2	2013-14	06	Chess, Badminton,Handball, Volleyball , Table Tennis	Zonal
3	2012-13	06	Basketball,Cricket, Handball,Table Tennis, Kabaddi	Zonal
4	2011-12	04	Badminton	Zonal
5	2010-11	06	Football, Badminton	Zonal
	Total	28		

5.3.2 Give details of the achievements of students in co-curricular, extracurricular and cultural activities at different levels:

University/State/Zonal/National/International, etc. during the last five years.

Sr. No.	Department	Name of the participant	Name of Game/Event	Prize	Level
[2014-15]					
1	Gujarati	Kamlesh Parmar	Poetry Writing	First	University
2	Gujarati	Nayan Boghra	Debate	Second	University
3	Gujarati	Manisha Chavda	Essay Writing	Second	University
4	Home Science	Ms. Yogini Chauhan	Poster Making	First	University
5	Home Science	Ms. Meera Barasara	Drawing Competition	Second	University
6	Physics	Anand P. Joshi	Solo	First	University
[2013-14]					
7	Gujarati	Farhanabanu Diwan	Rangoli	second	University
8	Gujarati	Deval Shah	Rangoli	Third	University
9	Home Science	Ms. Yogini Chauhan	Poster Making	First	University

Sr. No.	Department	Name of the participant	Name of Game/Event	Prize	Level
[2012-13]					
10	Gujarati	Nitin Patel	Rangoli	Third	University
11	Home Science	Jinal Panchal	Collage	Second	University
12	Home Science	Group of Students	Group Dance	Second	University
13	Home Science	Ami Brahmbhatt	Light Vocal Solo	Third	University
[2011-12]					
14	Gujarati	Nitin Patel	Youth Festival	First	University
15	Gujarati	Dipak Patel	Youth Festival	First	University
16	Gujarati	Manish Gadhavi	Youth Festival	First	University
17	Gujarati	Hiren Gadhavi	Youth Festival	First	University
18	Gujarati	Ragini Rami	Youth Festival	First	University
19	Gujarati	Bhumika Rami	Youth Festival	First	University
20	Gujarati	Sailesh Tambodiya	Youth Festival	First	University
21	Gujarati	Manisha Chavda	Youth Festival	First	University
22	Gujarati	Jashvant Panchal	Youth Festival	First	University
23	Gujarati	Ankita Patel	Rangoli	Second	University
24	Home Science	Ms. Ami Brahmbhatt	Light Vocal Solo	Third	University
[2010-11]					
25	Gujarati	Jignesh Joshi	Youth Festival	Second	University
26	Gujarati	Nimesh Gadhavi	Youth Festival	Second	University
27	Gujarati	Narendra Patel	Youth Festival	Second	University
28	Gujarati	Dharmishta Kakadiya	Youth Festival	Second	University
29	Gujarati	Priskilla Chauhan	Youth Festival	Second	University
30	Gujarati	Hiran Gadhavi	Youth Festival	Second	University

5.3.3 Does the university conduct special drives /campaigns for students to promote heritage consciousness?

The university has its own Museum and houses several rare and archeologically significant exhibits and the museum is run by permanent specialized faculty. Museum arranges visits, workshops, exhibitions and competitions to spread heritage awareness among students and citizens.

Under "Museum Awareness Program 2014-2015", Museum has invited various schools of Vallabh Vidyanagar-Anand. In such Museum visits, the students were given an orientation lecture by Museum-Curator and followed by a guided tour to the Museum galleries. At the end of each conducted visit, Museum has made an arrangement of documentary show (available in English/Hindi) on LCD. Over 2,600 school students along with 78 teachers visited University Museum.

University Museum had acquired the following objects:

- Anand Philatelic Association has given 80 Postal Stamps (on temporary loan) to develop a philatelic section in Museum. The Philatelic Section is under formative stage.
- 1 (ONE) British Coin (i.e. Edward VII; 1903) from Mr. Shreyas Pandya, Student, NA &TV Patel Arts College.
- 8 frames consists of rare scanned documents belong to Sardar Vallabhbhai Patel which are more than 100 years old. The original documents are with Middle Temple, UK. The same is gifted to the Museum by Prof. Harish Padh, Vice-Chancellor, Sardar Patel University.
- Following graph shows the details about the no. of visitors during the assessment period:

Visitors Information
(S P University Museum)

	2010-11	2011-12	2012-11	2013-14	2014-15
Local Visitors	3722	4883	6880	8256	2678
Outsider Visitors	778	817	5520	5244	13322
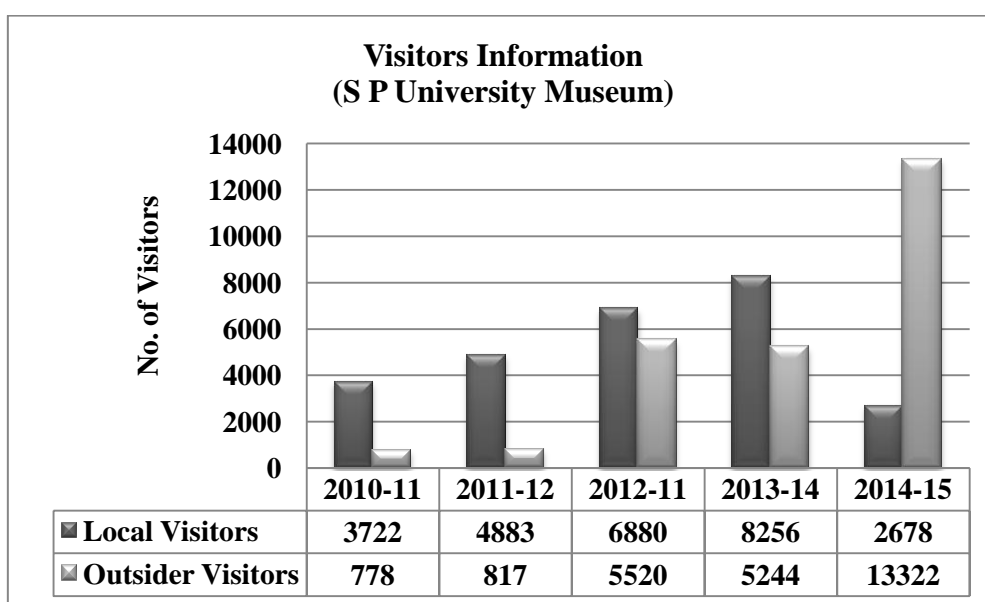
5.3.4 How does the university involve and encourage its students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/ materials brought out by the students during the last four academic sessions.

Students are given an opportunity to publish their contribution by the faculty in the appropriate place. The IQAC cell of the university regular remains in the touch with all departments and directly to students via emails to communicate such opportunity for the benefit the concern community. Departments have notice board to display the articles from magazines, industrial and science related information, other important messages related to health, education, etc…Students skills are also identified and they are provided opportunity to spread their skills within student community at department level, at university level and at higher level. The university has its own newsletter 'Sheel Shrutam' and students are encourage for their contribution to the news letter.

5.3.5 Does the university have a Student Council or any other similar body? Give details on its constitution, activities and funding.

The university has a very effective decentralized student council representative system. Each class has a class representative, woman representative and general secretary. These representatives closely work with the societies headed by heads of the department and faculty members. The activities are funded by University Central Gymkhana Fund and Departmental Gymkhana Fund.

Following activities are carried out for the students:

- Organizing the cultural programs
- Organizing the extracurricular programs
- Organizing welcome party
- Organizing farewell party
- Days celebration
- Talent finding
- Sports day
- Annual day or its equivalents event
- Organizing activity for overall development

5.3.6 **Give details of various academic and administrative bodies that have student representatives on them. Also provide details of their activities.**

The following are academic and administrative bodies that have student representatives:

- Anti Ragging Committee
- Women Cell
- Wall Magazine Committee
- Students Grievance Cell
- Students Society
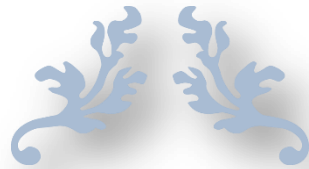
CRITERION VI

[GOVERNANCE, LEADERSHIP AND MANAGEMENT]

CRITERION-VI
[GOVERNANCE, LEADERSHIP AND MANAGEMENT]

6.1 INSTITUTIONAL VISION AND LEADERSHIP

6.1.1   State the Vision and Mission of the University

VISION

Sardar Patel University envisages blossoming of human potential through nurturing of talent, skill, and scientific temper, creation of knowledge, incubation of wisdom, sustenance of blithesome spirit toward upholding national pride, international understanding, peace and prosperity by activating engines of academic excellence

MISSION

Regeneration of rural Indian life with the application of the study and research in all the disciplines of knowledge in tune with the modern global developments

To meet up the mission of the university, all departments have formulated their own vision and mission statements which would collectively contribute to the attainment of the envisioned goal of the university. Our university is involved in the creation of knowledge base through academic research of high quality and also imparting through well thought out educational programmes

6.1.2   Does the mission statement define the institution's distinctive characteristics in terms of addressing the needs of the society?, the students it seeks to serve, the institution's tradition & value orientations, its vision for the future, etc.?

Yes, the departments have given a serious thought into these aspects. Our university, being a rural university with a mandate to address the rural issues trains the students from largely rural background and also the weaker sections. We have identified thrust areas which includes Agro-Economic research and extension, rural enterprises development apart from a strong presence in basic sciences and liberal studies. We maintain interactions with Industry for gathering their needs in order to enrich our curriculum and justify the existence by being relevant. Departments are undertaking problem solving research projects in addition to enrichment of knowledge through basic research. Some of the research results are being patented. We have applied for grant to set up an incubation centre for the logical extension of knowledge creation by commercializing the inventions. Inter disciplinary research projects are encouraged here by combining departments. Centre for

Interdisciplinary Studies in Science & Technology (CISST), Community services through C.C Patel Community Science Centre, Community Radio, Rural Programmes, Family Resource Management, Women Enterprises etc., is some of the examples.

6.1.3 How is the leadership involved?

- **in ensuring the organization's management system development, implementation and continuous improvement**
- **in interacting with its stakeholders**
- **in reinforcing a culture of excellence**
- **in identifying organizational needs and striving to fulfil them**

Right from the inception, our university believed and practiced democratic procedure of decision making with a strong leadership at the helm of affairs. The university has to function under the structure designed by University Act with the Governor of the State Gujarat being the Chancellor and the Vice-Chancellor being the Chief Executive authority. For the participatory decision making there are statutory bodies and a number of non statutory committees. These include Senate, Syndicate, Academic Council, P G Board, Finance and Establishment Committee, Building Committee, Library Committee, Academic Monitoring Committee, and Board of Studies at University level followed by Department level IQAC as an implementation agency of the apex body IQAC. At the department level, Department Research Committees, and several functional committees are also at work. The Vice-Chancellor being the head provides overall leadership, guidance and the direction of teaching-research by taking the views of the stakeholders in a University set-up. The decision taking bodies combine the views and visions of Chairpersons of Board of Studies, HODs of departments and Professors, Registrars, Deans, and other officers. The structure of bodies often represents the Government, Alumni, Philanthropists and Industry participations.

Our University believes in the quality improvement as an ongoing process and encourages systems improvements accordingly. We have a systematic quality assessment cell with laid down manuals for the standardisation of procedures. Under the IQAC we undertake the quality audits of our programmes with the support of department level quality assessments to uphold the standards. Department Research committee is a nodal point to stream line the research with a stated focus. Some of the Department level bodies help in admissions, curriculum improvements, purchases of equipments and stores, acquisition of library books and other administrative activities in order to maintain the transparency and values. We have maintained an ambience for quality teaching and

research by democratising the decision taking and we strongly encourage participatory management.

6.1.4 **Were any of the top leadership positions of the university vacant for more than a year? If so, state the reasons.**

Yes. Some key positions such as Registrar, Chief Accounts Officer and Medical officer were vacant for some period despite several of attempts made by us to fill these vacancies. We have advertised these positions several times during this period and recently we have been able to fill the position of Registrar, Chief Accounts Officer and Medical officer.

6.1.5 **Does the university ensure that all positions in its various statutory bodies are filled and meetings conducted regularly?**

Yes, our statutory bodies such as Senate, Syndicate, and PG Board have convened several meetings during this period. The annual senate meetings facilitate the passing of annual budgets and other recommendations for the academic reforms and improvements as suggested by other bodies such as Board of studies, PG Boards and academic council etc. Similarly, some important committees such as Finance and Establishment (FE) Committee, and Building Committee also have convened number of meetings.

Syndicate being executing authority has been dealing with important matters such as affiliation, recruitment & promotion, recommendation regarding the fee structure and other student oriented policy related decisions.

Finance and Establishment committee transacts, plan and non plan expenditure and also the management of various university funds time to time. It covers all of our construction activities.

Building Committee decides upon planning, execution and completion of major civil works which covers construction, extension, renovation, furniture upgrading and other novel activities such as solar & water harvesting, renovation in hostels, university quarters.

Following table shows the Details of meetings held of Statutory Bodies of University:

	Name of Bodies	Meetings Held 2010-11	Meetings Held 2011-12	Meetings Held 2012-13	Meetings Held 2013-14	Meetings Held 2014-15
A	Senate	01	01	01	01	01
B	Syndicate	09	19	06	04	03
C	Academic Council	02	02	02	02	
D	Board of		01	01	01	01

	Name of Bodies	Meetings Held 2010-11	Meetings Held 2011-12	Meetings Held 2012-13	Meetings Held 2013-14	Meetings Held 2014-15
	Postgraduate Studies and Research					
E	**Faculties**					
	Faculty of Arts	01	01	01	01	01
	Faculty of Science	01	01	01	01	01
	Faculty of Business Studies	01				
	Faculty of Management	01	01	01		
	Faculty of Education	01	01	01	01	01
	Faculty of Home Science	01	01	01	01	01
	Faculty of Law	01				
	Faculty of Medicine	01	01	01	01	01
F	**Boards of Studies**					
	Hindi	01	01	01	01	01
	Gujarati	01	01	01	01	01
	Sanskrit	01	01	01	01	01
	English	01	01	01	01	03
	History	01	01	01	01	01
	Logic and Philosophy	01	01	01	01	02
	Sociology	01	01	01	01	01
	Psychology	01	01	01	01	01
	Economics	01	01	01	01	02
	Political Science	01	01	01	01	01
	Geography	01	01	01	01	01
	Co-Operation	01	01	01	01	01
	Library Science	02	02	02	02	02
	Music and Dance	01	01	01	01	01
	Mathematics	01	01	01	01	01
	Statistics	01	01	01	01	02
	Chemistry	01	01	01	01	01
	Physics	01	01	01	01	01
	Biosciences	02	03	03	03	03
	Industrial Chemistry	01	01	01	01	01
	Computer Science	01	01	01	01	02
	Electronics	01	01	01	01	01
	Materials Science	01	01	01	01	01
	Commerce and Business Studies	01		01	01	01

	Name of Bodies	Meetings Held 2010-11	Meetings Held 2011-12	Meetings Held 2012-13	Meetings Held 2013-14	Meetings Held 2014-15
	Accountancy	01	-	01	01	01
	Banking	01	-	01	01	01
	Management	02	02	01	01	02
	Education	02	02	01	01	04
	Law	01	01	01	01	01
	Home Science	01	01	01	-	01
	Homoeopathic	01	01	01	01	01
	Clinical	01	01	01	01	01
	Paraclinical	01	01	01	01	01
	Pre-Clinical	01	01	01	01	01
G	AD-hoc Board					
	BSW/MSW	01	01	01	01	-
	Post Graduate in Pharmacy	01	-	-	-	-
	E-Commerce	01	-	-	-	-
	Instrumentation	01	01		01	01
	Master Of Valuation (Real Estate) and Master Of (Plant & Machinery)	-	-	-	01	01
	Interior Design	-	01	02	-	-
	Master Human Resource Development	-	-	-	-	01
	B Visual Arts	-	-	-	01	01
	Joint Ad-hoc Board of studies in Biomedical Science, Defence Science & Earth Science	-	-	-	03	02
	Forensic Science	-	-	-	01	01
	Nanoscience and Nanotechnology	-	-	-	01	01
	Master of Labour Welfare	-	-	-	01	01
	Renewable Energy	-	-	-	01	01

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- Details of Civil work in the University

Year 2010-11 (Civil Work)

Sr. No.	Particulars	Cost (in ₹)	Status
1	Construction of Pariksha Bhavan Building	10 Crores	Completed
2	Construction of S.T. Hostel Building	2.5 Crores	Completed
3	Academic Staff College Guest House	75 Lakhs	Completed
4	Humanities Renovation	22 Lakhs	Completed
5	Computer Science Renovation	15 Lakhs	Completed
6	Computer Centre Renovation	15 Lakhs	Completed
7	Old Biosciences Building Renovation	10 Lakhs	Completed
8	Physics Department Renovation	5.32 Lakhs	Completed
9	Home Science Department Renovation	5.15 Lakhs	Completed
10	Basic Facilities for Women	28 Lakhs	Completed
11	Women's Hostel Construction	2.07 Lakhs	In progress
12	University Second Floor Renovation	25 Lakhs	In progress
13	Campus Development	60 Lakhs	In progress
14	Gymnasium Hall Construction	5 Crores	In progress

Year 2011-12 (Civil Work)

Sr. No.	Particulars	Cost (in ₹)	Status
1	Basic Facilities for Women	50 Lakhs	Completed
2	University Second Floor Renovation	25 Lakhs	Completed
3	Water Proofing Work for T Block Quarters No : 45 to 72	4.95 Lakhs	Completed
4	Mathematics Department Renovation	8.63 Lakhs	Completed
5	Extension work of Mathematics Department	16.09 Lakhs	Completed
6	Materials Science Renovation	10.62 Lakhs	Completed
7	M.B.P.C. Renovation	12.23 Lakhs	Completed
8	E-type Quarters Renovation	11.15 Lakhs	Completed
9	Women's Hostel Construction	2.07 Crores	In Progress
10	Campus Development	60 Lakhs	In Progress
11	Gymnasium Hall Construction	5 Crores	In Progress

Year 2012-13 (Civil Work)

Sr. No.	Particulars	Cost (in ₹)	Status
1	Construction of Womens' Hostel No : 3	2.15 Crores	Competed
2	Renovation Work of Economic Department	13.00 Lakhs	Competed
3	Campus Development	62.00 Lakhs	Competed
4	Furniture Work for Womens' Hostel No : 3	14.00 Lakhs	Competed
5	Extension of Community Science Centre	22.00 Lakhs	Competed
6	Extension of Chemistry Department 2nd Floor	13.00 Lakhs	Competed
7	Civil Work of Purse Programme Phase-I	13.00 Lakhs	Competed
8	Renovation Work of Home-science Department	5.00 Lakhs	Completed
9	Construction of Gymnasium Hall	4.91 Crores	In Progress
10	Renovation Work of Bhaikaka Library 1st Floor	6.00 Lakhs	In Progress
11	Renovation of Bio-Sciences Campus Canteen	1.75 Lakhs	In Progress
12	Furniture Work for Eklavya Hostel	33.00 Lakhs	In Progress
13	Civil Work of Purse Programme Phase-II	10.00 Lakhs	In Progress

Year 2012-13 (Electrical Work)

Sr. No.	Particulars	Cost (in ₹)	Status
1	Electrification for Extended Portion of Mathematics Department (2nd Floor-West Side)	1.81 Lakhs	Completed
2	Re-electrification of M.B.Patel Education College	14.65 Lakhs	Completed
3	Supply, Installation, Testing & Commissioning of Power Panel & Cable Laying of D.G. Sets (Gyanodaya Bhavan, University Press, M.P. Patel Auditorium Hall & G.H. Patel Computer Centre)	9.70 Lakhs	Completed
4	Electrification for Providing Power Plug & renovation of Power Distribution System at Nehru Hall	3.42 Lakhs	Completed

Sr. No.	Particulars	Cost (in ₹)	Status
5	Supply, Installation, Testing & Commissioning of Power Panel & Cable Laying of D.G. Sets for Bhaikaka Library	2.37 Lakhs	Completed
6	Re-electrification of Room No : 101 to 109, 111, Passages and cabins at Ground Floor of Old Bio-sciences Building under CISST Programme	4.23 Lakhs	Completed
7	Electrification Work for Womens' Hostel & USIC Portion (G+3 Floor)	13.36 Lakhs	Completed
8	Re-electrification of H Type Staff Quarters	4.83 Lakhs	Completed
9	Re-electrification of Home Science Building (For Lab no: G2, G4 & HOD Cabin)	1.26 Lakhs	Completed
10	Re-electrification of Humanities Building	31.21 Lakhs (Estimated)	In Progress

Year 2013-14 (Civil Work)

Sr. No.	Particulars	Cost (in ₹)	Status
1	Construction of Womens' Hostel No : 3	2,14,15,536	Competed
2	Renovation Work of Economic Department	12,83,348	Competed
3	Campus Development	61,37,507	Competed
4	Furniture Work for Womens' Hostel No : 3	14,19,532	Competed
5	Extension of Community Science Centre	19,33,539	Competed
6	Extension of Chemistry Department 2nd Floor	12,06,679	Competed
7	Civil Work of Purse Programme Phase-I	14,10,712	Competed
8	Renovation Work of Home-science Department	5,67,041	Completed
9	Renovation Work of Bhaikaka Library 1st Floor	5,37,089	Completed
10	Renovation of Bio-Sciences Campus Canteen	1,64,539	Completed
11	Furniture Work for Eklavya Hostel	33,89,553	Completed
12	Civil Work of Purse Programme Phase-II	7,70,157	Completed
13	Construction of Gymnasium Hall	5.32 Crores	Completed

Sr. No.	Particulars	Cost (in ₹)	Status
14	Extension work of Computer Centre	15,49,505	Completed
15	Renovation work for Women's Hostel 1 & 2	4,79,767	Completed
16	Renovation work of Central Hall No : 13 for M B Patel College of Education	4,17,836	Completed
17	Solar Water Harvesting System for Women's Hostel No : 3	4,03,591	Completed
18	Solar Water Harvesting System for CTE Hostel	2,45,436	Completed
19	Solar Water Harvesting System for Men's Hostel	2,69,247	Completed

Year 2013-14 Electrical Work

Sr. No.	Particulars	Cost (in ₹)	Status
1	Electrification for Extended Portion of Mathematics Department (2nd Floor-West Side)	1.81 Lakhs	Completed
2	Re-electrification of M B Patel Education College	14.65 Lakhs	Completed
3	Supply, Installation, Testing & Commissioning of Power Panel & Cable Laying of D G Sets (Gyanodaya Bhavan, University Press, M P Patel Auditorium Hall & G H Patel Computer Centre)	9.70 Lakhs	Completed
4	Electrification for Providing Power Plug & renovation of Power Distribution System at Nehru Hall	3.42 Lakhs	Completed
5	Supply, Installation, Testing & Commissioning of Power Panel & Cable Laying of D G Sets for Bhaikaka Library	2.37 Lakhs	Completed
6	Re-electrification of Room No : 101 to 109, 111, Passages and cabins at Ground Floor of Old Bio-sciences Building under CISST Programme	4.23 Lakhs	Completed
7	Electrification Work for Womens' Hostel & USIC Portion (G+3 Floor)	13.36 Lakhs	Completed
8	Re-electrification of H Type Staff Quarters	4.83 Lakhs	Completed

Sr. No.	Particulars	Cost (in ₹)	Status
9	Re-electrification of Home Science Building (For Lab no : G2, G4 & HOD Cabin)	1.26 Lakhs	Completed
10	Re-electrification of Humanities Building	31.21 Lakhs (Estimated)	Completed
11	Re-electrification Work of Lab No : 207 at Bio-science Department	2,57,081	Completed
12	Electrification Work of Lab No : 108 Purse Programme	1,03,221	Completed
13	Electrification Work of Lab No : G-2, G-4 & Head Cabin at Home Science Department	98,534	Completed
14	Electrification Work of USIC Section & Women Hostel	13,36,661	Completed
15	Electrification Work of Community Science Centre	1,26,460	Completed
16	Electrification Work of Chemistry Dept IInd Floor Extended Portion	3,07,372	Completed
17	Under Ground Cabling Street Light at Museum Road	99,530	Completed
18	8 Mtr PSC Pole with Laying 95 Sqm Cable	33,000	Completed
19	Gymnasium Hall Electrification work	35.00 Lakhs	Completed

Year 2013-14 Repairs and Maintenance Work

Sr. No.	Particulars	Cost (in ₹)	Status
1	Providing and Fixing Glass at University Staff Quarters	28,684	Completed
2	Providing and Fixing FRP Sheet and Shed at Bio-sciences Building	1,34,849	Completed
3	Colour Work at Nehru Hall Hostel (Men's Hostel No : 1)	6,20,801	Completed
4	Providing and Fixing Book shelf at Bhaikaka Library	3,52,764	Completed
5	Providing and Fixing Pipe Line and Removal of Trees from Wall at Old Hostel	76,506	Completed
6	Providing and Fixing A/C Roofing Sheet at Staff Quarters	50,073	Completed
7	Providing and Fixing Rain Water Pipe at Bio-sciences Building	39,251	Completed
8	Providing and Fixing Fencing	40,729	Completed

Sr. No.	Particulars	Cost (in ₹)	Status
	Work at SSF Hostel		
9	Repairing and Renovation of Toilet Block at T, G & BSc BEd Block	1,55,931	Completed
10	Providing and Fixing A/C Roofing Sheet at Old Hostel Canteen	54,205	Completed
11	Providing and Fixing A/C Roofing Sheet at Staff Quarters	27,473	Completed
12	Providing and Fixing Tiles Flooring Work at Lab No : 302-A & B at Bio-sciences Building	1,46,701	Completed
13	Providing and Fixing Tiles Flooring Work at Lab No : 202 & 203 at G H Patel Computer Science & Technology Department	2,87,050	Completed
14	Providing and Fixing Glass at University Staff Quarters	31,337	Completed
15	Providing and Laying PCC (1:2:4) Under Tiles Flooring at G H Patel Computer Science & Technology Department	75,488	Completed
16	Repairing and Renovation of Toilet Block at BSc BEd Block 51/52, 69/70 Quarters	43,368	Completed
17	Repairing of Table Top at Faculty Guest House	34,770	Completed
18	Providing and Fixing Pipe Line, Door Shutters and RCC Frame at CTE Hostel	1,11,398	Completed
19	Renovation of Toilet Block at VC Office	29,367	Completed
20	Renovation work of Toilet Block and Water Proofing at D-45 to 48 Quarters at University Staff Colony	3,01,768	Completed
21	Providing and Fixing Fabrication Grill at Nehru Hall Hostel	31,955	Completed
22	Providing and Fixing RCC Door Frame and FRP Door at D-30 Quarters	35,245	Completed
23	Providing and Fixing Glass Work at University Staff Quarters	36,535	Completed
24	Removal of Trees from Wall at University Staff Quarters and Hostel	74,000	Completed

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Sr. No.	Particulars	Cost (in ₹)	Status
25	Providing and Fixing A/C Roofing Sheet at University Staff Quarters	1,40,468	Completed
26	Removing and Refixing of Door Frame and Shutters at University Staff Quarters D-31, 32, 37, 59, 64 & 70	69,968	Completed
27	Toilet Block Renovation, Sintex Water Tank Fitting and Pipe Fitting Work at D-50/52 Quarters	1,29,932	Completed
28	Providing and Fixing Table Top Lamination at Nehru Hall Hostel	3,80,227	Completed
29	Renovation of Master of Social Work Department	3,08,763	Completed
30	Providing Colour Work D Block Quarters	4.03 Lakhs	Completed

Year 2014-15 (Civil Work)

Sr. No.	Particulars	Cost (in ₹)	Status
1	Civil renovation work for central hall no 13 at MBPC	4,10,626	Completed
2	Roofing for MBPC Hall	5,35,626	Completed
3	Extension work for existing computer centre	17,05,366	Completed
4	Toilet block quarters renovation T block 53,54,61,62,69,70	3,62,066	Completed
5	University U.V sports complex Two side paver fitting	2,86,616	Completed
6	New Under Ground pipeline at botnical garden Sardar Patel University	1,10,554	Completed
7	Color work at D-(41-80) Quarters	1,93,460	Completed
8	Color work at Exterior wall at Physics dept.	72694	Completed
9	color work at quarters D-(1-40)	2,34,882	Completed
10	PCC work at Electric transformer at computer Sci. Department.	52,419	Completed
11	Providing & fixings Table Top with Drawer at Nehru Hall Hostel	3,73,352	Completed
12	Providing & Fixings M S Parking shed with GI sheet at Uni. Staff quarters	4,46,029	Completed

Sr. No.	Particulars	Cost (in ₹)	Status
13	Color work at T-49-72 quarters at sardar patel university	85,292	Completed
14	Providing & fixings Aluminum section sliding window at bhikaka lib. Sardar Patel University	1,92,477	Completed
15	Providing & fixings Rain water pipe line at Maths deptt. Busi. Studies Department	2,55,659	Completed
16	Color work at T-25-48 quarters at Sardar Patel University	66,424	Completed
17	Civil Renovation Work for Women hotels 1 and 2	4,76,142	Completed
18	Solar Water Hitting Systems or women's Hostel -3	4,03,591	Completed

6.1.6 Does the university promote a culture of participative management? If yes, indicate the levels of participative management.

Yes, it always does. Kindly see the response to 6.1.3. Following are the various committees functioning at our departments

- Admission Committee
- Time table Committee
- Purchase Committee
- Library Committee (Book Purchase)
- Security Committee
- Anti-ragging Committee
- Examination Committee
- Students Affairs Committee
- Placement Committee

6.1.7 Give details of the academic and administrative leadership provided by the university to its affiliated colleges and the support and encouragement given to them to become autonomous.

Our university provides academic leadership by appointing faculty members of affiliated colleges in the board of studies and also appointing their faculty members as Dean of the discipline or Chairman of the Board of Studies. University appoints the subject experts and nominates representatives as Vice-Chancellor's nominee in the selection process of the faculty. The performance review of the affiliated colleges will be conducted annually. For the new courses, university constitutes Local Inquiry Committee and on the Spot committee and necessary actions are taken as per the suggestions of this committee. University has a critical role in curriculum development and upgrading of it to keep them abreast with the changes. University provides the academic

calendar for the affiliated colleges and also conducts cultural and extracurricular activities. Apart from that University is wholly responsible for conducting end semester examinations, results declaration and Degree awarding. We facilitate colleges by providing leadership and quality enrichment in their academic pursuit to become autonomous.

6.1.8 Have any provisions been incorporated/introduced in the University Act and Statutes to provide for conferment of degrees by autonomous colleges?

No (at present).

6.1.9 How does the university groom leadership at various levels? Give details.

Our university believes in collective decision making process at various levels. At apex the Vice-Chancellor leads the process of strategy formulation in meetings of Heads of Departments, Registrar, Deans and Chairmen of different bodies. The renowned educationalists, Industrialists and other eminent personalities also contribute in setting the long term goals of the university. While at the implementation stage of strategies, several committees at university and department levels play a significant role. We have structured the schedules of meetings at various levels and meet regularly. This would give our lower level participants an opportunity to get groomed up nicely. The list of statutory bodies/ordinance committees is shown below.

- Senate
- Syndicate
- Academic Council
- PG Board of Studies and Research
- Finance & Establishment Committee
- Building& Estate Committee
- Heads of Department Committee
- College Development Council

6.1.10 Has the university evolved a knowledge management strategy? If yes, give details.

Yes. The success of knowledge depends both in creation and effective utilization or dissemination of it. This requires a proper management. We believe in team work of faculty, research students, and non teaching administrators in enhancing the knowledge level and its propagation. We have framed committees such as Departmental Research committees at that level and at the recognized research centres. Board of studies in

order to plan and monitor research activities. We at our university focus on generation, storage and dissemination of knowledge. With this view University strongly encourages the faculty members to organize and participate in academic conferences. University always promotes focused efforts to generate research projects sanctioned from various funding agencies. University also collaborates with several reputed foreign universities and Research Organizations through Memorandum of Understanding to expand the spectrum of research. Our effort in creating an incubation centre is an initiative in the direction of fructifying the research results. The University Industry Interaction Cell facilitates the filing and financing of the patent registration.

6.1.11 How are the following values reflected in the functioning of the university?

- **Contributing to national development**

Our university contributes to human resources by churning out quality students. We take care of the skills of students by imparting the best teaching inputs supported by the usage of latest information and communication technology. Our courses are addressing the needs of the society. For instance, Chemical Sciences, Bio-sciences, Physics, Material Sciences, Management and Business Studies, we cater to the needs of surrounding industry. Gujarat being the leading manufacturer of Pharmaceuticals and Chemicals we have kept number of courses covering these aspects. We train our students of various disciplines through projects with reputed research centres like PRL, ARDE Pune, and industries such as Envision Scientific Pvt. Ltd., industrial houses such as RIL, Asian Paints, Banks, rural welfare projects etc. We also train students to become entrepreneurs. With respect to research scholars, we make them learnt to formulate relevant research questions, hypotheses, developing suitable research methodology. Thus, our researchers can become useful hands to deal with science and social science research contexts with an orientation towards welfare of the society.

In fact, our university is one of the two in western region and one among seventeen universities across India to have won the status of Centre for Potential of Excellence in applied polymers during the period 2003-2008. Recently, UGC Committee visited and approved second phase of this program. As mentioned elsewhere, university also has GUJCOST sponsored centre of excellences. Based on the impact of research papers published in Science subjects DST, New Delhi has awarded PURSE programme for the period 2011-15, a distinction of being one of the 30 universities in India.

- **Fostering global competencies among students**

Our education systems witnessed substantial changes during the last 2-3 decades on account of the liberalization and the globalization. The meaning of being relevant has crossed the limits of the country's geographical boundaries. In this era, perhaps knowledge travels faster than anything and to be relevant means relevant globally. Hence, the university encourages our teachers and researchers to take up exchange programmes with foreign universities and research centres. We also attempt to improve the quality of our curriculum and teaching pedagogy to cope up with the global standards. Our university also encourages our students for clearing national level eligibility examinations such as JRF, NET, UGC-CSIR NET, ASRB (ICAR) etc

- **Inculcating a sound value system among students**

Orientation towards ethics and social responsibility is the prime considerations of value driven education. Our university apart from fostering these values as a part of education also conducts sessions of interaction with spiritual speakers. We have constituted Aurobindo, Gandhiji, Ambedkar and Sardar Patel chairs to emphasis our value based outlook of the university. We have added courses on Environmental issues, Women studies, Corporate Social Responsibility, Corporate Governance, Ethics and Social Welfare and Rural Economics. We also promote activities under NCC, NSS, Vivekanada Yuvak Kendra and Sports to have interface with the society to be considerate and appreciative of social issues. Our liberal arts, languages and political science disciplines are providing the inputs required to weave the social fabric with cultural, philosophical and ethical underpinnings. We undertake activities like Blood-donation camps, Cultural activities, Tree Plantation programmes, Campus cleaning programmes etc. Our university has signed an MOU with Vidyanagar Nature Club, for various activities ranging from outdoor camps on Cleanliness, Sanitation & Hygene in campus including residential of our university. It also covers Bio-diversity & Conservation, good agricultural practices, water harvesting and environmental awareness among students and community.

- **Promoting Use of Technology**

We have adopted developments of the latest Information and Communication Technology (ICT) in our teaching learning process. We have provided to our academic participants with Internet, sufficient number of computer terminals, educational and administrative software, and smart class rooms with LED projectors and they are in use for many years now. Several of the administrative functions of the university have

been using the computers and online system of administration. In Future, we are looking forward to paperless administration. Many departments are having Wi-Fi access to students. Our university and department libraries are having the access to e-books and e-journals. INFLIBNET facility is helping us to use vast resources of materials. University library as a part of UGC Shodganga, uploads Ph.D. theses. The university has set up a Cyber Café for the facilitating research and research based studies.

- **Quest for excellence**

The university emphasizes the quality in every sphere of activities and we believe in "excellence matters". We provide quality infrastructure and also tries to optimizing its utilization by centralizing some of the facilities such as central instrumentation and letting sister departments to use the equipments on available basis. Several departments are taking special initiatives for developing Research Talent and Teaching skills. In order to achieve this we organize workshops for preparing for JRF/NET/SLET examinations.

6.2 STRATEGY DEVELOPMENT AND DEPLOYMENT

6.2.1 Does the university have a perspective plan for development? If yes, what aspects are considered in the development of policies and strategies?

Yes, the university and departments have a perspective plan. The Vice-Chancellor is heading the body which plans and through which directs the university. The details of the future plans are given in the departmental profile.

Teaching and Learning

The University has a long term plan for teaching and research. As mentioned before we are in the process of continuous improvement of learning and research. Organizationally we have a set procedure under several academic bodies. Scheduling the classes both theory and practical are planned well in advance before the commencement of academic year. Students are given the course plan with contents and reference materials days before the classes begin. Teachers and students are encouraged to use ICT and other more effective teaching pedagogies for the effective imparting of knowledge. The evaluation of the students is continuous and methodology is also well framed and students are informed about it and the assessed answer books are shown to them. Interactions of experts from outside which includes people from Industry, reputed institutes and Alumni are arranged. Curriculum includes project works, field training and internships depending upon the course requirements. Students and Faculty are also encouraged to

participate in seminars and conferences at local, regional, national and international levels.

Inter department collaborations are promoted in our university. CISST is a nodal centre for inculcating the culture of interdisciplinary approach based academic and research activities. It is providing a common platform to the academicians and research scholars on campus to come together and address the academic content and its delivery in chosen three thrust programs.

CISST has already approached Government of Gujarat for faculty positions and approval for three such positions has already been received. The recruitment process is in the pipe line. We plan to extend the instrument facilities to industries and forge collaborations. CISST, SPU has already signed MOU with R & D Support Services Inc., Pennsylvania for taking up the activities in the area of biomedical devices. Efforts are also in the process for the collaborative research in the area of Earth Sciences with PRL, Ahmedabad. A similar forum for Social Science disciplines is being set up. For the centre in Science and Social Sciences, a philanthropist has given a generous donation for infrastructure.

Research and development

For undertaking research and development university follows a multi-pronged strategy. At university level, research planning will be done under the headship of Vice-chancellor. This body formulate perspective plans to provide the road map for the future research and monitor its progress systematically. Faculty members identify the thrust areas of research. University also promotes interdisciplinary research and has initiated seed money grant to faculty members for joint research. Faculty members are encouraged to develop project proposals for obtaining financial support from public and private funding agencies and industrial organizations. Our University ensures the continuous fund flow for operation of research projects.

At department level department research committees (DRCs) are formed to monitor research programmes and this committee plays a pivotal role. For the admission of PhD students, we have a structured admission procedure as per the instructions of UGC guidelines. The course works and the academic progress will be evaluated by DRC time to time. There exists an academic administrative section to facilitate the research. For the smooth conduct of the research some equipment are shared. Similarly, college level research is also being coordinated under different faculty discipline and board of studies.

Overall, the university involves constructively in promoting research in every department and affiliated colleges. All departments are encouraged to organize workshops, training programmes and seminars. University sponsors its faculty members to undertake collaborative research programmes with national and international institutions.

University encourages its academic community to publish research papers in refereed and indexed journals. University as a part of publication effort has couple of journals of its own at university and department level. University has signed a few MOUs with Industrial and research organizations for promotion of research. As a part of recognizing the efforts, there are a few awards that have been constituted under trusts and agencies.

Based on the impact of our research in the science departments DST, New Delhi has sanctioned PURSE program for the period 2011-15. Our progress in this program has been rated as excellent. Several of our departments have received special funding for research from UGC, DST, DBT and GUJCOST etc.

Community engagement

Being a rural university we place a lot of emphasize for the community development. Several departments involve village people in its extension activities. Department of Home Science is taking care for the health of vulnerable sections of women and children. They document and keep records of these poor people and counselling them whenever there is a need. University organizes women entrepreneurship development programmes to make them self reliant. Department of MSW interacts with the society often to address some issues of the weaker sections of the society. The university has NCC and NSS. These students' forums undertake several programmes for the village people through village camps. Blood donation camps, health check-ups and specific medical camps are being organized on regular basis.

University has established a Community Science Centre, (Shri C. C. Patel Community Science Centre) partly funded by GUJCOST, Gandhinagar. Its outreach activities directly involve the students from schools, colleges and university and also members of the society in its activities mainly popularization of sciences, creation of scientific temperament and also conducts exhibition of celestial phenomenon. It closely collaborates with PRL, Gujarat Science Academy and other Community Science Centres in the state. All the programmes are assisted by PG teachers of the science departments and research students participate as volunteers of our university. It conducted workshop for farmers of surrounding areas on utilization of banana wastes for making useful products.

University has a community radio station which operates on FM bandwidth. Several programmes of educational, cultural, social, and entertainment are formulated and aired for the benefit of students and citizens up to 8 km radius. Several pogrammes on health precaution, stress management, educational programmes for local farmers are also aired.

Human resource planning and development

For any institution, particularly educational institutions human resources are the most critical inputs for the success of meeting its goal. We have a long term plan in place to acquire, train and retain personnel. Recruitment, training and development will help us to equip ourselves to impart the best knowledge and skill sets to our students. Providing the best academic atmosphere with the right kind of administrative background helps in leading us to approach the optimal delivery mode. The academic persons were recruited based on rules of State Government and regulatory bodies such as UGC, AICTE, and NCTE etc. The faculty members are recruited in three categories such as Professors, Associate Professors and Assistant Professors. The non-teaching staff is recruited at various levels such as officer, clerical, technical and supporting staff. In addition, several persons are promoted internally to the subsequent higher levels based on the rules of promotion. For the development of skills among faculty members, they are encouraged to take training by way of participation in orientation programmes, refresher programmes, training programmes etc. Faculty members are also sent for Faculty Development Programme at IIM, Ahemdabad, and Sardar Patel Institute of Public Administration, Ahemdabad. There used to be workshops to train teachers in Research methodology and research paper writing. Teachers are encouraged to participate in seminars, workshops, conferences, and symposia etc, held nationally and internationally in order to develop their skills. This also provides them interaction with exchange of knowledge between industries, academic institutions of different places. Faculty members are also sponsored to visit other universities and institutions of international repute. Administrative persons are also provided with new skills in administrative activities by deputing them for similar programmes organized by academic staff colleges and institutions. Our computer centre also arrange need based training program for University staff besides in-house training programmes.

Industry interaction

The university has formulated a policy and structured a plan for the interaction with the Industry. To meet up this objective, our university has set up university-industry interaction cell. The faculty members are encouraged to have collaboration with Industry through consultancy and research projects. The university has entered into collaborative research with the industry. We have signed MOUs with Industrial units and research centres for forging the research and its extension. University Industry Interaction Cell (UIIC) has recently published a booklet showing the expertise and infrastructure available for consultancy purpose. (Please refer **http://www.spuvvn.edu/iqac/uiic.php**)**.**

Internationalization

Globalization in education has become a reality as never before. It provides challenges and opportunities. To create world class professionals, the university has adopted several measures in its academic and research activities. To acquire the prominence and purpose the curriculum has to be well designed and reviewed periodically by taking cues and suggestions from experts in the field. The collaborations with foreign universities contribute to a great measure.

Our university has an exclusive international students centre to help foreign students to take admission for post-graduate and doctoral programmes. We provide foreign students with accommodation and other facilities for a comfortable stay in our place. Our continuous efforts have resulted in large number of students enrolling for our academic programmes.

6.2.2 Describe the university's internal organizational structure and decision making processes and their effectiveness.

Our University has structured in a well-defined manner where Academic and Administrative functions are separated albeit administrative functions are supportive in nature in the pursuit of the goal attainment of the University. The head of the university is Vice-chancellor who has been presiding over most of the Statutory Academic Bodies like Senate, Syndicate and Heads meetings. The Registrar is the Administrative head of the University. We have Chief Accounts Officer, Deputy Registrars, and Assistant Registrars, Development officer, Medical officer, University Engineer, Director, Computer Centre, University Librarian, Museum Curator, Press Manager, Director, Physical Education and departments like Estate Department, Establishment, and Dispensary. These departments function as per the delegation of powers under the administrative head. Following two charts shows the organization charts of our university.

Organizational Structure of University (General Administration)
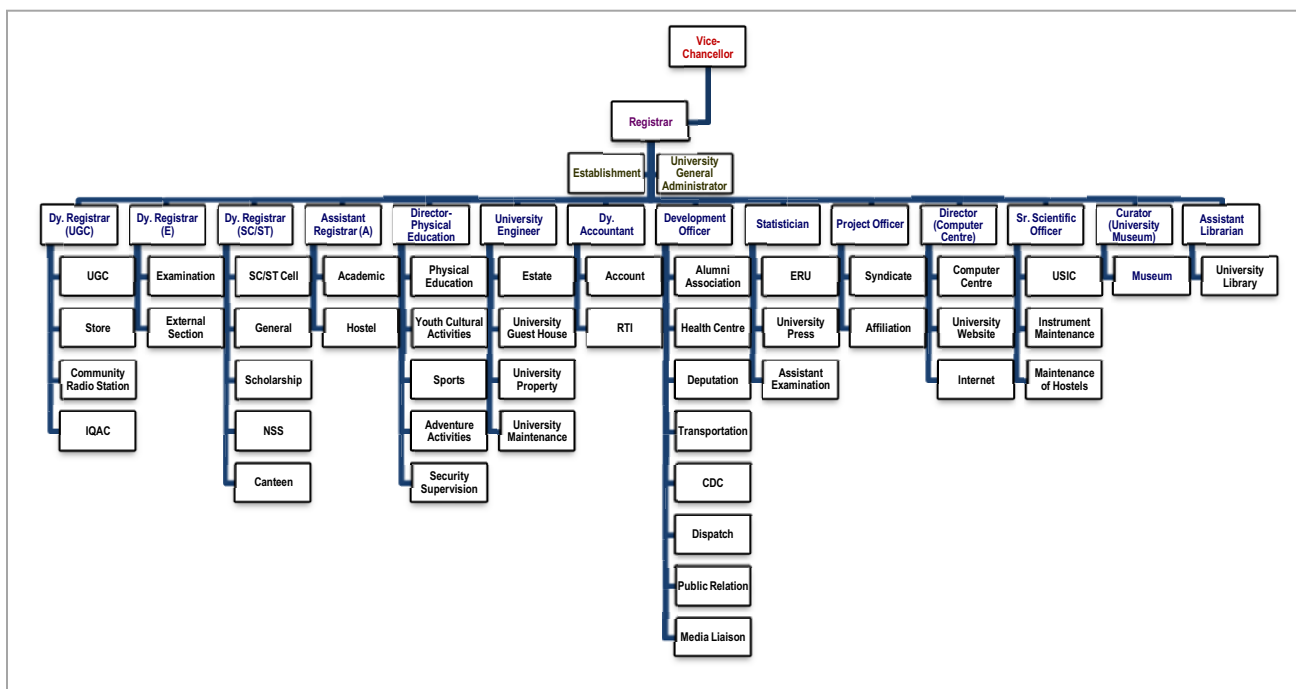
Organization Structure of University (Academic Administration)
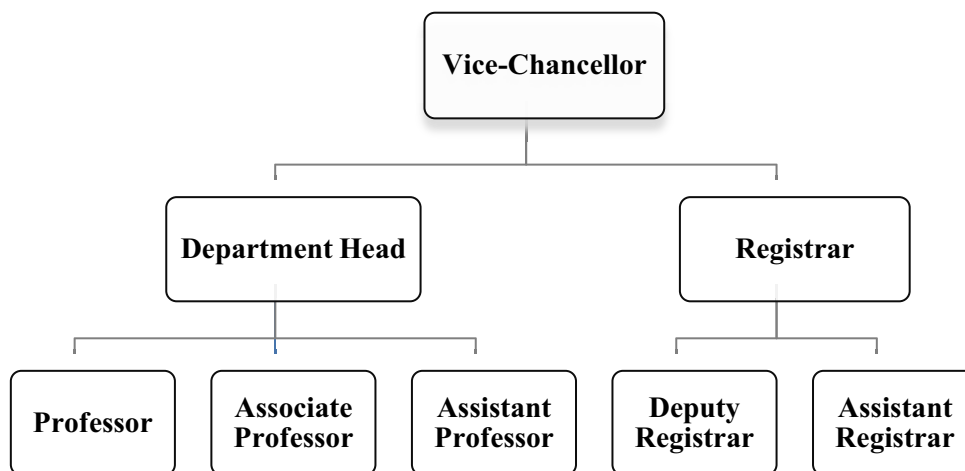
6.2.3 **Does the university have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?**

Yes, we have a quality policy and we firmly believe in excellence in performance. We are committed to producing quality students in terms of capabilities and skills who should be an asset wherever they work. As a researcher, one should be in a position to visualize a research problem and developing a suitable research methodology for carrying out that research. We take utmost care while recruiting the faculty and orienting them suitably. We try to provide the state of art technology for the deliverance. To ensure the quality we have an organizational mechanism

6.2.4 Does the university encourage its academic departments to function independently and autonomously and how does it ensure accountability?

Yes, the university encourages decentralization and autonomy of the departments with respect to several activities. All the departments are given with full academic autonomy. The Heads of the Departments is responsible for teaching, research and extension activities of the department. Those departments which run programmes exclusively are given full examination autonomy. Remaining departments are permitted decentralized practical examinations. All the departments are given financial autonomy under the delegation of power by competent authorities. These functions are conducted through various committees and the timely, effective completion is ensured. The Vice-Chancellor conducts periodic meetings with Heads of the Departments and Deans to review the programmes of the departments.

6.2.5 During the last four years, have there been any instances of court cases filed by and against the institute? What were the critical issues and verdicts of the courts on these issues?

There are not many cases filed against our university. However, few cases about disputes during the senate elections were filed and university got judgments in favour of it. Yet there are two cases related to service of two employees pending in the court.

6.2.6 How does the university ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder-relationship?

We have designed and implemented a structured mechanism to ensure that grievances of students and staff are addressed properly and issues are being resolved. The complaints and suggestions boxes are prominently placed at University and Department levels. The heads of the departments are also receiving complaints which are forwarded to the University for their redressal fast. There is a committee for attending to the grievances that meets frequently. The women grievances cell is also in operation to address the gender related issues. The University is also organizing open house where Vice-Chancellor receives complaints directly in presence of officers. Some of the issues are resolved on the spot. In order to prevent major grievances an ordinance described staff joint consultative committee is framed. It has three representatives of respective staff associations. This committee inculcates and promotes

co-operation and harmony in the functioning of the university. It helps to smooth the relation between employees and university. It also suggests from time to time on measures to increase the efficiency of services and promote the welfare of the employees. Besides, the university has also formed an assessment and monitoring committee to look into issues in general and suggest ways and means to solve it.

6.2.7 Does the university have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?

Yes, university has a structured feedback collection format by which students are supposed to express their feedback semester wise. The questions would cover the entire gamut of a course from its contents to it delivery. The collected feedback is analyzed and shortcomings are eliminated in subsequent years.

6.2.8 Does the university conduct performance audit of the various departments?

We have a different mechanism whereby we gather the Self Appraisal Report (SAR) collected through forms (as per UGC format) from each department. The faculty members submitting SARs are to fill in with details of their teaching, administration activities, research and publications and extension activities. The SARs for administrative staff are also in place.

6.2.9 What mechanisms have been evolved by the university to identify the developmental needs of its affiliated institutions?

As such University has a supervisory role in the affiliated colleges and other institutions. We have a leading role in their curriculum related aspects through board of studies and preparation of the academic calendar. For the infrastructure related issues we suggest as per the recommendations of Local Inquiry Committees. We have a College development council which is also having several functions for the development of affiliated institutions.

6.2.10 Does the university have a vibrant College **Development Council (CDC)/Board of College and University Development (BCUD)? If yes, detail its structure, functions and achievements.**

We have constituted a College Development Council (CDC) consisting of members from heads of University PG departments, Principals of affiliated colleges, senior teachers of university and colleges, director of Education and the Director/Co-ordinator of the council. Largely, they are policy recommending body for the integrated development of colleges.

Under the aegis of this body we had organised two workshops for teachers on how to get grants for research and, NCTE-Norms and Regulations.

6.3 FACULTY EMPOWERMENT STRATEGIES

6.3.1 What efforts have been made to enhance the professional development of teaching and non-teaching staff?

As mentioned before, our university believes that the quality of teaching faculty ultimately benefits students. Hence teachers are encouraged to attend the quality improvement programmes such as orientation, refresher, seminars, workshops and conferences. During the last five years our teachers have attended many refresher/orientation and short duration programmes. Apart from that we have given computer and internet facilities to all the departments and teachers. They utilize these facilities for their improvements and efficient teaching. We have our own facility under Human Resource Development where we conduct several programmes for quality and skill development. A number of programmes were conducted for non teaching staff also to make them more efficient. We provide computer training for non teaching staff. We have a large central library with INFLIBNET and other data mining software for helping researchers. All departments are also keeping a good library in their department also where they have been provided with several e-resources for their reference. At department level teachers discuss about the programmes in DRC for the benefit of other faculty members. Teachers are also examining the theses of other universities and involve in delivering lectures and participate as experts and panel members of other universities and colleges. Faculty members are also encouraged to conduct Minor and Major research projects under various schemes. Some departments are organising weekly Research Seminars to review their research and for exchanging ideas. Our university earmarks part of research grant (5% of overhead charges) as Personal & Proficiency Development Fund (PPDF) and the faculty members are free to use this fund for their academic and research development. PPDF has been given a code, faculty wise.

6.3.2 What is the outcome of the review of various appraisal methods used by the university? List the important decisions.

The faculty members are encouraged to improve their performance in research and our university has created seed grant, an interdisciplinary research grant from its own resources for initiating research by non initiated teachers. Performance appraisal methods reveal the information about these teachers. Some of these projects got converted to major research projects funded by national agencies.

6.3.3 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have benefitted from these schemes in the last four years? Give details.

- Teacher's welfare fund is contributed by all teachers of the university, and a committee monitors its utilization for the teachers.
- Group Insurance Scheme is also mandatory for the employees, the amount is deducted from the salary every month and the amount is given to the teacher at the time of retirement, or to the nominee (in the case of untimely death of the employees). University has taken a master policy with LIC and a policy Karmachari Kalyan Nidhi
- Health centre with laboratory and pharmacy facility is available for serving all employees including retired employees. This facility is also extended to all the students in the campus at concessional rates. There is a full time medical officer and several super specialists from reputed hospitals are invited as visiting doctors on weekly basis. Free medical checkup and camps are arranged for employees and students every six months
- Sports complex with outdoor and indoor games facility
- Swimming pool is under construction.
- Staff quarters.
- Canteen Facility
- Festival and Food grain Advances as per Government rule
- Uniforms, Foot wares and other protective gear to our university support staff
- Tuition Fee Concessions
- Dedicated Bank Branch for University

A large number of employees are the beneficiary of these measures.

6.3.4 What are the measures taken by the University for attracting and retaining eminent faculty?

- A teacher-administrator friendly atmosphere is maintained in the department/university.
- All posts are filled up in the university by advertising in national newspapers and the same is put up on the web site also, so that eminent faculty gets attracted for applying.
- The salary and scale is as per UGC norms and so eminent faculty gets attracted and also retained.
- A Central School (Kendriya Vidyalaya) is functioning under the management of university functioning on our campus where our employees' children get preference in admission.
- Freedom to work
- Quality Infrastructure

- Free access to all centralized facilities
- Retired faculties apply for UGC emeritus Professor Fellowship. Some are accommodated under CISST programme
- Recognition of meritorious works

6.3.5   Has the university conducted a gender audit during the last five years? If yes, mention a few salient findings.

With respect to students, our university has registered an increasing number of females compared to males over the years. During the last five years there were as many as 26,810 male students against 21,037 female students with a ratio of 1.27 male for 1 female. However, the year 2014-15 this ratio was just 1.14 male for 1 female though there was fluctuation during this period. It has been observed that there is a growing enrolment of girl students in most of the departments. With respect to teaching staff, however, the male members are more compared to female members. During the year 2010-11 the male ratio was 3.24 against 1 female and this ratio was fallen to 3.08:1 in 2014-15 largely due to the retirement of male faculty. With respect to administration and technical staff male proportion has been high. In the year 2010-11 the male female ratio was 9.34:1 which fell down to 7.58:1 by 2014-15. This decline was happened on account of retirement of the male members during this period.

6.3.6   Does the university conduct any gender sensitization programmes for its faculty?

Anti-sexual harassment cells are formed in each department which carries out gender sensitization programmes at department and University level. Also University encourages such programmes by celebrating Women's Day with various activities, competitions, prize distribution, etc. Our university has set up a women study centre sponsored by UGC which has organized a series of lectures on various aspects of women related issues.

(Please refer : **http://www.spuvvn.edu/iqac/womencell.php**)

6.3.7   What is the impact of the University's Academic Staff College Programmes in enhancing the competencies of the university faculty?

A large number of our Faculty members have attended Orientation/ Refresher programmes offered by our Human Resource Development Centre formerly known as Academic Staff College. The following table provides the information regarding the number of programmes organized by academic staff college of our university and the number of faculty attended of University and affiliated colleges are provided. Following two tables are meant for providing information on number of

programmes offered by our centre HRDC and number of local and out station students attended in these programmes.

The number of local participants attended in the programmes of UGC-HRDC (formerly Academic Staff College) during 2011-2015 are:

Year	Total OPs[*]	Total Participants in OP	Total RCs[*]	Total Participants in RC	Total STCs[*]	Total Participants in STC
2010-11	05	54	02	03	02	28
2011-12	06	50	05	41	03	25
2012-13	05	46	08	46	01	18
2013-14	06	61	08	89	04	54
2014-15	05	54	10	89	05	26

[*] - (OP – Orientation Programme, RC – Refresher Course, STC – Short Term Course)

The number of outstation participants attended in the programmes of UGC-HRDC (formerly Academic Staff College) during 2011-2015 are:

Year	Total OPs[*]	Total Participants in OP	Total RCs[*]	Total Participants in RC	Total STCs[*]	Total Participants in STC
2010-11	05	54	02	36	02	19
2011-12	06	73	05	74	03	43
2012-13	05	59	08	123	01	8
2013-14	06	74	08	82	04	53
2014-15	05	98	10	179	05	126

[*] - (OP – Orientation Programme, RC – Refresher Course, STC – Short Term Course)

6.4 FINANCIAL MANAGEMENT AND RESOURCE MOBILIZATION

6.4.1 What is the institutional mechanism available to monitor the effective and efficient use of financial resources?

We have computerized our entire accounting system with coding for each and every transaction department wise and head wise for income & expenditure accounts. University maintains the system accurately by using Tally ERP 9, the latest version of software.

We seek proposals of financial requirements from each department. After receiving proposals we call a joint meeting of heads under the chairmanship of Vice chancellor for scrutinizing and finalizing requirements. Budgetary provisions are created and sanctioned, and expenditures are monitored periodically.

6.4.2 Does the university have a mechanism for internal and external audit? Give details.

Yes, University appoint chartered accountant firm for internal auditing and preparation of university accounts. Submitted audit report will be placed before Finance and Establishment Committee and on the basis of recommendation of the committee, the internal audit report along with university accounts will be put before the syndicate for its approval. The university senate will consider and approve in its meeting held at every year end.

As per the act of the university, statutory auditor is Local fund office, which is controlled under the finance department of Gujarat Government. External audit will be arranged as per the availability of the Local Fund auditors.

6.4.3 Are the institution's accounts audited regularly? Have there been any major audit objections, if so, how were they addressed?

Yes. The compliance of the audit queries raised by the Auditor in Audit report is submitted to State Government after the approval at Senate meeting.

6.4.4 **Provide the audited income and expenditure statement of academic and administrative activities of the last five years. All the audited accounts up to financial year 2014-15 have been approved by the competent authorities like university Syndicate and Senate.**

Audited income and expenditure for the year 2010-11

SARDAR PATEL UNIVERSITY - VALLABH VIDHYANAGAR

INCOME & EXPENDITURE ACCOUNT

FOR THE YEAR ENDED 31-3-2011

INCOME	Annexure	TOTAL AMOUNT Rs.
Other Fees	L	2628790.00
Publication & Endowment Publication Income	M	8059941.00
Miscellaneous Income	N	1916482.50
Interest Income on University own Fund		1796099.86
Block Maintenance Grant		268515000.00
TOTAL		**282916313.36**

EXPENDITURE		
Salary & Allowances	O	246740861.5
Office & Administrative Expenses	P	7373452.80
Deficit of Expenses over Income in University Departments	Q	27330987.43
Miscellaneous Expenses	R	6787746
TOTAL		**288233047.7**

Surplus/(Deficit) Before Prior Period Adjustments   -5316734.33
Add: Prior Period Adjustments(Net)

SURPLUS/ (DEFICIT) FOR THE YEAR   -5316734.33
(C/F AS GRANT RECEIVABLE FROM STATE GOVERNMENT IN THE BALANCE SHEET)

We have Prepared these financial statement on the basis of information and explanation provided to us by the University.

Consultant Chartered Accountant
For D G S M & Co.
(FRN 101606W)

D G S M
& Co.
Chartered Accountants
VADODARA

(CA. Subramanya Shenoy)
Membership No.:-142153

Date : 13-07-2012
Place : Vadodara

2

Audited income and expenditure for the year 2011-12

2

SARDAR PATEL UNIVERSITY - VALLABH VIDHYANAGAR
**DRAFT INCOME & EXPENDITURE ACCOUNT**

INCOME	Annexure	AMOUNT Rs. 31.03.2012	AMOUNT Rs. 31.03.2011
Other Fees	L	52,50,590.00	26,28,790.00
Publication & Endowment Publication Income	M	62,36,388.00	80,59,941.00
Miscellaneous Income	N	15,05,904.50	19,16,482.50
Block Maintenance Grant		32,80,82,000.00	26,85,15,000.00
Income of University Departments	Q	1,80,24,682.00	1,72,91,733.74
Interest Income on University own Fund		-	17,96,099.86
TOTAL		**35,90,99,564.50**	**30,02,08,047.10**
EXPENDITURE			
Salary & Allowances	O	26,95,30,761.00	24,67,40,861.46
Office & Administrative Expenses	P	85,41,178.00	73,73,452.80
Expenses of University Departments	Q	4,95,96,325.00	4,46,22,721.17
Miscellaneous Expenses	R	63,55,052.85	67,87,746.00
TOTAL		**33,40,23,316.85**	**30,55,24,781.43**

Surplus/(Deficit) Before Prior Period Adjustments **2,50,76,247.65**   **(53,16,734.33)**
Add: Prior Period Adjustments(Net)

SURPLUS/ (DEFICIT) FOR THE YEAR **2,50,76,247.65**   **(53,16,734.33)**

(C/F & NET OFF WITH GRANT RECEIVABLE FROM STATE GOVERNMENT IN THE BALANCE SHEET)

We have Prepared these financial statement on the basis of information and explanation provided to us by the University.

SUBJECT TO APPROVAL
Consultant Chartered Accountant
For Kiran Patel & Co.   **For Sardar Patel University**
Chartered Accountants

(CA Hiten Mehta)   Registrar I/c. Chief Accounts Officer   Date: 5|6|14
Partner   Account Sec. Head   Place: V.V. Nagar
                                     Sardar Patel University
                                     Vallabh Vidyanagar-388120.

Incharge Registrar
Sardar Patel University
Vallabh Vidyanagar.

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Audited income and expenditure for the year 2012-13

K. G. PATEL & CO.
CHARTERED ACCOUNTANTS

SARDAR PATEL UNIVERSITY
V. V. NAGAR

Office :
First Floor, K. D. C. C. Bank Bldg.,
Station Road, ANAND - 388 001
Tel. No. 251275, 252575

INCOME EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2013

EXPENDITURE	Sch.	AMOUNT	INCOME	Sch.		AMOUNT
To, **SALARIES AND OTHER ALLOWANCES**	H	290777522.30	By, **GRANT INCOME** MAINTENANCE GRANT (ADHOC)			320000000.00
To, EXAMINATION EXPENSES	I	45911569.00	By, EXAMINATION FEES INCOME	L	85887696.00	
			Less : AMOUNT TRANS. TO EXAM FUND		39976127.00	45911569.00
To, EXPENSES OF UNIVERSITY DEPARTMENT	J	54981883.43				
			By, INCOME OF UNIVERSITY DEPARTMENT	M		15781842.00
To, OFFICE & OTHER ADM. EXPS.	K	12925600.00	By, EXAMINATION OTHER INCOME	N		156675.00
			By, OTHER FEES INCOME	O		9598435.00
			By, PUBLICATION & ENDOWMENT PUBLICATION INCOME	P		20818.08
			By, MISC. INCOME	Q		3241059.00
			By, INTEREST INCOME			2238569.00
			By, GRANT RECEIVABLE (Deficit)			7647607.65
TOTAL Rs.		**404596574.73**	**TOTAL Rs.**			**404596574.73**

For, SARDAR PATEL UNIVERSITY

REGISTRAR
SARDAR PATEL UNIVERSITY
Authorized Signatories

V. V. NAGAR   ANAND

1 4 NOV 2014

DATE: DATE:

1 5 NOV 2014

I/c. Chief Accounts Officer
Sardar Patel University
Vallabh Vidyanagar-388120.

As per our Internal Audit Report of Even Date

For, K. G. Patel & Co.
Chartered Accountants

Partner
K. G. Patel
M. No. 12087
FRN # 107716W

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K. G. PATEL & CO
VERIFIED
ANAND

Sardar Patel University, Vallabh Vidyanagar, Gujarat

Audited income and expenditure for the year 2013-14

K. G. PATEL & CO.
CHARTERED ACCOUNTANTS

SARDAR PATEL UNIVERSITY
V. V. NAGAR

Office :
First Floor, K. D. C. C. Bank Bldg.,
Station Road, ANAND - 388 001
Tel. No. 251275, 252575

INCOME EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2014

EXPENDITURE	Sch.	AMOUNT	INCOME	Sch.		AMOUNT
To, **SALARIES AND OTHER ALLOWANCES**	H	330779915.50	By, **GRANT INCOME** MAINTENANCE GRANT (ADHOC)			292100000.00
To, EXAMINATION EXPENSES	I	49202977.00	By, EXAMINATION FEES INCOME	L	85874829.00	
			Less : AMOUNT TRANS. TO EXAM FUND		36671852.00	49202977.00
To, EXPENSES OF UNIVERSITY DEPARTMENT	J	58080557.00	By, INCOME OF UNIVERSITY DEPARTMENT	M		17707180.00
To, OFFICE & OTHER ADM. EXPS.	K	14464521.92	By, EXAMINATION OTHER INCOME	N		175650.00
			By, OTHER FEES INCOME	O		7495248.00
			By, PUBLICATION & ENDOWMENT PUBLICATION INCOME	P		36779.28
			By, MISC. INCOME	Q		2474561.86
			By, INTEREST ON SAVING BANK			360205.00
			By, GRANT RECEIVABLE			82975370.28
TOTAL Rs.		452527971.42	**TOTAL Rs.**			452527971.42

For, SARDAR PATEL UNIVERSITY

Chief Account Officer
Sardar Patel University
Authorized Signatories University
V. V. NAGAR Vallabh Vidyanagar (Guj.)

I/c. Registrar
Sardar Patel University
Vallabh Vidyanagar (Guj.)
ANAND

AUDITED
K. G. PATEL & CO.
ANAND

As per our Internal Audit Report of Even Date

For, K. G. Patel & Co.
Chartered Accountants

Partner
K. G. Patel
M. No. 12087
FRN # 107716W

DATE: 18 MAY 2015   DATE: 18 MAY 2015

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Audited income and expenditure for the year 2014-15

K. G. PATEL & CO.
CHARTERED ACCOUNTANTS

SARDAR PATEL UNIVERSITY
V. V. NAGAR

Office :
First Floor, K. D. C. C. Bank Bldg.,
Station Road, ANAND - 388 001
Tel. No. 251275, 252575

INCOME EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2015

EXPENDITURE	Sch.	AMOUNT	INCOME	Sch.		AMOUNT
To, SALARIES AND OTHER ALLOWANCES	H	397902845.50	By, **GRANT INCOME** MAINTENANCE GRANT (ADHOC)			438100000.00
To, EXAMINATION EXPENSES	I	45019290.00	By, EXAMINATION FEES INCOME	L	89468823.00	
			Less : AMOUNT TRANS. TO EXAM FUND		44449533.00	45019290.00
To, EXPENSES OF UNIVERSITY DEPARTMENT	J	61012544.00	By, INCOME OF UNIVERSITY DEPARTMENT	M		21796402.00
To, OFFICE & OTHER ADM. EXPS.	K	16009909.60	By, EXAMINATION OTHER INCOME	N		172000.00
			By, OTHER FEES INCOME	O		7239469.00
			By, PUBLICATION & ENDOWMENT PUBLICATION INCOME	P		10865.00
			By, MISC. INCOME	Q		761302.00
			By, INTEREST ON SAVING BANK			441293.00
			By, GRANT RECEIVABLE			6403968.10
TOTAL Rs.		**519944589.10**	**TOTAL Rs.**			**519944589.10**

For, SARDAR PATEL UNIVERSITY

Chief Account Officer
Sardar Patel University
Vallabh Vidyanagar (Guj.)
Authorized Signatories

V. V. NAGAR

DATE: 2 1 SEP 2015

I/c. Registrar
Sardar Patel University
Vallabh Vidyanagar (Guj.)

ANAND

DATE:

2 1 SEP 2015

As per our Internal Audit Report of Even Date

For, K. G. Patel & Co.
Chartered Accountants

Partner
K. G. Patel
M. No. 12087
FRN # 107716W

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6.4.5 Narrate the efforts taken by the University for Resource Mobilization.

Our resources are mainly derived from tuition and other fees, funded research projects from various agencies, funds for centres of excellence, special assistance programmes, analytical services of industries and consultancy projects, maintenance and development grants and self finance courses. Our university has several development funds earmarked from above sources.

- Central Development Fund
- Department wise Development Fund
- University Development Fund
- Security Development Fund
- Campus Development Fund
- Hostel Development Fund
- Sports Development Fund
- Library Development Fund

Sardar Patel University, Vallabh Vidyanagar, Gujarat

- Examination Development Fund

Apart from sources of funds mentioned above we also take initiatives to get generous donations from philanthropists and other donors. The allotted amount will be utilised for the purpose for which it is being given though the fund will be yielding interest for the time period being kept as a deposits. We also claim 25% of such received amount from UGC under matching grant scheme. Following table provides the information regarding the donation received for the last five years.

Donation received by university for the last five years (2010-2015)

Sr. No.	Period	Donation Amount (in ₹)
1	01/04/2014 to 21/03/2015	2,47,48,028
2	01/04/2013 to 21/03/2014	17,03,988
3	01/04/2012 to 21/03/2013	3,51,000
4	01/04/2011 to 21/03/2012	8,47,500
5	01/04/2010 to 21/03/2011	29,80,315

6.4.6 Is there any provision for the university to create a corpus fund? If yes, give details.

Yes, the interest earned on investments and the income over expenditure particularly examination is transferred to our Corpus. Currently we have a corpus of Rs 110 Crores as on 31-3-2016. We have invested this Corpus fund in long term and short term investments.

6.5 INTERNAL QUALITY ASSURANCE SYSTEM

6.5.1 Does the university conduct an academic audit of its departments? If yes, give details.

Since the Government of Gujarat has formed Knowledge Consortium of Gujarat (KCG) for Academic and Administrative Audit. We will be submitting our intent soon for AAA for covering for last five years.

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

Please see 6.5.1

6.5.3 Is there a central body within the university to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

The Academic Council and Board of Faculty chaired by Vice chancellor and Deans of Faculty respectively are the apex bodies that review and recommend the suggestions of teaching and learning proposed by board of studies.

6.5.4 **How has IQAC contributed to institutionalizing quality assurance strategies and processes?**

The IQAC has recommended to co-opt the Co-ordinators in various sub committees formed to frame guidelines regarding admission, academic and extension activities. The pro active role of IQAC is described in details in 7.2.1

6.5.5 **How many decisions of the IQAC have been placed before the statutory authorities of the University for Implementation?**

Same as 6.5.4

6.5.6 **Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.**

No

6.5.7 **Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?**

Yes. IQAC on annual basis review the status of scholarship, free studentship and remedial coaching etc for the disadvantaged sections of society and streamline the process of academic and financial assistance.

6.5.8 **What policies are in place for the periodic review of administrative and academic departments, subject areas, research centres, etc.?**

The departments covered under major funding by national agencies have annual review meetings of advisory committee headed by the VC and experts from UGC. Similarly, other programmes from GUJCOST, DBT and DST are also reviewed periodically in mid-term meetings. DST PURSE program is reviewed by Project Management Board (PMB) for the progress of research work.
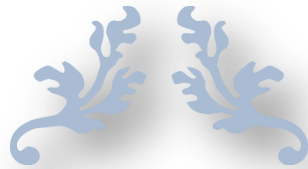
CRITERION VII

[INNOVATIONS AND BEST PRACTICES]

CRITERION-VII
[INNOVATIONS AND BEST PRACTICES]

7.1 ENVIRONMENT CONSCIOUSNESS

7.1.1 Does the university conduct a Green Audit of its campus?

The University is located in the heart of Vallabh Vidyanagar which is having the highest tree plantation in this area of the district in the Gujarat State.

The University is collaborating with Vidyanagar nature club, a registered charitable trust of Vallabh Vidyanagar, for environmental conservation, assessment and awareness in the campus for students and people at large. They are regularly assessing the environmental aspects especially related to tree conservation and plantation and are also advising on use of technologies for sustainable development.

Some of the campaigns like anti-polythene bag campaign, save the vultures campaign, anti-pollution campaign, survey of biodiversity in terms of flora and fauna have helped in making the campus environment friendly.

There is no activity leading to air and water pollution. The areas like University Office, Library and Departments are declared silent zones to keep noise pollution under control and keep the campus quite.

7.1.2 What are the initiatives taken by the university to make the campus eco-friendly?

- **Energy conservation:** The University is taking several measures for energy conversation. With a view to conserve electricity, conscious efforts of switching off are made, when electricity is not required. Instructions to run air conditioners on energy saving mode is given. Energy-saving fixtures, lamps, lighting control systems are being installed.

- **Use of renewable energy:** Solar energy harvesting systems have been installed at various places in the university campus for generating electricity to save electricity bills. Such installations with single or dual axel tracking systems have been installed in the University office, M. B. A. Department, Physics Department and Economics Department. It has resulted into power generations of 9 KVA. Solar water heating systems have been installed in many of the University run hostels for obtaining 24 hours hot water. These systems are helping in reducing carbon emission, have low maintenance and are labour free. Along with the hybrid solar system,

a wind mill system has been installe**d** on the roof of Physics Department. On these installations, an M. Sc. Laboratory, a Class room, department and Head's office are working.

- **Water harvesting:** The University has taken initiatives in rain water harvesting which helps in ground water recharge, salinity control and maintenance of soil humidity. Such installations have been made at University colony ground, University Guest House, University Women's Hostel, Vice-Chancellor Bungalow and Community Science Centre. This has helped in minting the ground water table in the campus.

- **Check dam construction:** No scope of check dam construction in this region of the state.

- **Efforts for Carbon neutrality:** Various departments and distant campuses are observing Vehicle Free Day on regular basis, helping the environment to reduce carbon emission. Conscious efforts are made for the restricted use of air conditioners to reduce the greenhouse gases along with CO_2. With a view to eliminate the carbon foot-prints and emissions, laboratories of Department of Chemistry are supplied with natural gas-based connection. Even **a natural gas-based, back-up generator supplies electricity, in case of power failure.**

- **Plantation:** The University has regular drives for plantation to maintain green coverage of the main campus as well as distant campuses. These movements are supported by different environment conscious organizations and Government Forest Department. Green campuses have been developed with such efforts at Computer Science Department and Bio Science Department.

- **Hazardous waste management:** No department in general has generation of hazardous waste. Biomedical waste generated by health centre is segregated and then handed over to 'Samvedna" an agency authorized to handle and dispose of such kinds of waste. Departments like Chemistry, Biosciences and Home Science where there is a use of chemicals and biological materials; the disposal of waste is done as per the prescribed rules and norms.

- **E-waste management:** Computers with old version have been given to an NGO for the purpose of education free of cost. The other E-waste is disposed off through tendering to the parties who are handling such waste.

- **Solar Power System:** The Department of Physics has developed the Solar Power System using both single and dual axial tracking systems with a generation capacity of 1.5 to 3.0 KW/h. The off grid systems are installed on the terrace of Department of Physics, VC's office, MBA Department and Agro-economics research centre. The storage of energy is used as a backup.

7.2 INNOVATIONS

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the university.

Numerous quality initiatives have been taken up by the Sardar Patel University for its effective and efficient performance. The following are the major initiatives:

IQAC: IQAC, as a facilitator between academic and administration, has carried out following innovative approaches.

- Implementation and actual execution of Choice Based Credit System (CBCS) at Under-Graduate and Post-Graduate level across the Faculties of the university.
- Implementation of UGC Minimum Requirements for Ph.D. (Including Ph.D. Entrance Test and Ph.D. Coursework).
- Arrangement of workshops and seminars on quality improvement parameters.
- Facilitation in singing of MoUs and Patent Filing etc.
- Redesign of examination papers and proportion of weightage between internal and external across the Faculties of the university.
- Familiarization and Training to both teaching and non-teaching staff members of the university and affiliated colleges and institutions for examination related issues namely paper setting, assessment and conduction of examinations.
- Implementation of UGC Career Advancement Scheme (CAS) and arrangement of assessment process through Academic Performance Indicators (API)
- Ensuring the speedy disposal of CAS cases
- Acting as nodal agency for AISHE and uploading of necessary information.
- Handholding and assisting new colleges and institutions for getting recognition under 2(f) and 12 (b) of UGC
- Coordinating the planning and distribution of funds to various department and sections from planned grants of 11th and 12th plans
- Arrangement of workshops and programmes for under graduate, post graduate and Ph.D. students to display their creativity through projects under Anveshan programme.

- Arrangement of convention and research scholars meet
- Preparation of brief appraisal of efforts made to initiate and familiarize the preparation of Sardar Patel University for AAA, KCG, Gujarat and Next Cycle of Reaccreditation (NAAC)

Memorandum of Understandings: The University has signed MoU with Government of Gujarat and District collectors for preparation of District Human Development Report for Dang District and Panchmahal District. The University has also signed MoU with the Papua New Guinea University of Technology, LAE, PNG to implement academic and professional cooperation and collaboration through research, study and training in furthering the advancement of learning, knowledge, business management, science and technology, and professional development. MoU has been signed with University of Turku, Finland and Tooltech to develop centre of excellence in Biotechnology for affordable health (for creating knowledge centre with the aim of commercialization, knowledge upgrade, internationalization and industrialization of such research, relevant to the goals which benefit science and society).

Alumni Associations: Various departments of the university have separate alumni associations at the department level. University level alumni association has been founded and registered the same under the Cooperative Societies Registration Act, 1860. On formation of University level alumni association, alumni associations of the department have been functioning as Chapters to have lively contact with departments' alumnus. Alumnus of the departments are invited on the day of the Convocation to their respective departments to interact with their teachers and the other students.

Implementation of CBCS: University had implemented CBCS System in all under graduate and post graduate programme. University has formed Task force/ CBCS Review committee to monitor and to make necessary amendment in the CBCS policies as per the UGC and state government guidelines. Moreover, University has also organized Work shop /Seminar / Training programme for all teaching and non teaching staff of the department and colleges to make them familiar with the CBCS System. Seminar was organised by Examination Reforms Unit (ERU) and Internal Quality Assurance Cell (IQAC) on "Challenges and Problems in Implementing Choice Based Credit System (CBCS) at UG Level" to explain technical aspects and to dispel the doubts.

Examination Reforms: The University has initiated below mentioned examination reforms and all these reforms have been implemented in all the university departments and colleges.

- Indication of the name of the student and name of the department/college in the students Grade Card/Mark-sheet and Degree Certificate of the students.
- Observation of Answer-book in all semesters/year undergraduate and post graduate examinations
- Preparation and implementation of question paper style format for all CBCS Examination.
- Examination Autonomy to all concerned department where single/unique post graduate course is offered.
- Decentralised Undergraduate BA/BCOM/BSC/BCA/BBA/BSW-I Semester examination which are offered in various affiliated colleges
- Decentralised all Practical Examination of Undergraduate and Post Graduate Courses conducted at various Departments/ Colleges / Institutions
- Deposit of examination remuneration in bank account

Information and Communication Technology: In order to strengthen the applications of information and communication technology in academics, research and administration, the University has taken up campus networking project and completed it successfully. The University also provides integrated e-platform for student management life cycle. The University web-site is upgraded periodically. It also provides Wi-Fi to many departments and student hostels. The University computer centre has organized orientation programme on the usage of online system.

Grievance Redressal Mechanism: The University takes pride in the fact that we have never had strikes on the campus. Academic sessions begin every year on time, examinations are announced and conducted on time, and central evaluation is conducted and results declared on time. Complete confidentiality is observed in on-the-spot evaluation and resolution of the problems. Our successive Vice Chancellors have made himself accessible to the student community throughout the year, depending on the nature of their daily schedule. Women's cell has also been established to handle the grievances of girls and female employees of the university. Departmental Anti-ragging committee and women's cell have also been constituted to handle or prevent ragging and to address women grievances at the department level.

Staff Joint Consultative Committee: A Staff Joint Consultative Committee has been constituted under O.99 to inculcate and promote amongst the employees of the University a spirit of co-operation, harmony and efficient service in the functioning of the University; to smoothen the relationship between the University as the employer and as employees and to promote harmonious relations and secure the greatest measure of cooperation between the University in its capacity as the

employer as the general body of the non-teaching employees, in matters of common concern and with a view further to increasing the efficiency of service and promoting the well-being of the employees.

Journals: The University publishes 6 journals (Journal of Education and Psychology by Department of Education, Arth Vikas – Journal of Economic Development by Department of Economics, PRAJANA: Journal of Pure and Applied Sciences – Basic Science by Registrar, Sardar Patel University, PRAJNA – Humanities by Registrar, Sardar Patel University, Journal of Engineering and Technology by Birla Vishwakarma Mahavidyalaya and SYNERGY- A Journal of Management by M. B. A. department) to create and promote research environment among the research scholars and teachers across the University.

Transparency in Admission: There is complete transparency in admissions granted on the basis of merit as the merit list for the masters, M. Phil. and Ph. D. programmes is prepared and put on the University website. The university has adhered to the national and state reservation policies in the granting of admissions. Students from communities belonging to Schedule Castes, Schedule Tribes, Socially and Economically Backward Classes, Physically or Visually Challenged groups, children of retired army men and women etc. are admitted on merit against their reserved quota and, therefore, there have been no complaints of discrimination. Processes of enrolment of the students and work flow system have also been made online to avoid delay and to have faster administrative decisions and approvals.

Freeships to meritorious students: 10% of the meritorious students admitted on self-financing basis are granted 50% Freeships on the basis of their merit standing at the Under Graduate Degree for those in the first year of the two-year masters programme and during the second year on the basis of their performance in the examination in the first year of masters programme. This works as a great incentive, and motivates our students to compete so as to be eligible for the 50% Freeships.

Felicitation of the students and the retiring employees: Students receiving gold medals for their outstanding performance in their final year exams are invited a day before the annual convocation, publicly felicitated in the presence of their parents, the teaching fraternity, administrative staff, and leading citizens of the township specially invited for the purpose, and this ends with a dinner where they get to interact with everyone present. Employees retiring during any given academic year are publicly felicitated and given a warm farewell as a result of which a permanent bond gets at once established between the university and the retiring employees, creating a lot of goodwill. The

university also disburses gratuity and leave encashment fully by cheque to its superannuating employees on the day of their retirement.

Medical facilities: The University students Health Centre provides primary health facilities to all the employees and students registered in the University. This is over and above the health facilities available in all the government hospitals as per the norms identified by the Government of Gujarat. The university reimburses the actual expenditure incurred during the illness as per the norms set by the government. Over and above medical facilities (diagnosis and medication) to the University students, University employees and their families; facilities available in the University Health Centre are to be extended to the superannuating employees and their families. Service of specialized doctors is also rendered to the staff over and above medication by the University medical officer.

Centralised Book Purchase: The University has constituted library committee to make central purchase of the books of all the departments so as to avail maximum discount ranging from 24%-50%.

Book Fair: The University has organized book fair for 2 days wherein the publishers/distributors were invited for making prompt purchase of books recommended by the teachers, students and research fellow.

Library: The University Library is well-equipped with ICT. It provides Wi-Fi services, cyber cafe, current awareness services, selective dissemination of information, reference services, reprography service, internet facility, reading room facility, document delivery service and inter library loan service to the readers and departmental level libraries. The University has organized career corner with a view to provide the students the literature pertaining to various competitive examinations, UGC NET/SLET, TOFFEL etc. and thereby to aid to the students to build their career. University gives library facilities to superannuating teachers also. They are given membership of the University library on the payment of Non-refundable fees of ₹2,000.

International Students Centre: Every year 10 to 25 foreign and NRI students on various programme in the University are admitted through Indian Council for Cultural Relations (ICCR), Ministry of External Affairs, Government of India, New Delhi.

National Service Scheme (NSS): The University has NSS in 32 affiliated colleges, having 5000 volunteers. The University takes pride in offering NSS as elective subject. The University has more than 40 students as "Swacchatta Senaani".

Affiliation to 39 colleges from Gujarat University: The University has given affiliation to 39 colleges from Gujarat University and taken up the issues relating to their representation in statutory bodies of the

University promptly, recognition of teachers from colleges as PG teacher and Ph. D. guide.

SEED Money for Research: To create and promote research among the teachers of the departments and affiliated colleges who have not been approached for funding for research, SEED money is utilised to sanction minor research projects.

Personal Proficiency Development Fund (PPDF): The University has created Personal Proficiency Development Fund out of Overhead Budget of the various research schemes granted by the different funding agencies with a view to meet research and educational activities; to purchase international books, journals and e-journals; to subscribe research journals; to participate in seminar, symposia, conference (to meet TA/DA and Registration fees); to purchase learning materials, scientific equipments, Laptops; and to depute the other teacher to attend seminar, conference etc. with a permission of the teacher who has credit amount in his PPDF.

Group Insurance Scheme: This scheme is available to all teaching and non-teaching staff. Every employee contributes per month to this scheme. In case of a premature death of an employee, the amount is paid to kith and kin of the deceased. If the employee retires after attaining superannuation or voluntary retirement, an employee is paid the amount of his/her contribution after certain deductions

Teacher welfare fund: Sardar Patel University Teachers' welfare fund (SPUTWEF) has been created to provide financial assistance to member –teachers who have been compelled to abstain from work owing to prolonged illness, serious physical or mental disability, provided he/she is on leave. Moreover, other welfare activities are undertaken for the members and their families. In the event of death of a member, his/her nominee is given financial assistance in case of full-time salaried teachers as well as part-time salaried teachers.

KALYANNIDHI: Sardar Patel University Non-teaching staff welfare fund (KALYANNIDHI) has been created to provide financial assistance to member –teachers who have been compelled to abstain from work on leave without pay owing to prolonged illness, serious physical or mental disability; to provide financial assistance to the legal heir of the member in case of death of the member and to provide financial assistance to the member who retires from the university service.

Transparency in Tendering and Order Work: The University invites tenders by giving advertisement in leading and local News Papers. Tender documents are opened in presence of all the firms who have sent tenders.

Design and development of New Food products: PG Students of Home Science department have designed and developed new food products for various health claims and special conditions such as for sports person, for children, convenience foods etc.

CISST: The University facilitates **involvement and participation of faculty members from departments of Physics, Chemistry, Biosciences, Electronics, Mathematics and Statistics and Computer science in teaching programme on a common platform of CISST. It also facilitates central equipment facility for the researchers from all the Science Departments.**

Preparation of Audio Book for Blind People's Association: "Tattvamasi" by Shri Dhruvbhai Bhatt, a well known Gujarati Novel cum Life enriching and guiding story depicting the life on the banks of river Narmada, and a recipient of 'Rashtriya Sahitya Academy Award' was selected and audio book was prepared utilizing honorary services from an expert announcer and reader and was recorded, edited and prepared at the University's Community Radio Station.

Sardar Patel University Community Outreach and Extension Programme - A Pilot Project: Continuing the mission of the University of "Resurgence of Rural India" by taking education and applications of study and research in various disciplines of knowledge to the doorsteps of rural areas, and prepare the citizens and leaders of new free nation as envisioned by Sardar Vallabhbhai Patel, the University undertook a pilot of SARDAR PATEL UNIVERSITY COMMUNITY OUTREACH AND EXTENSION PROGRAMME.

Loans from General Provident Fund (GPF)/Contributory Provident Fund (CPF): All the teaching and non-teaching staff are provided interest free loan up to 75% of the contribution of the employee from their own funds deposited in GPF/CPF. The loan is provided for (a) the marriage, (b) other social occasions, (c) cover illness, (d) purchase of a house, (e) purchase of vehicles, and (f) for higher education purpose.

7.3 BEST PRACTICES

7.3.1 Give details of any two best practices which have contributed to better academic and administrative functioning of the university

Best Practice – I

Title of the Practice: Promotion of Research through SEED grant and establishment of interdisciplinary research centres

Objectives of the Practice:

- To inculcate and develop a research culture among teachers and students of the University
- To encourage and facilitate the teachers for undertaking minor and major research projects from UGC and various other funding agencies
- To increase awareness and benefits of interdisciplinary research in basic sciences, humanities and social sciences
- To facilitate interaction among researchers of different disciplines through establishment of interdisciplinary research centres

The Context:

The University teachers appointed as Assistant or Associate Professors though may have very good research and innovative ideas, are constraint with funding to implement and experiment on their ideas. Provided some start-up grant, they will be able to go ahead with and pursue their ideas giving them results which may provide a platform to them for establishing their long and bright research career benefiting the University. They may be hesitating in approaching the national agencies for the funds and if such an opportunity is provided to them in form of SEED grant at their home institute, they will be able to carry out and initiate their research with confidence. With the result achieved, they may be able to convince the national or other funding agencies to finance their research projects considering the future prospects.

A multidisciplinary approach to study and research has now become a demand of the time as a result of the levels at which the contemporary advancement of knowledge in different disciplines have reached. Consequently the university is establishing the CISST for promotion for Interdisciplinary Studies and Research in Science and Technology, in particular, for the implementation of the PURSE Programme. The centre is expected to provide a platform for design and implementation of teaching and research programmes of interdisciplinary nature.

The Practice:

The University organizes workshops with an emphasis on interdisciplinary research themes where researchers across the University as well as experts from medical and agricultural faculties from collaborating institutions are invited for brainstorming on prospective interdisciplinary research areas.

The University also organizes joint workshops with Knowledge Consortium of Gujarat, Government of Gujarat for the University and affiliated college teachers of basic sciences, home science, management, commerce, humanities and social sciences disciplines for preparation of research proposal which are discussed and finalized with the experts in the subject area as mentors for onward submission to various funding agencies.

The University, for its young faculty members, provides SEED grant as start-up resource to initiate in the research area of their subject as basic research or area of interdisciplinary research. For the purpose of allocation of SEED grant, research proposals are selected on the following considerations:

- Objective, methodology and outcomes of the research project proposal
- Teachers in the cadre of Assistant or Associate Professor are given preference
- Teachers not having any minor or major research project are given priority
- The fund of ₹25,00,000 is earmarked for the purpose from the University's own resources
- The scrutinized research proposals are presented and a grant up to ₹1,00,000 p.a. per research proposal is sanctioned.

The University has established Centre for Interdisciplinary Studies in Science and Technology (CISST) which houses central experimental facilities, consisting of the equipments under the DST-PURSE so as to facilitate and promote interdisciplinary research and academic activities.

A committee consisting of the retired Vice-Chancellors has been constituted to consider the possibility of establishment of the centre, promoting interdisciplinary research and academic activities especially for humanities and social sciences. Considering their positive response, the University is going to establish a similar centre in line of the CISST for social sciences.

Evidence of Success:

- Ten Interdisciplinary Research projects have been initiated to promote interdisciplinary research collaboration.
- The research projects completed with the help of SEED grant have been proposed and approved by various national funding agencies.
- Faculties are also allowed to utilize the SEED grant for attending the seminars and conferences (TA/DA and registration fees).
- CISST has started functioning with research facilities established from DST-PURSE grant equipments catering the need of basic sciences and interdisciplinary research. The approach of housing and establishing such common facilities for interdisciplinary research haven been appreciated and considered "excellent" by DST, Government of India.
- Three teaching and research programmes have been identified after successive rounds of brainstorming session which are
  - Biomedical Science and Technology
  - Defence Science and Technology
  - Earth System Science

These programmes are run by CISST with the help of the faculty members of the University departments having expertise in the area and other invited faculty members institutions like PRL, ISRO and The M. S. University of Baroda and others. Considering the importance of the proposed research and training areas in the present scenario, government of Gujarat has also sanctioned the teaching posts which will help us in recruiting the expert faculties in these areas.

Considering the future prospects of research and development in the proposed programmes of CISST, Donors have generously donated ₹2,00,00,000 for construction of a new CISST building.

On receiving favourable reports and encouraging remarks and suggestions from the Vice-Chancellors' committee, the University has announced for the establishment of Centre for Interdisciplinary Studies in Humanities and Social Sciences in line of CISST. Donors have also agreed to donate generously ₹1,00,00,000 for establishment of infrastructural facilities for the proposed centre.

Problems Encountered and Resources Required:

- Since the M.Sc. Programme are innovative, new and yet to be published among prospective students and employers; we at present are getting only a couple of students to begin with. However, it is hopeful that these programmes will pick up the interest of the students in coming future and we have already initiated awareness

campaign about the job and research opportunities in the chosen areas.

- More specialized faculties especially in the chose areas are required for handling advanced level topics and also guiding the students for Projects and PhD.
- Similarly, more specialized equipments are to be purchased for practical training of the students.

Best Practice – II

Title of the Practice: Fund Management

Objectives of the Practice:

- **To generate the fund for the development of research and infrastructural facilities**
- **To make optimum utilization of fund**
- **To make fruitful investment of ideal fund**

The Context:

Due to revision of pattern for fixation of the yearly maintenance grant from vide GR dated 01-04-1997 by education department, government of Gujarat; reimbursement of the loss was not possible for the purpose and calculating the maintenance grants of the University under the head "examination" and an additional income generated through different sources i.e. donation, increase of fees except tuition fees etc. shall not be considered as the income of the University for the purpose of calculating maintenance grant of the University. In this line, the University has also started creation of funds to facilitate and promote research activities, to develop infrastructural facilities, to meet staff deficit and fund deficit from various funding agencies. Under a single umbrella of Corpus fund, various funds out of surplus of the respective budget heads such as Self Finance courses Funds, Funds from external courses, Examination Development funds, Library fund, Personal proficiency development fund have been created. Even surplus of corpus funds is strategically invested to get fruitful returns.

The Practice:

Creation and utilization of funds

- Central Development Fund: Out of surplus of tuition fees of self finance incomes, 30% of the surplus is utilized for creation of Central Development Fund for the purpose of development of research activities and infrastructural facilities.

- Department Development fund: In the line of Central development fund, Out of surplus of tuition fees of self finance incomes, 30% of the surplus is utilized for creation of Department Development Fund for the purpose of development of research activities and infrastructural facilities at the departmental level.

- Surplus from External courses: the University runs UG and PG level external courses. Surplus from the income from external courses is transferred to the University corpus fund which is utilized for the development of teaching, research and extension activities.

- Personal Proficiency Development Fund (PPDF): The University has created Personal Proficiency Development Fund out of Overhead Budget of the various research schemes granted by the different funding agencies with a view to meet research and educational activities; to purchase international books, journals and e-journals; to subscribe research journals; to participate in seminar, symposia, conference (to meet TA/DA and Registration fees); to purchase learning materials, scientific equipments, Laptops; and to depute the other teacher to attend seminar, conference etc. with a permission of the teacher who has credit amount in his PPDF.

- Recurring Development Fund: As per Notification dated 7-4-1997 of Govt. Of Gujarat additional income generalized either from Exam & Tuition fees like interest of Involvement of University own fund is transferred to RDF.

- Security Services Fund: The University receives ₹2,00,000 p.a. as security service from the Government of Gujarat. Being the amount is insufficient for the security purpose, security service charges are being charged from the students of University departments and the students residing in the University hostels and security services fund has been created with a view to compensate expenditure on security.

- Library Development fund: Unclaimed deposit by the University members is transferred to Library development fund which has been generated to create and provide library facilities such as Wi-Fi services, cyber cafe, current awareness services, selective dissemination of information, reference services, reprography service, internet facility, reading room facility, document delivery service etc.

- Hostel Development Fund: Penalty and unclaimed deposit are transferred to the Hostel development fund and the same is utilized for providing better facilities to the students staying in the University hostels.

- Examination development fund: Excess of income over expenditure from examination fees is transferred to examination development

fund for utilization of infrastructural facilities, ICT and strengthening of the University press particularly for the examination unit.

Over and above aforementioned utilizations of the University corpus, it is utilized to pay remuneration or salary to the ad-hoc/ contractual appointed faculties, administrative and supporting staff due to unfilled positions against the sanctioned vacancies and superannuated employees.

Moreover, the University provides financial assistance to the Departments and supporting services for the addition, alteration and renovation of the existing buildings, purchase of scientific equipments and development of other infrastructural facilities.

Investment

Surplus of corpus fund is strategically invested both as long term investment i.e. for 5 years and as short term investment i.e. for 1 year. The long term investment can be made in either 8% Government Taxable Bonds or in 6.5% Non-taxable bonds. As the University income is exempted under section 10 (23) (c) of the Income-tax Act, 1961, the University makes investment in the first option. With a view to manage liquidity, some of the ideal fund can be invested with the banks as short term investment in Fixed Deposit for 1 year. For the purpose, banks are approached to provide the maturity value of the fund to be invested. On the receipt of the maturity value, comparative statement of maximum rate with maturity value is prepared and the banks' representatives are invited for the negotiation and then the bank with the highest rate of interest and the maturity value is given the deposit for the period of 1 year.

Evidence of Success:

- The practice has helped the university to meet cut in recruitment of the employees by making appointment of ad-hoc and contractual staff.
- It has resulted into remarkable increase in the University corpus fund.
- It has become possible for the University in timely payment of the salary and retirement benefits.
- Liquidity and solvency of the University have improved.
- The University Funds required for promoting and developing research activities have increased and research environment has been developed by utilizing the fund as SEED grant. Interdisciplinary research activates have also been promoted with the help of the fund.

- Basic infrastructural facilities like "Gyanoday" (examination bhavan), Yugpurush swami Vivekanand Sports complex up to the mark at international level have been created.
- MoU with Gujarat Info Petro Limited has been made to make student cycle online (admission to award of degree) with the help of the fund. Human Resource module and Inventory software have been developed and introduced for smooth functioning of the University administration.

Problems Encountered and Resources Required:

- Allotment of insufficient and untimely maintenance grant from the state government.
- Over a period of time, accumulated deficit has increased against which government has not sanctioned even ad-hoc grant to reduce the accumulated deficit.
- Non-adjustment of funds received under planned and unplanned schemes despite of submission of report and utilization certificate in due courses.