

**INSTITUTE OF SCIENCE & TECHNOLOGY  
FOR ADVANCED STUDIES & RESEARCH**  
(MANAGED BY CHARUTAR VIDYAMANDAL)



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**Director**

26<sup>th</sup> August'2013, Monday

DECLARATION BY PRINCIPAL

I hereby declare that an attempt has been made to record in a comprehensive manner, the efforts made for quality enhancement by the institution in the SSR(Self Study Report) submitted to NAAC.

This SSR is prepared by the institution and no part has been outsourced. All the information and data incorporated in SSR are original. ISTAR is looking forward for the peer team visit to the institution.

Dr. P. M. Udani,

Principal



**PRINCIPAL  
INSTITUTE OF SCIENCE & TECHNOLOGY  
FOR ADVANCED STUDIES & RESEARCH  
(ISTAR)  
VALLABH VIDYANAGAR-388120**

Director

### Certificate of Compliance

(Affiliated/Constituent/Autonomous Colleges and Recognized Institutions)

This is to certify that Institute of Science & Technology for Advanced Studies & Research (ISTAR) fulfils all norms

1. Stipulated by the affiliating University and/or
2. Regulatory Council/Body [such as NCTE, AICTE, MCI, DCI, BCI, etc] and
3. The affiliation and recognition [if applicable] is valid as on date.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 26/05/2013

Place: Vallabh Vidyanagar



Dr. P.M. Udani

Principal

(Name and Signature with Office seal)



PRINCIPAL  
INSTITUTE OF SCIENCE & TECHNOLOGY  
FOR ADVANCED STUDIES & RESEARCH  
(ISTAR)  
VALLABH VIDYANAGAR-388120

**Self-Study Report**

**(SSR)**

**Submitted by**

**Charutar Vidya Mandal's**



**Institute of Science & Technology For Advanced Studies & Research (ISTAR)**

**(Affiliated to Sardar Patel University & Gujarat Technological University)**

**Vallabh Vidyanagra-388120, Gujarat**

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## ABBREVIATIONS

BoS	Board of Studies
CVM	Charutar Vidya Mandal
EST	Environmental Science & Technology
GTU	Gujarat Technological University
IC	Industrial Chemistry
INST	Instrumentation
ISTAR	Institute of Science & Technology for Advanced Studies & Research
IT	Information Technology
MCA	Master of Computer Applications
MIHS	Master of Industrial Hygiene & Safety
MV	Master of Valuation
OC	Organic Chemistry
OFW	Oils, Fats and Waxes
PST	Polymer Science & Technology
SCT	Surface Coating Technology
SPU	Sardar Patel University

## PREFACE

Charutar Vidya Mandal (CVM) was established in 1945 in Vallabh Vidyanagar by Shri Bhailalbai Patel (Bhaikaka) and Bhikhabhai Patel for providing meaningful education with strong social sense for regeneration of villages and building modern India. Vallabh Vidyanagar is an educational township realized for fulfilling the dream of Sardar Patel, the great son of the soil who had given vision of establishing modern education institutions, advanced agriculture resources centres and co-operative ecosystems for building prosperous independent India. CVM has established 47 premier institutes for demonstrating deep rooted commitment for providing education of global standards at Vallabh Vidyanagar. Initially, Dr. H. M. Patel, an ICS officer of great repute nurtured CVM with great care and established educational institutes for courses pertaining to domain of Polytechnic, Arts, Fine Arts, Science, English, Home Science, Architecture, Pharmacy, Higher Secondary, Career Development etc. Dr. C. L. Patel, formerly an Executive Engineer with the Gujarat Electricity Board, succeeded Dr. H. M. Patel as Chairman of the CVM and used his sound realism and unshakable endurance in establishing more than 20 self-financed colleges. He extensively renovated and refurbished several institutions and signed MoU with number of foreign universities namely Georgia South Western University, Myers University, Malaspina University, University of Herfordshire, British Columbia University, University of Cincinnati and Eastern Michigan University etc. for providing education of global standards. His unquenchable thirst for revitalizing the society through quality education propelled him to extend the boundaries of Vallabh Vidyanagar and created New Vallabh Vidyanagar at the trisection of Karamsad, Mogri and Gana on 20<sup>th</sup> April, 2000.

Our institute namely Institute of Science and Technology for Advanced Studies and Research (ISTAR) is a brainchild of Dr. C. L. Patel and was established in the year 1999 exclusively for post graduate study and research in Chemical Sciences, Information Science and Environment Science. ISTAR pioneered unique interdisciplinary courses like Master of Industrial Hygiene and Safety and Master of Valuation. Facility for Ph.D. study in six disciplines viz. Industrial Chemistry, Environmental Science, Botany, Biotechnology, Chemistry and Computer Science is available at ISTAR. ISTAR is an approved professional institute by All India Council for Technical Education (AICTE) as well as UGC and affiliated to Gujarat Technological University (GTU) and Sardar Patel University. Institute recognizes importance and essentiality of extra-curricular and co-curricular activities. Students are encouraged to organize and participate in

technical activities, cultural activities and sports activities for demonstrating their leadership skills and mark of worthy citizens. Institute is committed to shaping the student's career as per the aspirations of the world of tomorrow and has taken many initiatives in this regard. One of the major initiatives taken is Memorandum of Understanding signed by different departments of ISTAR with Institutes and Universities of global repute for providing opportunity for collaborative research, joint planning of seminars and exchange programmes (of students and faculties). We understand the importance of sponsored research programs and consultancy work and accomplishments of institute have generated recognition and faith among industries, recruiting agencies and aspirant students. Institute regularly invites expert faculties from academia, industries and R & D institute for achieving academic excellence and this has benefitted in placement of our students. The Institute is conscious about the raising and maintaining quality standards of higher education and will certainly widen the horizon in the era of knowledge economy with enlightened management of CVM under the patronage of Dr. C. L. Patel and qualified and committed faculty members of ISTAR.



**3. Status of the of Institution :**

- a. **Affiliated College**
- b. Constituent College
- c. Any other (specify)

**4. Type of Institution:**

- a. By Gender
  - i. For Men
  - ii. For Women
  - iii. **Co-education**
- b. By shift
  - i. **Regular**
  - ii. Day
  - iii. Evening

**5. Is it a recognized minority institution?**

Yes

No

If yes specify the minority status (Religious/linguistic/ any other) and provide documentary evidence.

**6. Source of funding:**

- a. Government
- b. Grant-in-Aid
- c. **Self-Financing**
- d. Any Other

**7.**

- a. Date of establishment of the college: **20/01/1999**
- b. University to which the college is affiliated /or which governs the college  
(If it is a constituent college) (**Annexure 1 and 2**)  
**Sardar Patel University, Gujarat Technological University**
- c. Details of UGC recognition: (**Annexure 3**)

<b>Under Section</b>	<b>Date, Month &amp; Year (dd-mm-yyyy)</b>	<b>Remarks (If any)</b>
i. 2 (f)	09/05/2012	----
ii. 12 (B)	09/05/2012	----

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act)

- d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

<b>Under Section/clause</b>	<b>i. AICTE</b>	<b>ii.</b>	<b>iii.</b>	<b>iv.</b>
Recognition/Approval details Institution/Department/ Programme	MCA			
Day, Month and Year (dd-mm-yyyy)	28-06-2001			
Validity	Extension Approved Till Academic Year 2013-14			
Remarks				

(Enclose the recognition/approval letter)

- 8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?**

Yes  No

If yes, has the College applied for availing the autonomous status?

Yes No

- 9. Is the college recognized**

a. By UGC as a College with Potential for Excellence (CPE)?

Yes

No

If yes, date of recognition:

b. For its performance by any other governmental agency?

Yes

No

If yes, Name of the agency ..... and

Date of recognition: ..... (dd/mm/yyyy)

**10. Location of the campus and area in sq.mts:**

Location *	Rural
Campus area in acres	4.452
Built up area in sq. mts.	10891.61

(\* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

**11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.**

a. **Auditorium/seminar complex with infrastructural facilities** ✓

The Institute has a seminar hall and two conference rooms in which the Institute arranges various academic, research and non-academic events.

b. **Sports facilities**

i. Play ground: ✓

ii. Swimming pool ×

iii. Gymnasium ✓

c. **Hostel**

i. **Boys' hostel** ✓

A. Number of hostels- **1** [Girnar Hostel]

B. Number of inmates - **202**

C. Facilities (mention available facilities)

Each hostel room is three seated and each student gets a separate bed, writing table, chair and cupboard. Sports facilities are also available.

**ii. Girls' hostel** ✓

A. Number of hostels- **1** [Square Hostel]

B. Number of inmates- **37**

C. Facilities (mention available facilities)

Each hostel room is three seated and each student gets a separate bed, writing table, chair and cupboard. Sports besides mess facilities are also available.

**iii. Working women's hostel** **N/A**

A. Number of inmates

B. Facilities (mention available facilities)

**d. Residential facilities for teaching and non-teaching staff (give numbers available -- cadre wise)**

The CVM provides residential facility cadre wise [for all classes] to those based on request from employees. The Head of the institute is provided with an independent bungalow.

**e. Cafeteria – One**

**f. Health centre** – University Health Centre is close to the college and students and staff is provided treatment **at very nominal charges (0.50 Paise /Case)**. Panchayat Hospital of Vallabh Vidyanagar also provides health care services at nominal charges. Specialist doctor is engaged every day by hospital. Full time Medical Officer and supporting paramedical staff is providing general treatment.

**g. First aid, Inpatient, Outpatient, Emergency care facility, Ambulance.....**

All the departments, labs and the office have a first aid facility. CVM has ambulance and much acclaimed 108 ambulance facility is provided through call. For emergency care facility (if any) services of medical college and hospital of Charotar Arogya Mandal, a sister concern of CVM is availed. The hospital is fully equipped with all the latest equipments, OTs and medical services are provided by highly qualified doctors and staff .

Health center staff –

<b>Qualified doctor</b>	Full time	Part-time	<input checked="" type="checkbox"/>
<b>Qualified Nurse</b>	Full time	Part-time	<input checked="" type="checkbox"/>

**h. Facilities like banking, post office, book shops**

Vallabh Vidyanagar is a well-known academic hub of Gujarat. All major private and nationalized banks with their own ATMs are operating in the vicinity of the Institute. Cooperative bank is opposite to the Institute. The Post Office is located at 200 m away from the Institute campus. There are several book shops and stationery shops in close vicinity of the Institute to cater to the requirements students

**i. Transport facilities to cater to the needs of students and staff**

The college is well connected by road transport services provided by Gujarat State Road Transport Corporation. City buse and private auto rickshaws are also operating and railway station is just 5 km away. Thus, adequate transport facilities are available for college students. CVM's bus facility is available for requirements like educational tours, NSS camps etc.

A Quallis (GJ-7-R6607) car is provided to the Head of the institute and it is also used for institute's official work. The institute has its own Verna Car (GJ-23-H-7759) and it is used for students and staff participating in extension activities and field study.

**j. Animal house:** Not Applicable.

**k. Biological waste disposal:**

Not Applicable

**l. Generator or other facility for management/regulation of electricity and voltage:** Institute has own generator of 125kVA. MCBs and stabilizers are used for power safety and computer labs are provided stabilized power through UPS.

**m. Solid waste management facility**

The institute sweepers collect waste from each department and timely it is collected by Municipality from the Institute for disposal.

**n. Waste water management**

College has a drainage connection with Municipal sewer.

**o. Water harvesting**

Rain water is collected and harvested in semi underground tank for usage in laboratory. Departments in Industrial Chemistry building are using harvested water for laboratories consumption.

## 12. Details of programmes offered by the college

Sl. No.	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/approved Student strength	No. of students admitted
	Under-Graduate	Not applicable					
	Post-Graduate	M.Sc. EST	Four Semester	B.Sc. with Env. Science, Botany, Zoology, Biochemistry, Chemistry & Allied subjects, Biotech., Microbiology, Agriculture, Geology, Genetics, Bio-informatics, Fire & Safety	English	60	57
		M.Sc. IC	Four Semester	B.Sc.with IC,Chemistry, IC (Vocational) Applied Chemistry, Ind.Polym. Chemistry, B.Pharm, Biochemistry		60	66
		M.Sc. INST	Four Semester	B.Sc.with Instrumentation, Instrumentation(Voc), Electronics, Physics, Electronics & Communication		60	34
		M.Sc. IT	Four Semester	B.Sc.with Information Science, IT,CS,,Bioinformatics, BCA,BBA,BE, PGDCA		120	138
		M.Sc. PST	Four Semester	B.Sc.with IC, IC (Voc) Applied Chemistry, Ind. Polymer Chemistry, Chemistry		60	20
		M.Sc. SCT	Four Semester	B.Sc.with IC, IC (Voc) Applied Chemistry, Ind. Polymer Chemistry, Chemistry		60	49
		M.Sc. OC	Four Semester	B.Sc. with Chemistry, IC (Vocational)		120	12
		M.Sc. OFW	Four Semester	B.Sc.with IC, IC(Voc) Applied Chemistry, Ind. Polymer Chemistry, Chemistry		60	00
		MCA	Six Semester	GTU Norms		60	60

		MCA Lateral	Four Semester	GTU Norms		60	Started from 2013-14
		MIHS	Four Semester	B.Sc or B.E. from a recognized University		15	15
		MV(Real Estate )	Four Semester	Degree in Science, Engg., Commerce, Economics, Management, Agriculture etc. Pass in Final Exam in Valuation Surveying, Building and Quantity, Land&Hydrographic Surveying conducted by Institution of Surveyors, New Delhi – 110 016 Pass in Section ‘A’ and ‘B’ Examinations conducted by Institution of Engineers, 8 – Gokhale Road, Kolkata – 700 020 <b>OR</b> Institution of Mechanical Engineers (India)		30	14
		MV(Plant and Machinery)				15	05
	Integrated Programmes P G	-----	-----	-----	-----	-----	-----
	Ph.D.	Ph.D.in IC, Chemistry, Env.Science, Botany Biotechnology	6 Semester for full time 8 Semester for part time	M.Sc. result and University Entrance Test	English	-----	
	M.Phil.	-----	-----	-----	-----	-----	-----
	Certificate courses	-----	-----	-----	-----	-----	-----
	UG Diploma	-----	-----	-----	-----	-----	-----
	PG Diploma						
	Any Other	-----	-----	-----	-----	-----	-----

**13. Does the college offer self-financed Programmes?**

Yes  No

If yes, how many?

**14. New programmes introduced in the college during the last five years if any?**

Yes  No Number

**15. List the departments:** (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Particulars	UG	PG	Research
Science	-----	√	√
Arts	-----	-----	-----
Commerce	-----	-----	-----
Inter disciplinary	-----	√	-----

**16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, and M.Com...)**

a. Annual system

b. Semester system

c. Trimester system

**17. Number of Programmes with**

a. Choice Based Credit System

b. Inter/Multidisciplinary Approach

c. Any other ( specify and provide details)

**18. Does the college offer UG and/or PG programmes in Teacher Education?**

Yes No

If yes,

a. **Year of Introduction of the programme(s).....NA..... (dd/mm/yyyy)**

and number of batches that completed the Programme

**b. NCTE recognition details (if applicable) NA**

Notification No.: .....

Date: ..... (dd/mm/yyyy)

Validity: .....

**c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?**

Yes                      No     

**Does the college offer UG or PG programme in Physical Education?**

Yes                      No     

If yes,

**d. Year of Introduction of the programme(s)..... (dd/mm/yyyy)**  
and number of batches that completed the programme

NCTE recognition details (if applicable)

Notification No.: .....NA.....

Date: ..... (dd/mm/yyyy)

Validity: .....

**e. Is the institution opting for assessment and accreditation of Physical Education Programme separately?                      Yes                      No**

**19. Number of teaching and non-teaching positions in the Institution**

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor		*M	*F	*M	*F
	*M	*F	*M	*F	*M	*F				
Sanctioned by the UGC/Univ/State Govt.	Not applicable ( Self financed college)									
Sanctioned by the Management/society or other authorized bodies	05	03	05	00	25	11	Class 3 :08	Class 3 :01	Class 3 :18	
Recruited	04	03	01	00	23	08	class 4: 19			

Positions	Teaching faculty						Non-teaching		Technical	
	01				02	03				
Adhyapak Sahayak/ Adjunct Prof./Trainee Assistant Professor										
Yet to recruit	01		04		02		00	00	00	00

**\*M-Male \*F-Female**

**20. Qualifications of the teaching staff:**

Highest qualification	Professor		Associ. Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.	04	03	01	00	13	02	23
M.Phil.							
PG					11	05	16
Temporary teachers [Adhyapak Sahayak/ Adjunct Prof./Trainee Assistant Prof]							
Ph.D.							
M.Phil.						01	01
PG	01				02	02	05
Part-time teachers		NA					

**21. Number of Visiting Faculty/Guest Faculty engaged with the College.**

Department	Number of visiting Faculty
EST	2
IC	2
IT	0
INST	0
MCA	0
OC	1
PST	2
SCT	2
MIHS	12
MV(plant & machinery, real estate)	10

**22. Furnish the number of the students admitted to the college during the last four academic years**

Categories	09-10		10-11		11-12		12-13	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	04	00	06	01	12	07	06	02
ST	03	00	00	01	02	01	03	01
OBC	22	02	60	09	59	12	46	15
General	138	66	234	71	324	89	307	90
Foreign+ NRI	00	00	00	00	01	00	00	00

**23. Details on students enrollment in the college during the current Academic year:**

Type of students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state where the college is located	Nil	455	Nil	19	474
Students from other states of India	Nil	15	Nil	01	16
NRI students	Nil	00	Nil	Nil	Nil
Foreign students	Nil	Nil	Nil	Nil	Nil
Total		470		20	

**25. Dropout rate in UG and PG (average of the last two batches)**

UG  PG

**26. Unit Cost of Education**

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) Including the salary component

*Rs.83464*

(b) Excluding the salary component

*Rs.50025*

**27. Does the college offer any programme/s in distance education mode (DEP)?**

Yes No

If yes,

- a. Is it a registered centre for offering distance education programmes of another University,  
No
- b. Name of the University which has granted such registration.
- c. Number of programmes offered
- d. Programmes carry the recognition of the Distance Education Council.  
Yes No

**28. Provide Teacher-student ratio for each of the Programme/course Offered**

In year: 2012-13

Sr.No	Programme	Students Teachers ratio
1.	IC	33 : 1
2.	SCT	27 : 1
3.	OC	20: 1
4.	PST	24:1
5.	EST	25: 1
6.	INST	24 : 1
7.	IT	29 : 1
8.	MV(real estate and plant &	35:1
9.	MIHS	15 : 1
10	MCA	15:1

The number of only permanent staff is taken into account in the above calculation of student teacher ratio.

**29. Is the college applying for**

Accreditation: **Cycle 1**  Cycle 2  Cycle 3  Cycle 4

Re-Assessment:

**(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)**

Date of accreditation\* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 1: Accreditation Outcome/

Cycle 2: ..... (dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle 3: ..... (dd/mm/yyyy) Accreditation Outcome/Result.....

**\* Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.**

30. Number of working days during the last academic year.

292

31. Number of teaching days during the last academic year.

257

(Teaching days means days on which lectures were engaged excluding the examination days)

32. Date of establishment of Internal Quality Assurance Cell (IQAC)

IQAC : 03 /04 /2012

Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.

AQAR (i) AQAR (ii) AQAR (iii) AQAR (iv)

Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

- ISTAR is the only institute in India managing 13 diverse post graduate programmes under one umbrella. The Master of Valuation and Master of Industrial Hygiene & Safety are only of their kind in the whole nation.
- SICART (Sophisticated Instrumentation Center for Applied Research and Testing) facilities established jointly by CVM and DST are used for training of students. SICART and ISTAR are jointly conducting certificate course for students of EST,IC, OC,PST and SCT departments
- Testing and Consultancy in the field of Chemical Sciences and Valuation
- ISTAR is in the process of establishing R & D center for
  - Cloud Computing
  - Multi Media
  - Semantic Web
  - e-governance
  - Geoinformatics
  - Mobile Computing & Applications
  - Statistical Analysis

## C. Criteria-Wise Inputs

### CRITERION I: CURRICULAR ASPECTS

#### 1.1 Curriculum Planning and Implementation

##### 1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

###### **Vision:**

To add significantly to our enduring civilizational tradition of pioneering excellence in learning, knowledge, enlightenment and self-realization, in a universally relevant context.

###### **Mission:**

We dedicate ourselves to the perpetuation of our founders' vision of providing the infrastructure facilities, operating conditions and overall environment conducive for the education of young scholars, along with the desired physical, mental and character building inputs; we firmly renew our commitment in providing value added globally relevant education with an emphasis on the techno management domain to ensure that our scholars fruitfully exercise their knowledge, skills and values in the global economy.

###### **Goals and Objectives:**

- To create and nourish a stimulating learning environment that ensures a globally relevant education, based on eternal human values
- To forge and reward excellence in the curricular as well as extra-curricular sectors so as to ensure the scholars' global competitiveness
- To tap, nurture and unleash the innovative entrepreneurial abilities of scholars and thereby ensuring lifelong socio-economic value- addition
- To evoke and embellish the finest traits of human excellence that can dovetail into a sustainable career growth curve
- To affiliate, associate, liaise or otherwise synergize with any institution body, entity, ethno-cultural diaspora and the overall global fraternity in any form whatsoever, in support of the above
- To initiate, consolidate and extrapolate any objectives, function and activities in support of the above

Our college follows the above mentioned vision and mission in letter and spirit. Ours is a secular institution whose focus is on imparting quality education in the field of pure & applied sciences and interdisciplinary subjects which gives an opportunity to our young postgraduates to explore the knowledge and skills gained for career building and higher studies. Moreover, the faculties are always keen to upgrade themselves and always strive to improve the curriculum to make it relevant with the changing times. The college also gives ample opportunities for the overall development of the students by allowing the students to participate in various sports events, academic meets and cultural events. We also conduct a personality development programme in association with Globe Arena (Hyderabad), a professional organization and H. M. Patel Career Development Centre (Vidyanagar), to build all-round personality of the student. It is said that future leaders of the nation are born in educational institutions. We follow this saying by including the students in Central Committee and provide them the opportunity to manage and organize various events in the college. This practice is useful for building future leaders and managers besides building the character.

**1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).**

Academic time schedule is provided by the University and accordingly academic calendar for each program is prepared by institute. Suggestions of the HOD and the Principal are taken for implementation of teaching plan. Deployment action plan is described below.

- The department time table committee plans the schedule for teaching process according to UGC and State Government Resolution.
- CBCS system is followed and students are given freedom for selecting the elective subjects from a given pool of subjects.
- The Heads of Departments allot teaching duties as per UGC norms initially, If required, teachers available in the department are given few more lectures for the successful completion of the syllabus.
- To adjust the work load of staff on leave, all teaching and non-teaching Staff have to

mention adjustment of duty in the leave report.

- In some instances, where the management has sanctioned posts but appropriate candidate is not available, Adhoc teachers are appointed by the management.
- During the departmental meetings, the head of the department takes feedback from all staff members regarding the details of syllabus completed and it is ensured that at least 40 % syllabus is completed before the internal examinations.
- Students are given project assignments for demonstrating their learning outcome.
- Guest faculties are inviting for expert talk
- Curriculum based workshops and seminars are conducted.

**1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?**

**Support from University**

Univeristy provides details about course structure, teaching hours for different units, text books, reference books etc. for all the programs well in advance.

**Support from Institute**

- Library support for books, reference books, research journals & periodicals
- Healthy teaching and learning Environment
- ICT facility in class rooms
- Wi-Fi & LAN internet facility
- Desktop computer and lap tops
- Printing and scanning facility in each department.
- Encourages faculties for participation in seminar and workshops
- Fund is provided for miscellaneous expenses.
- Departments are allowed to invite guest faculty/expert related to their course

**1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.**

CBCS curriculum is implemented from 2010 as per the initiatives of CVM. Ten of our faculties are Members of Board of Studies in various subjects of the university and are

involved in designing the syllabus. Teachers also attended workshops for obtaining insight about framing syllabus according to CBCS. Teachers of various departments meet their counterparts from other institutions and interact with experts from industries to work out strategy for designing and implementing effective curriculum delivery.

**1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalization of the curriculum?**

Institute constantly interact with the Board of Studies of university and senior faculty members for effective operationalization of the curriculum. During industrial visits, faculties do interact with experts and discuss about the scope of improving the syllabus. Suggestions are also taken from experts invited for regular course work teaching and special lectures from research organization and industry to improve the syllabus and make it more relevant to the current technology. Prevailing research and industrial trends are adopted in different disciplines for increasing the employment opportunity of students.

**1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University?(number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.**

10 senior faculty members are in Board of studies (BoS) and they constantly interact with students and teachers. The members of the BoS meet all the faculty members before they attend the BoS meeting for obtaining their suggestions. As stated earlier, industry and expert opinion are also collected in preparation of syllabus.

<b>Sr.No</b>	<b>Name of faculty in Board of studies</b>	<b>Department</b>	<b>University</b>
1	Prof.(Dr.)Merlin Thomas	Industrial Chemistry	Sardar PatelUniv.
2	Dr.JigarV.Patel	Industrial Chemistry	Sardar Patel Univ.
3	Dr.Rohit H. Dave	Industrial Chemistry	Sardar Patel Univ.
4	Dr.Kalpesh I. Patel	Surface Coating Technology	Sardar Patel Univ.
5	Dr.Mayank Patel	Surface Coating Technology	Sardar Patel Univ.

6	Prof.(Dr.) Nirmal Kumar	Env. Science & Technology	Sardar Patel Univ.
7	Prof.(Dr.) S.O.Khanna	Information Technology	Sardar Patel Univ.
8.	Dr. Sanjay Panjabi	Organic Chemistry	Sardar Patel Univ.
9.	Prof.(Dr.) Priyanka Sharma	MCA	GTU
10.	Dr. Priya Swaminarayan	MCA	GTU

3 staff members of the institute are senate members who represent the requirements of the institute in university.

Sr.No	Name Senate Members	University
1	Dr.P.M.Udani	Sardar Patel University
2	Prof.(Dr.) Merlin Thomas	Sardar Patel University
3	Mr. Rupesh T. Shah	Sardar Patel University

**1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If ‘yes’, give details on the process (‘Needs Assessment’, design, development and planning) and the courses for which the curriculum has been developed.**

Yes. Course for soft skill and personality development and value added short term course for improving employability are jointly designed and conducted with industry partners.

**1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?**

The institute ensures the attainment of the objectives of curriculum by the following ways

- Analyzing the university theory and practical examination results
- Analyzing internal examination results
- Taking feed back from employers, students, alumni and other stake holders
- Analyzing participation and performance in paper presentation, projects, quiz competition etc by students and faculty
- Based on the above analysis, corrective actions like remedial classes, value added courses, counseling etc. are arranged.

## **1.2 Academic Flexibility**

### **1.2.1 Specifying the goals and objectives give details of the certificate/diploma/ skill development courses etc., offered by the institution.**

#### **Personality Development Programme [PDP]:**

Being an affiliated institute, curriculum of S P University and GTU is followed. Additionally, PDP is conducted round the year in association with Career Development Center (CDC) and Globe Arena Technologies Ltd., Hyderabad. Total 24 hours sessions are organized every year for each student to ensure all round development of students and to make them confident and independent thinkers.

#### **Training on Analytical instruments**

The students of chemical sciences and environmental science are given free three days training programme on various analytical instruments in SICART (Refer 1.2.3)

### **1.2.2 Does the institution offer programmes that facilitate twinning /dual degree? If 'yes', give details.**

No such provision

### **1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability .**

- **Range of Core /Elective options offered by the University and those opted by the college:** In each CBCS programme three core subjects are given and two or more elective subjects offered to the students for selecting any one. The elective subjects offered to the students are from courses outside their subject.
- **Choice Based Credit System and range of subject options:** Same as above.
- **Courses offered in modular form:** No such provision
- **Credit transfer and accumulation facility :** No such provision
- **Lateral and vertical mobility within and across programmes and courses :** No such provision
- **Enrichment courses**
- **Personality Development Programme [PDP]:** PDP is organized in association with

Globearena, Hyderabad and H.M. Patel Career Development Centre(CDC),Vidyanagar [short term 24 hours per student per year]

- All the final semester science students are given 3 days training on analytical instruments in SICART (Sophisticated Instrumentation Centre for Applied Research and Testing). The charges for the training are paid by the institute.

Department	Analytical Instruments in SICART on which training is provided
IC	GC,HPLC,FTIR
PST	TGA & DSC,FTIR,SEM
SCT	GPC,Particle Size Analyzer,FTIR
EST	GCMS,FTIR,ICP
OC	FTIR ,HPLC,NMR

- **Language Laboratory:** The institute has a well established language laboratory
- **In-plant training to students:**
  - For the students of Industrial Chemistry, Surface Coating Technology, Polymer Science & Technology and instrumentation, in-plant training of 42 days is compulsory after completion of second semester and it is considered a pre requisite for admission to third semester.
  - The final semester students of Industrial Hygiene, Valuation, Information Technology and MCA do their project work in industries
  - The details of industries/organizations helping in the training of the students of our institute are attached in **Annexure 4**.

**1.2.4 Does the institution offer self-financed programmes? If ‘yes’, list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.**

All the courses are self financed programmes. The admission is as per the norms of Sardar Patel University/GTU and merit.

**1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If ‘yes’ provide details of such programme and the beneficiaries.**

The management has established tie up with Globe arena, Hyderabad and CDC, Vidyanagar for conducting Personality Development Programme, Group Discussion , Soft Skills development and and developing Interview skills.

**1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice” If ‘yes’, how does the institution take advantage of such provision for the benefit of students?**

Yes the University does provide such flexibility and students are allowed to do any other courses from IGNOU / Babasaheb Ambedkar Open University along with their regular course. Notifications of IGNOU and other open Universities are displayed on the Students’ Notice Board to convey the information to the students.

**1.3 Curriculum Enrichment**

**1.3.1 Describe the efforts made by the institution to supplement the University’s Curriculum to ensure that the academic programmes and Institution’s goals and objectives are integrated?**

The Institution follows the curriculum framed by the university. The institutions goals, as mentioned earlier, are to ensure that students become independent learners and the objectives are achieved by the involvement of faculty in curriculum enrichment.

MoUs are signed with universities and R&D institutes for project work of students.

Interaction meetings are organized with industrial experts for preparing employable youth.

The authorities and teachers of the college are doing their best to achieve the following goals:

- **To create and nourish a stimulating learning environment that ensures a globally relevant education, based on eternal human values.**

The teachers of the institute continue to be learners. More than 60% have Ph.D degree and they are active in the field of research. The classrooms and laboratories are equipped as per the government’s push for increasing ICT usage in teaching. The faculty keeps itself abreast with the changing scenario and demands. So they always try to bring relevance to the curriculum and teaching. Students are also encouraged to participate in seminars, workshops, NSS activities and sports to nurture their

professional quality, humanity, empathy towards societal causes, helpfulness, leadership and team spirit.

- **To forge and reward excellence in the curricular as well as extra-curricular sectors so as to ensure the scholars' global competitiveness.**

The college always encourages students to pursue excellence in curricular and co-curricular activities and students are given prizes, scholarships and certificates on annual day. Students excelling in the fields of sports and cultural activities are also similarly honored. All this play a vital role in making them strive for excellence and acquire global competence.

- **To tap, nurture and unleash the innovative entrepreneurial abilities of scholars and thereby ensuring lifelong socio-economic value- addition.**

The students are guided by the senior faculty members. To nurture entrepreneurial abilities, educational visits to industries and expert talks by professionals and well-established entrepreneurs (including the alumni of the respective departments) are organized.

- **To evoke and embellish the finest traits of human excellence that can dovetail into a sustainable career growth curve.**

Students are given training in personality development like group discussion, communication skills and interview skills. In plant training in the industries is a part of curriculum for students of most of the departments.

- **To affiliate, associate, liaise or otherwise synergize with any institution body, entity, ethno-cultural Diaspora and the overall global fraternity in any form whatsoever, in support of the above. To initiate, consolidate and extrapolate any objectives, function and activities in support of the above.**

The college has always focused on all round development/holistic growth of the students to prepare them for the world of tomorrow. Needless to say, academic endeavors are given top priority. At the same time a lot of weightage is given to co and extra-curricular activities that play an equally significant role in shaping the youth. Like our founding fathers, we are also of the belief that the youth are a precious human resource that needs to be nurtured. The youth are the ambassadors of change and nation building. We therefore, offer Personality Development Programmes, encourage participation in cultural fests, operating a counseling cell, and try to resolve student grievances to achieve our stated goals and objectives.

**1.3.2 What are the efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experiences of the students and cater to needs of the dynamic employment market?**

Students' feedback is taken every year. Inputs from experts and industries are also considered for the curriculum enrichment. Interactions with students during curriculum delivery and teaching process are also taken into consideration.

As mentioned earlier, institute has highly experienced faculty and 10 faculties are nominated members of Board of Studies and they regularly convey the feelings of students to the chairman BoS for updating syllabus.

Curriculum adopted by other reputed institutions is also studied for framing/ up gradation of syllabus. The inputs from employers of our students and past students are also given proper weightage.

**1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?**

- ICT is extensively used in teaching – learning process and it is enabled by Wi-Fi connectivity and each class room is equipped with projector system. Institute encourages faculty members for their own web space to enable them for wider interaction and exposure.
- Our institution is a science college and environmental education is the part of their study as an elective subject. Besides, all science students are well aware of other components like climate change, gender issues, human rights as these are a the part of the co curricular activities like Nature club, NSS etc.
- We have a full course on M.Sc. Environmental Science & technology
- The subject of environmental audit is a part of the curriculum for many of the courses.
- Expert lectures are arranged on climate change and environmental issues
- We have also established a Women Cell which looks after the anti harassment and women development activities.

**1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?**

- **Moral and ethical values**
- **Employable and life skills**
- **Better career options**
- **Community orientation**

The institute motivates students for participating in co-curricular activities like NSS, Sports, etc. Cultural programs and specific day like Guru Purnima; Teachers Day etc. are organized for development of life skills. All these activities help in students' personality development and providing community orientation.

**1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?**

- The IQAC team of the institute is comprised of teaching & non-teaching staff members, students, management representative and a representative from other institution. The student members represent the Ph.D students and the post graduate students. This composition enables collecting feedback from all stakeholders for enriching the curriculum
- IQAC feedback helps institute in planning courses to cover topics beyond curriculum.
- Inputs are also collected from Head of Departments and accordingly Principal takes necessary actions for overall development of the Institute

**1.3.6 How does the institution monitor and evaluate the quality of its enrichment Programmes?**

- The institution relies on feedback from students and teachers to monitor and evaluate the enrichment Programme like PDP which is offered in the college.
- The core subject ability developed is evaluated using examinations, presentations, quiz and project work. Results of university examination and placement statistics are also used for evaluating enrichment programmes. Feedback from stakeholders like parents, industries, subject experts is also used for evaluation

**1.4 Feedback System**

**1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?**

Being a University affiliated institute, the curriculum is designed and developed by the university

Institute regularly contributes in the design and development of University curriculum. 10 faculty members are part of the BoS in different subjects in the university and 3 are senate members. This participation helps in conveying required changes during board meetings and senate meetings conducted for the development of the curriculum. Institutes organize curriculum development workshops, seminars and involve representatives from industry, students and parents.

**1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?**

Yes, Institute has proper mechanism to obtain feed back from students and stake holders on curriculum. Faculty members discuss their issues regarding curriculum with members of BoS of the institute. The feedback from all stake holders is communicated by the members of the board of studies to the University and actions are taken to improve/alter the curriculum.

**1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?)**

- M.Sc. (Organic Chemistry) program was started in June 2010
- Lateral MCA from 2013

## CRITERION II: TEACHING-LEARNING AND EVALUATION

### 2.1 Student Enrolment and Profile

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

**a. Prospectus** – The prospectus gives a thorough insight about vision, mission and objectives of Institute. The information about the various programmes, seats available, affiliation, fees per semester, collaboration of departments with other organizations, faculties, boy's hostel, ladies hostel, hostel fees, rules and regulations of institute, scope and job opportunities of each programme etc. are included in the prospectus. Information about the history of Vallabh Vidyanagar and path traversed by Charutar Vidya Mandal (CVM) and Board of Management is also provided in the prospectus. The copy of prospectus is also available on our website ([www.istar.edu.in](http://www.istar.edu.in)).

**b. Institutional Website** - Institute has a well maintained and updated website which provides all necessary information about the Institute. Information pertaining to structure of various courses, course content, intake capacity, eligibility criteria and faculties profile etc. are accessible through the website. The admission form is available on website (<http://www.istar.edu.in>). Students are allowed to download the application form from the web site. Date of counseling is also mentioned in the website. .

**c. Advertisement in Regional/ National Newspapers**- Institute advertises in National and Regional newspapers regarding type of courses offered by the institute, seats intake, highlights of the college and minimum eligibility criteria.

**d. Other** – Institute participates in Education Fair organized by CVM at major cities of the state. Duties are allotted to faculties by the Head of the Institute according to convenience of faculty members. Special leaflets are prepared and provided to visitors. Parents and aspiring students are given detailed information regarding the scope of various programmes and specializations offered, job opportunities, rules and regulations of the institute, hostel fees etc. Students are allowed to fill up the form in advance for securing provisional admission. The institute confirms admission based on merit after declaration of result of the qualifying examination. The admission to first semester is open to all fulfilling minimum eligibility criteria as required by the University. The admission process of our institution is completely transparent and it is ensured by following:

- Informing students about the status of admission through letters, email and phone calls
- Informing about commencement of admission process and date of allotment
- Displaying the list of eligible and admitted candidates on institute's notice board
- Scheduling specific time slot for personal counseling and same is informed to students
- Adopting strict adherence to reservation policies of the state government in admission process

**The admission for MCA course is done directly by ACPC (Admission Committee for Professional Courses), Gujarat**

**2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.**

As mentioned in 2.1.1, at the time of admission, the admission committee counsels the students and allots the branch of their choice. If demand is more than the allotted number of seats, merit list is prepared based on the marks of qualifying examination. If required, interview is also conducted at the department level.

**2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.**

INST, MIHS, MV, EST, PST and SCT courses are conducted only in our institute.

Programmes	Open category		SC/ST		OBC	
	Highest %	Lowest %	Highest %	Lowest%	Highest %	Lowest%
IC	79.6	43	66	58	69	56
PST	63	37	---	---	49	37
SCT	85.00	52.00	62.00	55.00	66.00	56.00
EST	81	51	75	60	82	51
MV (Real Estate)	71	43	---	---	---	---
MV(Plant&Machinery)	78	46	---	---	---	---
OC	66	39.4	57	---	-----	-----
MIHS	79	50	66	59	64	50
IT	74.60	38.07	----	----	71.25	51.25
INST	81.6	48.2	56.57	---	62.12	54.07

The admission for MCA is done by Admission Committee for Professional Courses, Gujarat. No students were admitted in the M.Sc. courses in Oils, Fats and Waxes.

**2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?**

The heads of various departments, in consultation with the Head of the institute, review the entire process of admission. Each department of the college reviews the profile of students admitted annually. The admission committee reviews the profile of students selected for admission and if required plan is prepared for admitting students from less represented regions.

**2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion**

- **SC/ST category:** Merit is not considered for students and college provides all necessary help for availing financial support from the state government
- **OBC:** The institute arranges for financial support from the state government
- **Women:** Girls students enjoy equal opportunities
- **Differently abled:** Merit is not considered for students of this category
- **Economically weaker sections:** Such students are given financial assistance to enable them to study
- **Minority community:** Students enjoy equal opportunities
- **Any other:** The percentage of SC/ST/OBC students is gradually increasing in the institution. There is special reservation for students of J & K.

**2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase / decrease and actions initiated for improvement.**

Students are more attracted towards professional courses like engineering, medical, paramedical, diploma etc. So over all student enrollments is decreasing in the pure

science stream in Gujarat. All our science programmes are specifically designed based on industries requirements and Master of Valuation and MIHS are unique interdisciplinary programmes offered by our institute only. This diversity of programmes offered by the institute has helped in sustaining our enrolments for different courses. The intake of Information Technology has been increased from 60 to 120 due to increasing demand of IT professionals.

Programmes	No. of applications				Number admitted				Demand Ratio			
	9-10	10-11	11-12	12-13	9-10	10-11	11-12	12-13	9-10	10-11	11-12	12-13
PST	4	11	29	20	4	11	29	20	1	1	1	1
SCT	13	54	66	49	13	54	66	49	1	1	1	1
EST	46	43	75	57	46	43	70	57	1	1	1.07	1
MV (RE)	04	11	14	14	04	11	14	14	1	1	1	1
MV (P & M)	11	4	02	05	11	4	02	05	1	1	1	1
OC	----	33	68	12	----	33	68	12	-----	1	1	1
MIHS	25	20	14	15	15	15	14	15	1.66	1.33	1	1
IT	35	70	70	140	35	70	70	138	1	1	1	
INST	00	11	40	34	00	11	40	34		1	1	1
IC	47	82	76	70	47	70	70	66	1	1.17	1.08	1.06
MCA	Admission by ACPC				60	60	60	60	NA			
OFW	No students admitted since 2009											

We have two undergraduate science institutes managed by CVM and no of students graduating in different streams from these sister institutes affects our admission process. This has necessitated expanding our catchment and for this purpose faculties interact with undergraduate institutes and conducts appraising /orientation sessions for creating awareness about ISTAR and courses offered by the institute.

## **2.2 Catering to Diverse Needs of Students**

### **2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?**

The institute has made arrangement of lift for differently-abled students. If required additional books are issued to differently-abled students to restrict their visits to library.

### **2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.**

The MIHS and MV department students are from much diversified fields and their knowledge and skills are assessed during first 2-3 days and informed about scope and job opportunities to create interest and awareness about the course structure.

### **2.2.3 What are the strategies drawn and deployed by the institution to bridge the knowledge gap of the enrolled students to enable them to cope with the programme of their choice? (Bridge/Remedial/Add-on/Enrichment Courses, etc.)**

Many students have previously studied in regional language i.e. Gujarati. These students need to cope with English medium instructions. So in the beginning, teachers adopt a bilingual approach to acclimatize students to the class room environment. We also have a language laboratory which helps the newly admitted students with their verbal skill, vocabulary etc. For slow learners, we have a system of conducting remedial classes and home assignments are also provided for improving their academic performance

### **2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?**

The college has a policy of giving equal opportunities and privileges to staff and students irrespective of their gender. Other measures taken in this regard are:

- Our institute has nominated a female faculty member to the senate
- The IQAC, Anti-Ragging cell, Admission committee and NAAC steering committee of the institute are headed by female staff members
- Girls have a Ladies' Representative in the central committee
- Girls also enjoy equal opportunity of becoming the student secretary for different portfolios of the Central Committee of the college.
- The college runs a Women's Cell to address issues related to girl students.

- Institute organizes special lectures on value and moral and conducts various team activities for promoting harmony and inclusion

**2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?**

- During the regular lectures and practical sessions, advanced learners are identified by teachers by their responses in class room, performance in written tests, seminar paper presentation, participation in value added course, etc. The teachers take extra care and help them in finding additional resources and learning materials and also encourage them for participation in seminars and workshops.
- The institute has counseling cell and each student is allotted a teacher counselor. Enthusiastic students eager to learn more are facilitated with appropriate environment and are encouraged to participate in scientific paper writing
- Experts lectures are organized based on learning needs
- Not only students, but faculty members are also encouraged for active participation in various workshops, conferences and seminar.

**2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.)?**

- Teacher counselors are well aware about performance of the students. They keep evaluating the students by asking questions in class rooms, conducting unit tests, giving them assignments and discussing results of internal tests.
- Remedial classes are arranged for weaker students, if he/she is not able to attend remedial classes, then personal care is taken by teachers for solving problems individually.
- During the time of admission, category mentioned in the admission form by students helps in identifying the students of weaker section and they are counseled by office persons and teachers to get economic help from government, management and industrial houses through scholarships.
- SC/ST/OBC and minority students are given benefits of reservation policy
- Departmental data are analyzed and it is found that drop out ratio is almost nil.

## **2.3 Teaching-Learning Process**

### **2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)**

- Every year institution prepares an academic calendar in accordance with the University and it is provided to each student before commencement of classes.
- In addition to this, each department also makes its academic calendar which includes the dates of internal theory and practical examinations.
- Expert lectures, industrial visits etc. are arranged to supplement curriculum.
- College also plans for continuous evaluation of the students by conducting quiz, assignment, and internal test within prescribed schedule. Most of the departments assign project work to the students of final semester.
- University results are analysed and guidelines are prepared by IQAC team for performance improvement

### **2.3.2 How does IQAC contribute to improve the teaching –learning process?**

- The coordinator of IQAC is invited whenever Director arranges meeting of all HoDs for providing suggestions regarding the development of the institution.
- The coordinator is in contact with each department, teacher and student and therefore he/she is able to analyze and understand the needs of institution, teachers and students and accordingly prepares an action plan for the development of the institution.

### **2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?**

The focus of the college is always students centric and they are informed about the courses available to them, examination system, counseling, sports, NSS and the future prospects and scope of each programme. Special remedial classes are conducted for weak students and also for those who have failed to clear some papers. Unit wise assignments are given and unit test is conducted so that students focus very well on each unit. This encourages independent learning and group work. The library facility is available for reference work and books are issued for a specific period and if required books are renewed for further reference. Arrear exams are arranged for students who failed to

appear for regular exams due to medical reasons or due to their participation in sports/ NSS or cultural activities.

The college allows and encourages teachers by giving them duty leave to participate in seminar/ conference, work shop, Orientation Courses and Refresher Courses.

Institute also organizes training program for faculties through Globe Arena, to develop their soft skills and competence.

The college provides photo copying, scanning and printing facility in each department.

Wi-Fi network is established and it is accessed by students

Advanced learners are groomed for writing scientific papers. Course wise topics are selected for the group discussion and the student groups are identified for different topics.

This exercise provides platform for collaborative learning.

**2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?**

Students of most of the departments are assigned project work and they are guided for review of literature, project work planning and preparation of project reports. Additionally, departments like Environmental Science & Technology, Industrial Chemistry, Surface Coating Technology, & MCA are having students doing Ph.D. under guidance of faculties of ISTAR. The research work carried out by the faculties and Ph.D students is presented during internal seminars and this provides inspiration to the post graduate students for creative thinking and joining for R&D work. The details about departments, recognized guides and no of students enrolled is provided below.

Sr.No	Departments and Major research domains	Name of the research guide	Number of students
1	EST	Dr.Nirmal Kumar Dr.Hiren Soni	08
2	IC	Dr. Merlin Thomas Dr. Jigar V. Patel Dr.Nirmal K. Patel	05
3	MCA	Dr.Priyanka Sharma	06
4	SCT	Dr. Kalpesh Patel	01

**2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? E.g.: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.**

85 % of class rooms are equipped with multimedia projectors and ICT facility.

Laptops are given to each department for effective teaching

Wi-Fi connection network is established and it is accessed by faculties and students

NPTEL server is established in CVM institute (MBCICT) and content is made sharable

**2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?**

- The institute is member of Computer Society of India and faculties participates in seminars and conferences conducted by CSI and IEEE
- Faculties are encouraged to write research papers for journal published by the institute
- The institute regularly organizes lectures by expert faculty and industry professionals. Students and teachers are encouraged to participate in seminars and conferences
- Educational tours are organized by all the departments.
- Faculty members are presenting papers in international/national conference and seminars and experience gained is shared with students.
- Faculties are allowed to visit abroad for attending conferences and workshops
- Faculties are member of various professional organizations like CSI, IEEE, ...

**2.3.7 Detail (process and the number of students/benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/academic advice) provided to students?**

- Our institute arranges Personality Development Program [PDP] conducted by Career Development Centre [CDC] of CVM for all the students of the institute
- All the students of the institute are assigned counselors who takes care of their academic , personal problems and helps in placement

- Project work of final semester students is evaluated by faculty and the head of the institute and inputs are provided for the improvements of the project work

**2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?**

- College has installed multimedia projectors in 85% class rooms and each department has been provided with the laptop to facilitate teaching through ICT
- Students are also taught by NPTEL video lecture
- The students are prepared by the faculty for seminar/project presentation. This approach has been very effective and has helped students in learning research methodology, data preparation, data analysis and its logical presentation

**2.3.9 How are library resources used to augment the teaching-learning process?**

The institution has a centralized library which houses 4389 titles of books, 47 journals and 2 e-sources. The range of titles available in the library collection reflects our institution's ever growing zest for newer areas of study and research. Students are also encouraged to use library resources. Students are provided library card which enables them to get books issued from the library.

**2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.**

- By and large the institution does succeed in completing the curriculum within the planned time frame and calendar
- If there is shortage of time due to unavoidable circumstances viz. natural disaster, infrastructure up gradation ,the faculty prepares schedule for extra classes on Sundays to complete the curriculum
- Whenever a faculty is on leave , alternate arrangement is made so that teaching does not suffer

**2.3.11 How does the institute monitor and evaluate the quality of teaching learning?**

- Students are given feedback forms for communicating response regarding different aspects of teachers and their teaching practices. If any teacher is not at the

satisfactory level, the Head of the institute advises them by talking to him/her personally.

- Results of internal tests and university examinations are analysed and corrective measures are taken. It is also mandatory for institute to appraise governing board and CVM management regarding results.
- Teachers are also asked to fill self-appraisal forms and this helps in monitoring their performance
- Head of the Department and Director ensures that faculty members are expert in the assigned subjects. This has helped in effective teaching and timely completion of syllabus. Placement status is also discussed and analysed and considered one indicator of teaching and learning outcome.

## 2.4 Teacher Quality

### 2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum

We have experienced and committed faculties and 50 % are holding Ph.D. degree. The list of faculties with designation is provided below in table. Faculties recruitment is done through open advertisement and interviews are conducted by selection committee comprising of V C nominee and external experts. Satisfactory working environment is provided and retention rate is very good.

Highest qualification	Professor		Associate Prof.		Assistant Prof.		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.	4	3	1	0	13	02	23
M.Phil.							
PG					11	06	17
Temporary teachers [Adhyapak Sahayak]							
Ph.D.							
M.Phil.						1	01
PG	1				2	2	05

Part-time teachers							
Ph.D.							
M.Phil.							
PG							

**2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.**

Ours is an institute imparting post graduate programmes primarily in pure & applied sciences and in inter disciplinary domains. Maximum efforts are made by the management to appoint permanent faculty as per the requirements. In absence of eligible faculty, support is taken from various science & engineering colleges of CVM and from other reputed institutes. Faculty members are important resources and are paid six pay scale with other allowances and provided with satisfactory working environment. Efforts are made to attract experienced faculties through open advertisement and merit based selection. Guest faculties from industries and R & D organisations are also invited for bridging the knowledge gap and development of institute faculties.

**2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.**

Most of the faculties in the college are permanent and all of them have attended refresher courses and orientation courses. Teachers do attend staff development programmes like seminars, conferences, workshops conducted by various institutions.

**a. Nomination to staff development programmes:**

The summary of faculties' participation in various staff development programmes is provided below.

<b>Academic Staff Development Programmes</b>	<b>Number of faculty Nominated</b>
Refresher courses	01
HRD programmes	01
Orientation programmes	01
Staff training conducted by the university	08

<b>Academic Staff Development Programmes</b>	<b>Number of faculty Nominated</b>
Staff training conducted by other institutions	-----
Summer / winter schools, workshops, seminars etc.	155

**b. Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning**

- **Teaching learning methods/approaches-1**

(1 day training to all teaching staff by Dr.V.K.Sinha, V.P.Science College, Vidyanagar)

- **Handling new curriculum : Handled at department level by Head of the department**

- **Content/knowledge management- 1**

Training to all teaching staff by Dr.Roy, Director, ARIBAS, New Vidyanagar

- **Selection, development and use of enrichment materials**

- **Assessment-1**

(1 day training to teaching staff by Prof.J.H.Patel, Adj.Professor, MIHS)

- **Cross cutting issues**

- **Audio Visual Aids/multimedia-1**

(1 day training to all teaching staff by Prof.Samrat Khanna, department of information technology)

- **Other**

- **Teaching learning material development, selection and use**

Percentage of faculty invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies – **31 %**

<b>Sr.No</b>	<b>Name of faculty</b>	<b>Nature of invited talks/resource persons etc.</b>
		Invited talk on Android Technology and Application Development, ADIT,9 <sup>th</sup> April,2013
		Talk on Impact of FDI on higher education system during principals

1	Dr. P. M. Udani	forum meeting of CVM,ADIT, 2 <sup>nd</sup> April 2013
		Research opportunities under respond program of ISRO, NVPAS auditorium on Science day,2013
		Geospatial Technology & Applications ,Academic Staff College,S.P.University,27-29 May,2013
2	Prof.J.H.Patel	Expert Speaker National Workshop on “Advanced Treatment Technologies in Industrial pollution Control,27-29 July 2011
		Key note speaker “Engineering Preparedness for Disaster Mitigation”, 44 <sup>th</sup> Engineers’ day Celebration , Local Centre Vallabh VidyaNagar,17-09-2011
		Key note speaker, World Habitat Day, Vallabh VidyaNagar,07-10-2011
		Expert speaker in Refresher Course for Professor of Gujarat state, Academic Staff college SPU V.Vnagar,23October 2012
		Session chairperson of “Civil Engineering, National Conference on “Advances and challenges in Engineering & Sciences”, Gujarat,13-14 April 2012
		Expert member at Technical committee, New drainage pumping station for the city Vallabh Vidyanagar Municipality, 1 May, 2011
		Expert speaker in Refresher Course for Professor of Gujarat state, Academic Staff college SPU VVnagar,6 January 2013
3	Dr. A. K. Dighe	Invited lecture on “Awareness of Paint Raw Materials”,1 day seminar organized by GUJPRAMSA at Ahmedabad on 25 <sup>th</sup> September 2011
		lecture on Tech, of Paints and printing inks,NVPAS,21 Jan,2009
4	Dr. Kalpesh Patel	Invited lecture on “Awareness of Paint Raw Materials”,1 day seminar organized by GUJPRAMSA at Ahmedabad on 25 <sup>th</sup> September 2011
		Chaired technical session in National Symposium on Advances in Separation & Purification Science & Technology, Feb4-5,2011, GCET, V.V.Nagar

5	Dr. Merlin Thomas	Chaired technical session in National Symposium on green Chemistry & Technology for Sustainable Development, Feb 24-25,2012, organized by GCET,V.V.Nagar
		Adjudicated chemical Science Exhibition in International Year of chemistry-2011 celebration,V.P.Science College, Sep-29-30
		Adjudicated state level poster competition on Carbon print, 12th October, 2012, organized by GCET, V.V.Nagar.
6	Dr. Nirmal Kumar	Chaired National Seminar on Air pollution management in changing Global Environmental Scenario,M.S.U.,Baroda,7 Feb,2010
		Judged National Symposium on New Frontiers in Life Science,NVPAS,Vidyanagar,19 Dec,2009
		Judged National Symposium on Biotechnology led Paradigm shift-2010 in ARIBAS, New Vidyanagar, 24 Jan, 2010
7	Mr. Nirbhay Chaubey	Chaired Technical Activities, IEEE,Gujarat Sction, 2013
8	Dr.Hiren Soni	Invited as resource person in National Conference on “Wetland Conservation and Sustainable Development”, Organized by Gujarat Institute of Desert Ecology (GUIDE), Bhuj (Kachchh), Gujarat, India 17 <sup>th</sup> & 18 <sup>th</sup> February 2012.
9	Ms.Kunjla Mankad	Invited as Session Chair at World Congress on Engineering & Computer Science, USA, 19-21 Oct 2011
10	Dr. Priyanka Sharma	Invited Lecture on Knowledge management Model for Controlling Noise pollution, Dept. of Biological Sciences, NVPAS, 20 Sep, 2008
		Invited Lecture on E waste generated from computers and laptops: present status in India, Dept. of Biological Sciences,NVPAS,20 Sep,2008
		Lecture on Ontology in Knowledge Management, ICT,Rajkot,19-20 Nov,2008
		Lecture on Predicate logic for Knowledge Representation,ADIT,10 Dec,2008

11	Mr. Mijal Mistry	Delivered a talk on A Web service approach to provide communication among the web applications, Dept. of computer science,SPU,14 Feb,2009
12	Dr. Kamlesh Vaishnav	Invited talk on use of ICT in Learning Language and Literature”, N. S. Patel Arts College, Anand ,30 <sup>th</sup> August 2008
		Invited talk on Software Project Development”, Shree P. M. Patel College of Computer Science and Technology, Anand. (27 <sup>th</sup> January 2009)
		Invited talk on Software Engineering”, Shree P. M. Patel College of Computer Science and Technology, Anand. , 5th January 2010.
		Delivered 40 expert lectures on different topics in Computer Science, are delivered in Orientation/Refresher Programs organized by UGC Academic Staff College, Sardar Patel University, Vallabh Vidyanagar
13	Mr. H. N. Parikh	Invited Lecture on “Transducers” in subject of Physics from SANDHAN (Live Television Lecture Series from BISAG), Gandhinagar on 06-02-2012
		Invited Lecture on “AC and DC Bridges” in subject of Physics from SANDHAN (Live Television Lecture Series from BISAG), Gandhinagar on 10-09-2012

- Participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies -**100 %**
- Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies -**70 %**

**2.4.4 What policies/systems are in place to recharge teachers? (e.g.: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)**

The institute encourages the staff to participate in seminars/workshops/conferences etc. and publish research articles in journals of national and international repute. In the last five years **260** research papers have been published by the faculty ( **annexure 5**) and faculties have attended 154 workshops/seminars /conferences ( **annexure 6**). Many of

our staff members have been invited as resource persons in seminars, conference, workshop etc. arranged by external agencies.

**2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty. NA**

**2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?**

- The institution does evaluate teachers through Students Feedback mechanism. If any teacher's work is found to be unsatisfactory as per feedback, the Head of the institute personally talks to him/her and proper guidance is provided for performance improvement.
- The feedback forms are analyzed by the IQAC and suggestions are received from the heads of departments. Based on such inputs, action plans are prepared and implemented for improvement of teaching process. IQAC has one external peer group member.

## **2.5 Evaluation Process and Reforms**

**2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?**

The Institute has a well established evaluation system for regular assessment of students' performance. Teachers are provided training for e-assessment. HoD of each department conducts meeting and provides guidelines regarding paper setting, checking and marks allotments. IQAC team is continuously providing guidelines regarding improvements in evaluation process.

**1. Communicating evaluation method to students-** At the beginning of academic session, Head of the Department arranges an orientation program for fresher students and they are informed about the evaluation system in brief along with other rules and regulations of the Institute. The students are informed about evaluation system by counselors and faculty during counseling session, classroom and practical sessions. Students are counseled in detail about core and elective courses, weightages of theory

papers and practical papers. Students are informed about the exam and seminar schedule through department notice board. Internal test, seminar presentation and quiz tests marks with defined weightages are used for deciding internal marks and this is informed to the students well in advance.

**2. Communicating evaluation method to faculty-** Evaluation process involves quiz, unit test, internal and external examination. At the beginning of the academic session, examination coordinator conducts meeting with departmental faculties for the preparation of time table for internal examinations. The time table is displayed on Departmental notice board for the students and on staff room notice board for faculties. Faculties are allotted invigilation duty as per the time table. Departmental faculties are briefed about the evaluation pattern, submission of syllabi, framing of question papers, preparation and submission of marksheet etc. Syllabus of the courses for the scheduled tests is displayed prior to examination. Quiz tests are arranged at the completion of each unit. For practical examinations, evaluation pattern is conveyed by the Head of the department to faculty members and the syllabi are displayed for reference at least one week prior to the commencement of examinations.

### **2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?**

Institute follows evaluation directives decided by S P University and Gujarat Technological University. Semester system is followed. Internal and external marks, passing standard, minimum presence requirements etc. are decided by university.

- Our management has taken the initiative for introduction of the choice based credit system(CBCS) system in all colleges of CVM
- The internal evaluation pattern has been changed after introduction of CBCS. Now internal evaluation is based on unit wise assignments, internal tests, seminar presentations and projects.
- Each paper now has a compulsory multiple choice questions [MCQs]. Allotment of marks per question has been reduced
- Focus on single major question per unit has been reduced and more questions are asked per unit with lesser allocation of marks

- This mechanism has provided wide coverage of topics and also it has proved to be stress free examination for students.

**2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?**

**Univeristy Evaluation:** The BoS and P.G. Board decide the evaluation reforms and teachers are informed in writing about the guidelines suggested by the mentioned bodies regarding the patterns of question papers and evaluation method.

**Institute Evaluation** Institute organizes all examination as per schedule and requirement of the university. Examination committee is formed at institute level for smooth conduction of internal and external examination. (Include committee details)

**2.5.4 Provide details on the formative and summative evaluation approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.**

Formative assessment is done through seminars presentations, quiz, project assignments, mock interviews and GD and this has resulted in better student – teacher interaction, personality development of students, improved knowledge application and employability. This mechanism ensures greater involvement of students in studies and also inspires them for self-study. This also helps the teachers to identify the slow learners who need more help.

Summative assessment is done through unit / chapter tests, midterm tests, final university examination and viva voce. This ensures systematic and unbiased assessment of learning and learning outcome.

**2.5.5 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an nalysis of the students results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.**

- The results are analyzed by the heads of the departments and a decision is taken to start remedial classes for slow learners

- Extra assignments and self study material are given to students for extra practice so that their performance can be improved during next exams
- Students are monitored by counselor as well as by the concerned subject teacher. During the class interaction and after the quiz test, if the students are found to be weak/scholar/studious, personal care is taken by the department based on his/her ranking as weak or studious.
- Scholar students are encouraged to compete at university exams and we take pride in mentioning that here every year almost all gold medals are bagged by the institution

Course	2009 May				2010 May				2011 May				2012 May			
	total	D	F	%P	total	D	F	%P	total	D	F	%P	total	D	F	%P
<b>EST</b>	29	4	18	100	16	16	0	100	44	10	28	100	43	10	30	100
<b>IC</b>	45	3	16	98	33	8	5	100	46	13	27	100	69	24	35	100
<b>INST</b>	8	1	6	100									11	05	03	100
<b>IT</b>	35	5	24	100	35	3	2	100	34	15	17	100	66	38	25	100
<b>MIHS</b>	12	02	07	100	15	4	7	100	15	3	8	100	15	5	6	100
<b>MV</b>	03	02	01	100	02	02	0	100	11	06	04	100	08	04	02	100
<b>OC</b>													29	---	09	100
<b>PST</b>	23	5	12	100	2	2	0	100	4	4	0	100	11	09	02	100
<b>SCT</b>	32	1	18	100	22	1	1	100	12	3	7	100	53	14	17	100
<b>MCA</b>	48	04	23	100	65	14	2	98	58	08	25	96	47	23	11	91.49

**D: Distinction, F: First Class**

Nearly 100 % results are achieved during the last four years for all the programmes

**2.5.6 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.)**

- The college has a practice of showing answer sheets to the students after every exam and even in case of unit test. This method has helped students in improving the answering skills and less mistakes are made in answer sheets
- Students are informed about weightage assigned for project work, assignment, seminar presentation and attendance
- Those Students who are involved in co-curricular and extracurricular activities are given flexibility in attendance
- All departments conduct open house after the assessment of internal examination papers wherein parents are shown the answer books of their wards along with students attendance record .Parents are also informed about other departmental activities conducted for the benefit of students.

**2.5.7 Does the institution and individual teachers use assessment/evaluation as an indicator for evaluating student performance, achievement of learning objectives and planning? If ‘yes’ provide details on the process and cite a few examples.**

The institution does consider the assessment/evaluation as an indicator for students’ performance. After every assessment, papers are shown to students and best written answer sheets are kept for display. Moreover students are given feedback about their short comings and guidance is provided about how to study and prepare for exams, seminars, project work etc.

**2.5.8 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?**

As mentioned above, after evaluation the assessed answer sheets are shown to students and their grievances are addressed. Regarding results of university exams, students can apply for reevaluation within the stipulated period of time by paying required fee. In such cases the institute forwards their applications. In case there is a change in marks, the students are issued with a fresh mark sheet by the university.

**2.6 Student performance and Learning Outcomes**

**2.6.1 Does the college have clearly stated learning outcomes? If ‘yes’ give details on how the students and staff are made aware of these?**

Yes, the college does have clearly stated learning outcomes and it is targeted in preparation of high quality technical professionals with deep sense of social values. Promote attitude of innovative thinking for solving real world problems is considered equally important. These learning outcomes are achieved by the following practice.

- The syllabus prepared and approved by the board of studies clearly states the objectives and outcomes. This syllabus of each paper is circulated among all the concerned staff members.
- The scope and main goals of each course is explained and institute observes achievements of staff and students. Feed back and results are analyzed for required improvement in teaching –learning process
- Faculties are mandated to determine the intended educational outcomes of their academic programs and activities. How to assess these outcomes and how to use the results for program development is informed to all concerned. The results of outcome assessment are used to evaluate the effectiveness of academic programs and activities, and student services, and not the performance of individual faculty or staff.
- Our well placed alumni are providing financial assistance /scholarship to needy students. This is considered one of the very positive learning outcomes.
- Placement statistics is one important aspect of learning outcome and it is monitored for each program.

#### **2.6.2 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?**

The learning outcomes are achieved by the following practice

- Careful planning of curriculum delivery by experience, committed and qualified teachers using ICT facilities
- Care is taken to ensure that the syllabus is completed well in time
- The college also ensures that no class remains unengaged. If a teacher is on leave, alternate arrangements are done for conducting classes. In fact, the leave report is not accepted if it does not show an alternate arrangement
- Assignments are also given for each paper according to university exam pattern to reinforce the class room teaching

- Experts are invited from industries and R &D institutes for sharing their knowledge and experience for improving the learning outcome
- MOU's signed with various R & D and academic institutes for promoting research attitude and innovative thinking
- Personality and soft skill development courses are conducted
- Various extracurricular activities are conducted to inculcate deep social values and community belongingness.

**2.6.3 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality Jobs, entrepreneurship, innovation and research aptitude) of the courses offered?**

Most of the courses conducted by institute are of applied nature. The institute understands its academic as well as social responsibility.

- The courses run by the institute have both social and economic relevance
- Prior to admission, the institution provides counseling regarding the choice of options available to the students. They are guided regarding the future prospects of various courses/programs
- The students are motivated through personality development programs
- The College has made dedicated efforts to impart quality education and in depth practical knowledge through research and development activities
- College is committed for the development of self-reliant, enterprising and employable human resource. Most of the students are placed in esteemed organizations through campus interviews.

**2.6.4 How does the institution collect and analyze data on student learning outcomes and use it for planning and overcoming barriers of learning?**

The institution collects feedback form from students. If majority of students suggests any change then the college takes initiative to reform the syllabus.

During teaching learning process, students perception regarding relevance and complexity of subjects are understood by the teachers and same are communicated to members of BOS for necessary updation.

Inputs regarding modification of time table, enhancement in infrastructure facilities,

subject allotment, placement records, learning material, remedial coaching, revision of complex topics, lectures / workshops by industry experts etc. are collected and appropriate actions are taken.

#### **2.6.5 How does the institution monitor and ensure the achievement of learning outcomes**

The institute uses the following scheme to monitor and ensure achievement of learning outcomes.

- Monitoring results of internal tests, quiz and university examinations
- Arranging for assignments and extension of experiments
- Monitoring periodic feedback from students and faculty
- Monitoring participation and achievements of students in other institute activities
- Evaluating projects and innovative ideas presented by the students

#### **2.6.6 What are the graduates attributes specified by the college/affiliating university?**

##### **How does the college ensure the attainment of these by the students?**

The college is highly preferred by student community because of specialized courses and lab facilities. Ten teachers are members of various BOS and three are senate members. This has helped in modification and implementation of new syllabus. These efforts have ensured and resulted in improving attributes and achievement of students. The college aspires to have a transformational impact on students through comprehensive education by inculcating qualities of competence, confidence and excellence. The college has specified its attributes very clearly and these are:

- The first priority of the institute is to make its students employable
- The college endeavors that its students should become valuable and worthy global citizens
- Make the students academically sound enough, so that they are able to handle any situation of the competitive world

### CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

#### 3.1 Promotion of Research

##### 3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

Yes, the college does have recognized research center through SICART in the same building in the subjects of Industrial Chemistry, Environmental Science, Botany, Bio technology and Computer Science which are affiliated to Sardar Patel University, Vallabh Vidyanagar.

The center is facilitated with the following sophisticated instrumentation facilities which are useful to carryout latest and advanced research work.

- FT-NMR, FTIR, GPC, , UV-visible spectrophotometer
- LCMS-MS, GCMS ,GC with head space
- HPLC, HPTLC , GPC, Ion chromatography
- T EM,ESEM with EDAX, ICPA, XRD
- Thermal analysis ( DSC,TGA and DTA), Laser flash thermal diffusivity
- Mercury Porosimeter, particle size analyzer, C,H,N,S,O analyzer , TOC analyzer
- Gas permeability tester and water permeability tester
- UTM, Micro hardness tester
- Ambient air quality monitoring mobile van, Environmental laboratory

##### 3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Yes. The ISTAR is having a separate research committee looking after the scrutiny of research proposals before submitting it to the funding agency. Interviewer panel is formed for evaluation of research fellow and providing overall guidance to PI. The committee comprises of following members.

<b>Name of Research Committee Members</b>	<b>Position</b>
Dr. P.M. Udani, Director (ISTAR)	Chair Person
Dr. Nirmal Kumar, Prof. & Head (EST)	Coordinator
Dr. Ashok Dighe, Prof. & Head (SCT)	Member
Dr. Merlin Thomas, Prof. & Head (IC)	Member
Dr. Samrat Khanna, Prof. & Head (IT)	Member
Dr. Priyanka Sharma, Prof. (MCA)	Member

Few of the recommendations made by the research cell regarding research issues are as follows:

- Setting up of separate research labs for chemical science & computer science.
- Encouraging faculty to submit more research proposals to various funding agencies.
- Guiding M.Sc students to take up research activities in the frontier and emerging areas of Science and technology

### **Implementations:**

The process of setting up separate research lab is implemented in EST and initiated for chemical science and computer science departments.

### **Impact:**

This has encouraged more participation in research activities and more proposals have been submitted to various funding agencies. This has helped in smooth execution of research activities of the institute.

### **3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?**

- **Autonomy to the principal investigator:** The principal investigators/researchers are given complete autonomy regarding their project work. Institute gives freedom to select area of research and PI is given freedom to procure equipments, consumables etc.
- **Timely availability or release of resources:** Resources are made available as and when needed.
- **Adequate infrastructure and human resources:** There is enough infra-structure like research laboratories and ICT facilities. Human resources in the form of non-teaching staff are made available for project execution. Inter department co-ordination is also encouraged and allowed.
- **Time-off, reduced teaching load, special leave etc. to teachers:** Teachers are encouraged to attend conferences/seminars and abroad visits are allowed to attend conferences/workshops and special leave is granted. It must be mentioned here that teachers carry out their research activity in addition to the full work load allotted to them
- **Support in terms of technology and information needs:** All departments are fully equipped with ICT facilities to facilitate timely auditing and submission of utilization certificate to the funding authorities: Every teacher involved in research has to get their expenditure audited from a chartered accountant hired by the institution and submit the utilization certificate in time.
- **Any other:** water, laboratory facilities, manpower, electricity and library are available free of cost for the smooth conduction of the research project. Investigators sincerely utilize the funds as per the budget allotment in the sanctioned proposal.

#### **3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?**

Yes, research is a significant activity of the institute both for research scholars and faculties.

- Faculty members are encouraged to participate and present their research papers in National and International Conferences for which they are provided TA/DA and duty leave.

- Faculties of other institutes are invited as visiting fellows to interact with the faculty members and students of different departments.
- The Institute is having collaboration with various institutes at regional, national and international level.
- The institute is having a recognition certificate of 12 (B) and 2 (f) Acts issued by UGC, New Delhi.
- Besides, Faculty is encouraged to submit research projects for financial support to various national agencies.
- Almost all students of M.Sc. are given project work as a part of the university curriculum. The dissertation is assessed by the expert committee of S.P. University
- Some of the research works also have been published in journals of national and international reputation
- At present 20 scholars are registered in the Institute for Ph. D. study and some have been awarded JRF and SRF to pursue research
- Many students of institute have successfully competed for national level fellowships such as JRF, NET / SLET (UGC & CSIR), GATE, etc.
- Scholars of the Institute have received fellowships to pursue their research indicates that academic and research standards of institute have been reasonably high
- There are several scholars working in research projects that have been awarded to the different Departments of the Institute by funding and research agencies

<b>Name of Department</b>	<b>Remarks</b>
EST	Participation & Presentation of Research Papers in Seminars, Symposia, Conferences, Workshops by faculties
IC	Participation & Presentation of Research Papers in Seminars, Symposia, Conferences, Workshops by faculties, Research projects
INST	Participation & Presentation of Research Papers in Seminars, Symposia, Conferences, Research projects

IT	Participation & Presentation of Research Papers in Seminars, Symposia, Conferences, Workshops by faculties
MCA	Participation & Presentation of Research Papers in Seminars, Symposia, Conferences, Workshops by faculties. Students and faculty deputed for six weeks Canada visit by GTU
OC	Participation & Presentation of Research Papers in Seminars, Symposia, Conferences, Workshops by faculties,
MV	Participation & Presentation of Research Papers in Seminars, Symposia, Conferences
PST	Participation & Presentation of Research Papers in Seminars, Symposia, Conferences, Research projects. New methods and process are developed for preparation of polymer materials as per the requirements of industry
SCT	Participation & Presentation of Research Papers in Seminars, Research projects, Industrial Analysis. Analytical methods are developed for formulation of paints. This knowledge is also imparted to the students

**3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.**

Sr.No	Name of departments where students are undergoing Ph.D	Name of the guides	Number of students
1	EST	Dr. Nirmal Kumar Dr. Hiren Soni	08
2	IC	Dr. Merlin Thomas Dr. Jigar V. Patel Dr. Nirmal K. Patel	05
3	MCA	Dr. Priyanka Sharma	06
4	SCT	Dr. Kalpesh Patel	01
5	Dr. S.O. Khanna (IT department) and Dr. Mayank Patel (SCT department) are recognized external guides in R.K. University, Rajkot and NIT, Surat respectively.		

### Details of students currently enrolled for Ph.D

Sr. No	Name of the student	Research Topic	Name of the guide & department
1.	Ms.Yamini Verma	Environmental studies of tropical wetland ecosystems in relation to abiotic and biotic components for central Gujarat, India. (synopsis submitted)	Dr.Nirmal Kumar(EST)
2.	Mr.Kanti Patel	Studies on Biodiversity, biomass, nutrient dynamics and carbon stock of dry tropical forests of Western India(synopsis submitted)	Dr.Nirmal Kumar(EST)
3.	Ms. Dhruvi S Patel	Inventory of Greenhouse gas emission from different habitats of Gujarat.	Dr.Nirmal Kumar(EST)
4.	Ms.Jignasha G. Patel	An evaluation of Biodegradation and Bioremediation of Polycyclic Aromatic Hydrocarbons by certain species of Cyanobacteria- Bio-chemical and Molecular approach.	Dr.Nirmal Kumar(EST)
5.	Ms.Shamiyan R. Khan	An investigation of Biodegradation and Bioremediation of Petroleum Products using certain species of fungal isolates from the petroleum contaminated soils - A Biochemical and Molecular approach.	Dr.Nirmal Kumar(EST)
6.	Ms. Nidhi R Parmar	Exploring micro-biota and their molecular characterization from rumen meta-genomics of different breeds of buffalo.	Dr.Nirmal Kumar(EST)
7.	Ms. Mira Patel	Biochemical and molecular studies on the Bioremediation and Biodegradation of Polycyclic Aromatic Hydrocarbons by species of Micro Algae.	Dr.Nirmal Kumar(EST)
8.	Ms. Sheju Thomas	Assessment of aquatic biodiversity in relation to tropical lentic ecosystems of Gujarat	Dr. Hiren Soni (EST)
9.	Mr.Brijesh parikh	Synthesis and characterization of polymeric precursors from waste (Synopsis submitted)	Dr. Jigar Patel (IC)

10.	Mr.Jay Patel	Synthesis, Characterization And Application OF Modified Natural Polysaccharide.	Dr.Nirmal K. Patel (IC)
11.	Mr.Mandar Karve	Bio-conversion of Glycerol and It's application	Dr.Nirmal K. Patel(IC)
12.	Mr.D.D.Chauhan	Synthesis and characterization of bio stimulants from waste	Dr.Merlin Thomas(IC)
13.	Mr.Tirth Panchal	Synthesis and characterization of bio lubricants from waste	Dr.Jigar V.Patel
14.	Mr. Dinesh K. Vaghela	“Efficient knowledge discovery from very large and dynamic database of text image data in dynamic environment”	Dr.Priyanka Sharma(MC A)
15.	Ms Moinica Gahlawat:	“Optimizing service performance during data migration in open source clouds”	Dr.Priyanka Sharma(MC A)
16.	Ms.Falguni Patanali	“A clinical support system for diagnosis of various diseases in the field of Ophthalmology”	Dr.Priyanka Sharma(MC A)
17.	Ms Rutvi Shah	“Decision support system for automatic identification of ROI for medical images”	Dr.Priyanka Sharma(MC A)
18.	Mr Akhil Surati	“Bioinformatics Pattern Recognition”	Dr.Priyanka Sharma(MC A)
19.	Mr Popat Kalpesh	“Analysis, Design and comparative study on location updating strategies in mobile computing”	Dr.Priyanka Sharma(MC A)
20.	Mr.Viksa Mishra	UV curable PUDs	Dr.Kalpesh Patel (SCT)

**DETAILS OF ONGOING MINOR AND MAJOR PROJECTS.**

<b>Department</b>	<b>Points</b>	<b>Nos.</b>	<b>Funding agency</b>	<b>Total Amount (in Rs)</b>
EST	Major Research Projects	01	UGC, GUJCOST,	12,30,000/-
	Minor Research Project	02	MoEF, MoES, FES	3,70,000/-
OC	Minor Research Projects	One	UGC	75,000/
IC	Major Research Projects	01	NTPEL	7,00,000/-
	Minor Research Project	03	UGC	2,45,000/-
MCA	Minor Research Projects	01	UGC	77,000/-
IT	Major Research Projects	01	DST sponsored Indo-Russian project	8,52,000

**3.1.6 Give details of workshops/ training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.** Following programs are conducted

- One day training on teaching learning approaches conducted by Dr.V.K.Sinha, V.P.Science College, Vidyanagar for teaching staff of the institute
- Every year Computer department organizes web hosting course for faculty members of different departments.
- A seminar on knowledge management conducted by Dr. Roy, Director, ARIBAS, New Vidyanagar for teaching staff of the institute
- A one day training programme on Environmental Health & Safety in Testing Laboratories conducted in association with SICART

- Seminar on Preparing Research proposals for the teaching staff delivered by Dr.Nirmal Kumar,EST department

**3.1.7 Provide details of prioritised research areas and the expertise available with the institution.**

Department	Expertise
Principal	Information System, Geospatial Technology, Space Technology, Mobile computing and applications
EST	Environmental And Molecular Toxicology ,Forest Biodiversity And Nutrient Dynamics, Marine And Surface Water Pollution, Nano-Toxicology , Botany And Biotechnology
IC	Polymer Precursors, Bio Stimulants, Biopolymers, Adsorption, Synergistic Extraction
MCA	Cloud Computing, Semantic Web,Data Warehousing And Data Mining
SCT	UV Curing Coatings, Water Base Paint And Resin Formulations
PST	Polymeric Blends, Composites, Polymer Modification
OC	Co-Ordination Polymers, Copolymer Surfactants
INST	Micro Controller And Embedded System, Sensors, PLC And RF Systems &SCADA Technology.
IT	Mobile Computing & Application, IT Infrastructure, Geo Informatics

**3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?**

Institution is very enthusiastic in the various multi-disciplinary frontiers and emerging area of research. Many eminent researchers do visit the college to deliver guest lectures, talks and for conducting seminars. Faculties and students are encouraged to visit various research organizations and industries.

**3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?**

- We do not have the system of sabbatical leave for faculty. However, some teachers have been granted special leave to visit foreign countries for research collaborations and to participate in conferences and workshops
- Faculty from foreign countries (MST, Rolla, USA) and (UC, USA) regularly visit and deliver series of lectures. Field visits are arranged for minor research project work which further boost and strengthen the research spirit and zeal among the students
- These efforts encourage students to pursue research in our institution

**3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land)**

**Patents obtained**

Dept	Name of the faculty	Title	Patent No. & Date	Patent as outcome
IC	Dr.Rohit H.Dave	“Process for the Preparation of Magnesia (MgO)	US Patent No. 7,771,682, Dt. 10-08-2010	International Patent (Granted in US)
		“Process for the Preparation Magnesia (MgO)”,	US Patent No. 7,811,535, Dt. 12-10-2010	International Patent (Granted in US)

**3.2 Resource Mobilization for Research**

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

The research budget of ISTAR is Rs. 35,00,000/ per year . Departments are provided Rs 5,00,000 to purchase new instruments which are used for taking up research projects in the emerging research domain

Department	Budget Provision (in Rs.)			
	Year	2010-11	2011-12	2012-13
EST	For Major Projects from department	25,89,000/-	Nil	12,30,000/- (UGC)
	For Minor Projects from department	Nil	Nil	3,70,000/- (GUJCOST)
	Fellowships/Scholarships	Nil	Nil	34,600/- pm
OC	For Minor Projects from Departments	Nil	Nil	75,000/- (UGC)
IC	For Major Projects from department	Nil	Nil	7,00,000/- (NPTEL)
	For Minor Projects from department	Nil	Nil	2,45,000/- (UGC)
	Fellowships/Scholarships	Nil	NA	Nil
IT	For Major Projects from department	NA	8,40,000/-	Nil
MCA	For Minor Project from departments	NA	NA	70,000/-

**3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?**

**Yes**, institution does provide facilities like research laboratory, Chemicals, Glasswares, electricity, water, laptops, LCD and ICT support. Analysis facilities of SICART are also used for research work.

**3.2.3 What are the financial provisions made available to support student research projects by students?**

All types of analytical testing facilities are provided free of cost by SICART, our sister institution housed in the same building. Research work of below mentioned students is supported by UGC.

<b>Name of the student</b>	<b>Agency</b>	<b>Amount</b>
Ms. Shamiyan R Khan	UGC	Rs.16,000 per month for I and II year and 18,000 per month for III and IV years with 10% HRA and Contingency of 12,500 for yr.I and II pa and 25,000 pa for III and IV years
Ms. Sheju Thomas	UGC	Rs.16,000 per month for I and II year and 18,000 per month for III and IV years with 10% HRA and Contingency of 12,500 for yr.I and II pa and 25,000 pa for III and IV years

Students carrying out project work are provided in-house facilities in like chemicals, glassware, instruments etc. free of cost by institute.

**3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.**

Courses offered at ISTAR are interdisciplinary in nature and therefore faculties in each department have demonstrated specialization in more domains. Faculties carry out interdisciplinary research work. .

**3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?**

All the facilities are accessible to all faculty members and all students. They make use of Internet facilities, multimedia projectors, equipments and research instruments. Analytical facilities of SICART are also used as and when required.

**3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If ‘yes’ give details.**

Yes, Department of Environmental Science and Technology received two field kits of HAKE costing Rs.4,00,000/ from Missouri University of Science and Technology, MST,Rolla,MO, USA to carry out hydro and geochemical properties.SCT department received Rs.25,00,000 during the last five years for paint formulation and analysis.

**3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organisations. Provide details of ongoing and completed projects and grants received during the last four years.**

The details of ongoing research projects are given in 3.2.1.

The details of projects completed in the last four years are given below in the table.

Name of the staff	Agency	Year	Amount in Rs.
Dr.Nirmal Kumar	UGC	2008-2011	10,50,000/-
Dr.Nirmal Kumar	MoEF	2008-2011	14,89,000
Dr.Nirmal Kumar	MoES	2007-2010	7,45,000
Dr. Priyanka Sharma	UGC	2010-2012	70,000
Mr. H. N. Parikh	UGC	2009-2011	1,16,000
Dr.Sanjay Panjabi	UGC	2009-2011	2,00,000
Dr.Jigar Patel	UGC	2009-2011	70,000
Dr.Nirmal K.Patel	UGC	2009-2011	2,00,000
	NTPEL	2012	7,00,000

**3.3 Research Facilities**

**3.3.1 What are the research facilities available to the students and research scholars within the campus?**

- Analytical facilities of SICART are available free of cost for the research students
- The departmental laboratories are upgraded as and when required with latest equipments
- Departments are upgraded with internet and laptops
- Wi-Fi connectivity is provided in campus

- Library books, journals are purchased/subscribed every year as per the budget allocation

<b>Name of Department</b>	<b>Available Research Facilities</b>
EST	Dry & Wet Lab facilities including Sophisticated Instrumentation related to Air Monitoring, Wastewater Monitoring, and Solid Waste Monitoring. Meteorological and Molecular-based Research lab: 20' X 30'. Reagents preparation room : 10' X 10', General EST lab: 60'X 40' and Store room :10'X 15'
IC	Dry & Wet Lab facilities for Industrial Analysis, Organic Synthesis and Chemical Engineering laboratory
INST	Automation, PLC & Microprocessors
IT	Mobile Computing, Web Hosting, GeoInformatics
MCA	Web Technology, Cloud Computing, Statistical Analysis
OC	Dry & Wet Lab facilities including vital Instrumentation
PST	Dry & Wet Lab facilities, polymer testing facilities
SCT	Resin and Paint Manufacturing and Testing Units

**3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?**

- The institute is well equipped with research facilities and it is upgraded with funds provided from management and various funding agencies.
- The faculty members involved research work are provided conducive environment to carry out their work. Teachers are permitted to attend work shop, conferences at state level, national level and abroad

**3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities?? If 'yes', what are the instruments/ facilities created during the last four years.**

Please refer 3.2.6.

**3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?**

The management had set up SICART in collaboration with DST to facilitate various kinds of research and testing for researchers in the domain of chemical sciences. This facility is one of its kinds in the entire western region of India. Researchers are allowed to use these facilities free of cost. Major facilities like SEM [scanning electron microscope], TEM [transmission electron microscope], HPLC [High Proficiencies Liquid Chromatography], Gas Chromatography, tensile testing [for steel, rubber and plastic], ICPA, FTIR are available.

**3.3.5 Provide details on the library/ information resource centre or any other facilities available specifically for the researchers?**

Researchers are allowed to use the institute library for referencing and literature survey. The University Library (Bhaikaka Library) is also available for researchers.

Departmental libraries are housed with good number of journals and books related to the subjects referred by researchers and P.G.students.

**3.3.6 What are the collaborative researches facilities developed / created by the research institutes in the college? For ex. Laboratories, library, instruments, computers, new technology etc.**

Collaborative facilities developed are departmental libraries, labs equipped with significant instruments, computers and laptops with Wi-Fi connectivity.

### **3.4 Research Publications and Awards**

**3.4.1 Highlight the major research achievements of the staff and students in terms of**

**\* Patents obtained and filed (process and product):**

Dept	Name of the faculty	Title	Patent No. & Date	Patent as outcome
IC	Dr.Rohit H.Dave	“Process for the Preparation of Magnesia (MgO)	US Patent No. 7,771,682, Dt. 10-08-2010	International Patent (Granted in US)
		“Process for the Preparation Magnesia (MgO)”,	US Patent No. 7,811,535, Dt. 12-10-2010	International Patent (Granted in US)

**\* Original research contributing to product improvement**

Name of the faculty	Product developed	Remarks
Dr.P.M.Udani, Principal	Mobile GIS Software	Technology of both products transferred to industry and more than 100 licenses are sold for both the products
	Integrated GIS and Image Processing Software – IGIS	
	Datum Conversion of National Spatial Framework :	Task completed as a joint development between SOI / DST and SAC / DOS for building NSDI
	Detailed Design Prepared & Development Initiated for GPS-GIS Unified Software for Android Devices	Software development having potential for Technology Transfer and large scale rural applications
	Converted NRDB spatial framework to WGS-84 datum at SOI and created ground control points library	Development helped in hosting NRDB Data services

### **Research studies or surveys benefiting the community or improving the services:**

- Research projects have been carried out in the EST with emphasis on site specific suggestions and measures for conservation, preservation and protection of significant wetland forests and different lotic and eusterine environments of Gujarat .Results are submitted to GoI or GoGuj for its implementation in the final technical report preparation.
- During the project tenure, the research team visited village sites in forest areas, near lakes, rivers, estuary, marine areas and inform the local people about the deplorable environmental status and nature of the pollution and how to overcome the situation. Team explained about the mitigation measures, protection and conservation aspects of the system during extension and education program.

### **Research inputs contributing to new initiatives and social development:**

- The results of research projects contributed in the development of new mechanism for environmental concern and accordingly anthropogenic interventions have been investigated for revenue generation and their quantification.This has been beneficial to local people residing in forest and protected areas of Gujarat.

### **3.4.2 Does the Institute publish or partner in publication of research journal(s)? If ‘yes’, indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?**

The MCA department publishes its own bi-annual journal RESEARCH@ICT: International Journal of Information and Computing Technology, ISSN: 0976 – 5999

<b>Sr.No</b>	<b>Name of the staff</b>	<b>Post</b>
1	Dr.C.L.Patel	Patron
2	Dr.P.M.Udani	Patron
3	Dr.Priya Swaminarayan	Chief Editor
4	Dr.Priyanka Sharma	Associate Editor
5	Dr.Kamlesh Vaishnav	Associate Editor
6	Dr.Narayan Joshi	Associate Editor

### **Publication policy**

- Papers invited in the area of computers and communications
- peer reviewed by editorial board
- selected papers are published in the journal

#### **3.4.3 Give details of publications by the faculty and students:**

##### **\* Publication per faculty (last 5 years)**

<b>Name of Department</b>	<b>Name of Faculty</b>	<b>Number of papers</b>
Principal	Dr.P.M.Udani	06
EST	Dr. Nirmal Kumar	86
	Dr. Hiren B. Soni	26
	Dr. Pankaj Kumar	16
IC	Dr. Merlin Thomas	09
	Dr. Jigar Patel	10
	Dr. Nirmal Patel	05
MCA	Dr. Priya Swaminarayan	23
	Mr.Parag Moteria	03
	Mr. Nirbhey Choubey	10
PST	Dr.M.M.Raj	04
	Dr. Amit Thummar	01
OC	Dr. Sanjay Panjabi	04
SCT	Dr. Kalpesh Patel	05
	Dr. Mayank Patel	05
IT	Dr. S.O.Khanna	44
INST	Mr. H.N.Kapse	02

- Number of papers published by faculty and students in peer reviewed journals (national / international) : 260 papers have been published in peer reviewed journals during the last five years.( annexure 5)
- Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Monographs       None
- Chapter in Books

<b>BOOKS</b>	Dr. Nirmal Kumar (01) Dr. Hiren B. Soni (02) Dr. Pankaj Kumar (01)	04
<b>CHAPTERS IN BOOKS</b>	Dr. Nirmal Kumar (06) Dr. Hiren B. Soni (03) Dr. Pankaj Kumar (04)	13

- Books Edited
- Books with ISBN/ISSN numbers with details of publishers
- Two books
- Citation Index
- SJR
- Impact factor: Yes almost all journals have impact factor.
- h-index

#### 3.4.4 Provide details (if any) of

##### \* Research awards received by the faculty

Name of the faculty	Details of award
Dr.Nirmal Kumar	<ul style="list-style-type: none"> <li>• Conferred Dr. C.K. Shah award for the best research paper in the in the field of Plant sciences , Plant biotechnology and Agriculture Botany for the year 2007-8</li> <li>• Honored as a FELLOW of National Environmentalists Association (FNEA National Environmentalists Association at Ranchi) during National Conference on Environmental Science and Technology at Srikakolam, A.P on 18th January, 2009.</li> <li>• Recognized as a Student Inspirer in Science by Department of Science and Technology, New Delhi.(www.inspire-dst.gov.in)</li> <li>• Dr. C.K. Shah award for the best research paper in</li> </ul>

	<p>the in the field of Plant sciences , Plant biotechnology and Agriculture Botany for the year 2010-11.</p> <ul style="list-style-type: none"> <li>• Confirmed Bharat Shikshak Ratan Award for the year -2011 by Global Society for Health &amp; Education Growth, Delhi.</li> <li>• Honored as Associate Fellow by Gujarat Science Academy , Ahmadabad in the year 2011</li> </ul>
Dr.Hiren Soni	<ul style="list-style-type: none"> <li>• Awardee of ‘ARIBAS Publication Award’ for Highest number of National and International Publications during the Academic Year 2007-08</li> <li>• Awardee of ‘Best Research Paper Award (Dr. C.K. Shah Award)’ in ‘Plant Sciences’ for the Year 2008-09 by Sardar Patel University, Vallabh Vidyanagar, Gujarat (India)</li> <li>• Won 2<sup>nd</sup> Prize in Oral Presentation for Paper presented at National Seminar on “Bird Habitats &amp; Their Conservation”, Organized by Department of Life Sciences, Hemchandracharya North Gujarat University (HNGU - Patan) and Bird Conservation Society of Gujarat (BCSG), on 16<sup>th</sup> February 2013.</li> </ul>

- **Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally.**

Name of the faculty	Details of award
Dr.P.M.Udani	<p>South Asia’s Manthan Award 2009 and ISRO team award 2008 for VRC program</p> <p>ISRO team award for VRC Program ( ~ 500 programs conducted under Gujarat VRC Network during 2006-2011</p> <p>Awarded the best paper prize during Map India 2005,International conference ,New Delhi</p>
	Award of Exemplary performance as a teacher, researcher

Dr.A.K.Dighe Dr.Merlin Thomas Dr.Nirmal Kumar	.student activities accelerator and all round praiseworthy work with cash prize of Rs. 20,000/ and a Certificate for the year 2007 by Charutar Vidya Mandal, Vallabh Vidya Nagar, Gujarat.
Dr.S.O.Khanna	Received “CHAROTAR GAURAV PURSAKAR” award from CVM for the year 2013.

**\* Incentives given to faculty for receiving state, national and international recognitions for research contributions.**

Dr. A.K. Dighe, Dr. Merlin Thomas and Dr. Nirmal Kumar received cash prize of Rs. 20,000/ each

### **3.5 Consultancy**

#### **3.5.1 Give details of the systems and strategies for establishing institute-industry interface?**

As our courses are industry oriented, all the departments have regular interaction with the concerned industry. This interaction helps in student training, placement, consultancy, expert lectures and course up gradation. We also have MoU signed with the following industries for the above said purposes.

Name of the department	Industry with whom MoU is signed
IC	Lupin Ltd.
SCT	Pushkar Paints Ltd.

#### **3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?**

The institute has a well-defined policy for Consultancy, Research and Analytical Analysis. This expertise of the department/institute has helped in generating fund of Rs. 25 lakhs during the last 5 years.

70 % of the income from consultancy is given to the faculty concerned and 30 % is deposited in the endowment fund of the institute.

**3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?**

The Institute always encourages staff members to share expertise with entrepreneurs for consultancy work.

**3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.**

Department	Consultancy	Agency	Amount in Rs.
SCT	Development of Inorganic Silicate Based Paint.	Ricasil Industries, Vitahal Udyognagar	50,000/-
	Evaluation of Suitability of Guar Gum derivative in Paints	Hindustan Gum & Chemicals Ltd. Harvana	50,000/-
	Formulating Water based Ink	Aromax Corporn, A'bad	20,000/-
	Replacement of Rutile TiO <sub>2</sub> pigment in water based emulsion coatings with synthetic silicates	J.M Huber India Ltd., Mumbai	50,000/-
	Saturated polyester resin for coil coating	Jesons Industries Ltd., Sarigam	60,000/-
	Water Based Paint	Pranav Corporation,	10,000/-
	Acrylic latex for Paints.	Jesons Industries, Daman	15,000/-
PST	Dispersion and Characterization of fillers in some commercial thermoplastic polymers	Shri Ram Minerals, Bhuj	80000/-
EST	EIA, Biodiversity by Dr. Hiren Soni	Aquare Enviro, Vadodara	Service

**3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?**

70 % of the income from consultancy is given to the faculty concerned and 30 % is deposited in the endowment fund of the institute.

**3.6 Extension Activities and Institutional Social Responsibility (ISR)**

**3.6.1 How does the institution promote orientation and holistic development of students-institution-neighborhood-community network and student engagement, contributing to good citizenship, service?**

- NSS unit organizes thalassemia checking camp, blood donation camps, eye check up camp in nearby villages.
- Activities like Tree Plantation, Competitions, Cleanliness camps etc are carried out by the central committee throughout the year.
- ISTAR also organizes a career counseling program for students in nearby villages on regular basis.
- Central Committee of the institute celebrates national science day, environmental day, wildlife week by conducting different competition events such as on the spot painting, clay modeling and rangoli, cartoon and greeting card making on the above mentioned themes to bring out the talent among the students.
- During the project tenure, the EST research team comprising of investigators, researchers and students visited villages in forest areas, near lakes, rivers, estuary, and marine areas and create awareness among local people about the status and nature of the pollution and how to overcome the degrading environmental situation. Team explained about the mitigation measures, protection and conservation aspects of the environment system during extension and education programs.

**3.6.2 What is the Institutional mechanism to track students' involvement in various social movements / activities which promote citizenship roles?**

Every year students taking admission to the first semester are encouraged to join NSS. This helps in promoting good values, discipline and citizenship roles among the students.

Students enrolled are encouraged to participate in various activities conducted under the auspices of NSS. The students are groomed through personality development program and given responsibilities to demonstrate their life skills.

**3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?**

The institution values feedback from all stakeholders. Therefore the management holds meetings with the principal and faculties. The college organizes Parent-Teacher open house meeting. Students are asked to fill feedback forms and express their opinion about teaching, and infrastructure facilities.

**3.6.4 How does the institution plan and organize its extension and outreach programmes? Provide the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.**

Details	Expenditure in Rs/-
<ul style="list-style-type: none"> <li>• Thalassemia checking</li> <li>• AIDS awareness lecture</li> <li>• Free eye check up in lambhvel village</li> <li>• Spiritual lecture in old age home</li> <li>• Food distribution in old age home</li> <li>• Blood donation camp</li> <li>• Training on fire extinguisher</li> </ul>	52,000

The above mentioned outreach programmes generates fresh perspectives in students mind about life and facilities that they take for granted. Students also learn about handling responsibility and the importance of team work, and other social skills needed to work in rural settings.

**3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/International agencies?**

The NSS cell of the college conducts an orientation programme for students of first semester at the beginning of the academic year and gives detailed information about NSS. Students are encouraged to attend camps and additional classes are arranged for compensating lectures missed due to the camps. If internal examination schedule and camp schedule is coinciding, arrear tests are arranged. Institute gives special certificate for participation in extension activities.

**3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?**

The institute has provision to provide scholarships to students of under-privileged and vulnerable sections of society.

**3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.**

As mentioned earlier, the institution organizes various types of activities for students every year. These activities help in developing a sense of leadership, team spirit and organizing skills. Likewise, such camps give the students hands on experience of real life situations. By exposure to rural areas, they learn to empathize with the rural folk, understand their life style and appreciate the challenges faced by them.

**3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?**

In whichever village the camp is organized, the community is consulted and many of the people are encouraged to involve themselves in activities like Health Check up, AIDS awareness, Education awareness etc. To encourage community participation in outreach activities, faculty members as well as students who are familiar with the area first get in

touch with “Surpanch” and Panchayat of the village and build up a trust quotient. This helps in confidence building and encourages village folks to freely participate in the activities.

**3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.**

The institute has signed MoU with gram panchayat of Amod Village, Taluka: Petlad, District: Anand for its extension activities.

**3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.**

Nil

**3.7 Collaboration**

**3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.**

The institution gives a free hand to the researchers for collaborative work.

Name of Department	Collaborating Institutes / Organizations
EST	<ul style="list-style-type: none"> <li>• Missouri University of Science &amp; Technology, Rolla, USA – for short-term course &amp; project work</li> <li>• National Research Center, Tsukuba, Japan – for R &amp; D</li> <li>• GUIDE, Bhuj – for R &amp; D</li> </ul>
IC	SVNIT, Surat- for project work & research
SCT	Pusker Paint Industries, Lucknow for Research

Our sister institution SICART is also one of the collaborative Research Institutes.

**On collaborative research, staff exchange, sharing facilities:**

**Dr.Nirmal Kumar**

- Visited and attended work shop on Phyto-remediation in Department of Earth and Environmental Sciences, University of Texas at San Antonio, Texas, USA, 23-25 August, 2006.
- Visited university of Cincinnati, Cincinnati, Ohio State, USA from 3<sup>rd</sup> to 5<sup>th</sup> October, 2007 and attended meeting on Nano-Pollution and Toxicology and developed joint venture dealing with the department of environmental science and engineering for students and teacher exchange program.
- Visited North Carolina A& T State University, at Greensboro and Raleigh, USA for departmental collaborations and conducted wetland field visits from 8-10<sup>th</sup> October, 2007.
- Visited and delivered a lecture in Environmental Research Center, Missouri University of Science and Technology, Rolla, MO, USA from 23<sup>rd</sup> October to 06<sup>th</sup> November,2011
- Visited and interacted with Dr. Prasada Rao, Sr. Scientist, observed state- of -art facilities on toxicology at US Environmental Protection Agency USEPA, Raleigh-Durham, NC, USA from 7<sup>th</sup> and 8<sup>th</sup> Nov.2011.
- Visited and interacted with Prof.Susan Jannigs, Director, Department of Sustainable Development, Massachusetts University, Dartmouth, and Boston, USA on 9<sup>th</sup> Nov.2011.

**Dr. Samrat Khanna** visited Russia as a part of Indo-Russian joint project sponsored by DST. He visited Dr. Ivan Mathew, Computer Centre, Moscow and discussed about mobile computing and web technology

**Dr. Chintan Patel**, SCT Department has completed his Post-Doctoral research at Eastern Michigan University, U.S.A from 2011-2012 (One Year).

**3.7.2 Provide details on the MoUs / arrangements (if any) with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.**

The following organizations are involved in providing hands on training on different instruments and conducts short term certificate course and help students in their project work and dissertation preparation. These initiatives have contributed in development of institute and placement of students.

- SICART was set up in the campus by the management with support from DST to facilitate research and testing for researchers and commercial units. This is the most advanced laboratory in entire western region. This laboratory allows researchers and students of CVM institutes to use its facility free of cost.
- The EST department has signed MoU with Missouri University of Science & Technology, Rolla, USA for Short-term course & Project work
- The EST department has an understanding of R & D work, with National Research Center, Tsukuba, Japan ,
- The EST department has signed MoU with GUIDE, Bhuj for faculty exchange, students project work and R & D
- The IC department has signed MoU with Lupin Ltd for training, placement & scholarship
- The IC department has signed MoU with SVNIT, Surat for project work and research of students
- The SCT department has signed MoU with Pushkar paints for Industrial Research

**3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment / creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services etc.**

Industry – Institute interaction is established with many industries and such joint initiatives have contributed in the overall enrichment of academic programs. Details are given in **annexure 10**.

**3.7.4 Highlighting the names of eminent scientists/participants, who contributed to the events, provides details of national and international conferences organized by the college during the last four years.**

Many state level conferences/workshops were organized by different departments of the institute. However, no national and international conferences were organized by the institute in the last four years. Recently **National seminar on Best Practices in Pharmaceutical Industries** was conducted by the Industrial Chemistry department.

**3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated**

**a) Curriculum development/enrichment**

Institute is affiliated to SPU and GTU and has to follow the syllabus framed by their Board of Studies. However, the representatives from industry are consulted during the framing of curriculum and invited during the final discussion on curriculum designing.

**b) Internship/ On-the-job training**

The departments of IC, INST, PST and SCT are having 42 days of internship in Industries as a part of the curriculum. This is a pre requisite for their admission to third semester of the course. The details of industries that have helped in internship program is given in **annexure 4**.

**c) Summer placement**

Placement activities of different departments is presented in **Annexure 10**

**d) Faculty exchange and professional development**

- Team from Missouri University of Science & Technology, Rolla, USA recently conducted short-term course on Environmental Sustainable development and Health during 20<sup>th</sup> to 30<sup>th</sup> December, 2012 and provided certificates to all students on behalf of MST, Rolla, USA & Project work.
- 2 Staff members and six ME students from Missouri University of Science & Technology, Rolla, USA conducted project work on drinking water quality, impact of pesticides and fertilizers on Agriculture and health of local people during 1<sup>st</sup> to 12<sup>th</sup> January 2013 and provided certificates to every student participant on behalf of MST, Rolla, USA.

**f) Consultancy**

The SCT department has signed MoU with Pushkar Paints for Industrial Consultancy.

**g) Extension**

During MST Rolla,USA project, local people were involved with three research teams and compiled information on drinking water resources, use of pesticides and IQ among students of Primary schools. Local people provided breakfast and lunch for all the three team members. All three team members collected information on their topic of interest from local people, students, teachers, doctors etc.

**h) Publication None**

**i) Student Placement**

Every department is putting their best efforts for the placement of students

**j) Training programs**

Training is compulsory part of the curriculum of all the departments of the institute and one - three months training and project work are arranged for all the students to make them acquainted with real process and systems studied in theory. At the end of the project work, students prepare dissertation report which is reviewed and assessed by the experts. The training and project work has weightage of certain marks in S.P.University examination.

**k) Introduction of new courses: Nil**

**l) Student exchange:** Six students from MST, Rolla, MO, USA visited ISTAR and involved in three research projects in different areas of Environmental Science, Health and Agriculture during 1<sup>st</sup> to 12<sup>th</sup> January, 2013 along with eight students of EST, ISTAR and visited various villages and primary schools to get the ground truth and primary data with cellular mobiles and GPS systems.

**m) Twinning programs:**

- Compulsory instrumental on-hand training program for forth semester students of EST,IC,SCT and PST is conducted in SICART
- PDP classes are arranged for all students of the institute

**3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.**

EST department has initiated the process to establish MoU with Gujarat Ecological

Education Research Institute, Gandhinagar, Gujarat Ecological Society, Baroda for research and dissertation for M.Sc students of EST.

**Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.**

Chemical Sciences departments of Institute have state-of art of facilities to carry out research in frontier areas pertaing to Industrial Chemistry, Polymer Technology, and Surface Coating Tecgnology. Facilities of SICART located in the the same building is also used



## **CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES**

### **4.1 Physical facilities**

#### **4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?**

##### **Institute Policy**

- The college always gives priority to students' facilities for effective teaching learning process
- Each year budget provision is made for infrastructure improvement and enhancement
- The college has established full-fledged ICT facility in majority of class rooms. Laboratories, library and Internet facility are accorded top priority to facilitate effective teaching and learning
- Fully furnished conference and seminar hall facilities are under establishment for effective teaching-learning
- Each class room is having adequate seating capacity and ventilated properly
- Institute is located in the main bazar and therefore canteen service is limited

#### **4.1.2 Detail the facilities available for**

**a) Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.**

- The institute is having well established laboratories for each department
- Language lab, web service and network service centers are fully functional
- MIHS department is provided with equipments for measuring various safety related parameters by University of Cincinnati, Ohio, U.S.A. and 3M industries, Ahmedabad, India.
- EST department has established additional research facilities using funding from UGC/GUJCOST
- IT department has established facilities for Mobile Computing Technology & Applications development

- SCT department is well equipped for paint consultation work
  - SICART facilities are also extensively used
- b) **Extra-curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, public speaking, communication skills development, yoga, health and hygiene etc.**

**Facilities for sports:**

**Indoor games:** We have sufficient facilities for all students with separate hall for the following games

- Table Tennis
- Carom
- Chess

**Outdoor games:** We provide sports goods and wears for following games:

- Cricket
- Volleyball
- Football
- Badminton
- ShastriMaidan’ is the common ground for the CharutarVidyaMandal institutions and it is used by our students for Cricket, Volleyball and Football
- H. M. Patel Badminton hall is used for badminton
- Necessary goods and sportswear are procured every year for the above mentioned games.
- Every year the institute organize inter-class competitions and also participate in the inter collegiate tournaments organised by Sardar Patel University. Many of our students are also participating in the Inter University tournaments.

**Facilities for cultural activities:**

- Cultural programme of ISTAR is organised every year during the annual day celebrations in the premises of ISTAR
- A GALAXY magazine is published every year containing complete information about the extracurricular activities of institute

- Other co-curricular activities like elocution competition, poster making competition, clay modeling competition etc. are organized in the common hall of ISTAR. We have necessary facilities for these activities e.g., podium, microphone, computer with LCD projector and screen etc.

**4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/ campus and indicate the existing physical infrastructure and the future planned expansions if any).**

The master plans of the main campus, Industrial Chemistry building and PST building are attached in **annexure 7a to 7i**.

Future expansions are planned for research laboratory in computer science ( 5th floor of main building) and research laboratory for chemical sciences( one extra floor to be constructed above the existing PST building)

Amount spent	2009-10	2010-11	2011-12	2012-13
Furniture	171680	1892094	122059	324231
Equipments	513503	5523465	663075	1779207
Library books	311596	668917	379831	221349
Computers	1866450	2537889	1801434	4021096
Vehicle	0	847062	0	0

- Laboratories have been up graded in IC, SCT, PST and EST departments in 2012.
- A new lab for IT department is created in 2012.
- Research laboratories have been up graded.
- Class rooms are equipped with multimedia projectors
- Campus has been beautified
- Seating arrangement for faculties have been upgraded
- Departments are upgraded with internet and laptops.
- Wi-Fi connectivity is provided in campus
- Library books, periodicals and journals are purchased/subscribed every year as per the budget allocation

#### **4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?**

- Two lifts are provided for physically challenged students and persons.
- Provisions in wash room, class room and labs have been made for easy movement of physically disabled.

#### **4.1.5 Give details on the residential facility and various provisions available within them:**

- **Hostel Facility** – Accommodation available

The college has dedicated and separate hostels both for boys and girls at walking distance from the institute.

- Girnar hostel for boys provided accommodation for 202 Boys (2012-13).
- Square hostel for girls provided accommodation for 37 Girls (2012-13).

- **Recreational facilities, gymnasium, yoga center, etc.**

- The institute has a playground with basketball, volleyball, khokho, cricket, and football facility. It also has a gymnasium
- Students are allowed to use H.M.Patel badminton hall of CVM for tennis and badminton.
- Table tennis facility is provided within the college
  1. Computer facility including access to internet is provided in hostel
  2. Wi-Fi facility is provided in girls hostels.

- **Facilities for medical emergencies**

- The college does have first aid facility in all the laboratories
- The Health Centre run by the university is located in close vicinity of the college
- Ambulance facility is provided by the CVM,
- The acclaimed 108 Ambulance facilities is just a call away

- **Library facility in the hostels**

Magazines and news paper are provided in the hostels.

- **Internet and Wi-Fi facility**

The students have been provided with broadband internet facilities and slots are allotted to each student for internet access.

Wi-Fi facility has been installed in the institute and in ladies hostel.

- **Recreational facility-common room with audio-visual equipments**

Ladies hostels are well equipped with audio visual facility.

- **Available residential facility for the staff and occupancy.**

- Constant supply of safe drinking water, water filters and cooling water facilities are installed in the institute
- There is provision for residential facility for both teaching and non-teaching staff in Vallabh Vidyanagar campus. At present 3 teaching staff including Principal and 5 non-teaching staff are provided accommodation by CVM. The principal is provided a bungalow by CVM.

- **Security :** There is round the clock security for the college

#### **4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?**

- A Health Centre run by the university provides health services for staff and students of the college at extremely nominal rates. This health center has arranged visiting specialist doctors for Ophthalmology, Gynecology and General Medicine
- CVM also has established an Ayurvedic College and hospital at new V.V.Nagar and free health services are provided for college students and staff of CVM institutes
- A full-fledged hospital with all the advanced facilities is located at a distance of four kilometers. The hospital runs a scheme for free treatment up to Rs 5000. The CVM bears fifty percent of service fees which is Rs. 99 per student of the college
- Panchayat hospital is also very close to the institute. Our students and faculties are using hospital services at very nominal rates

#### **4.1.7 Give details of the Common Facilities available on the campus –spaces for special units like IQAC, Grievance Redressal unit, Women’s Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.**

Separate rooms are there for the following in the institute.

Sr.No	Name of the room	Room No
1.	IQAC office	307
2.	Alumni office	408
3.	Placement Cell	317
4.	NSS	401- IC building
5.	Anti-ragging	302
6.	Women Cell	302
7.	Canteen	302-IC building
8.	Girls common rooms	320,303- IC building
9.	Conference rooms	303,402- IC building
10.	Seminar Hall	421

#### 4.2 Library as a Learning Resource

Library has a reading room with a seating capacity of 50 students. Photocopying facility, Internet and DELNET access are available.

##### 4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

The library does have an advisory committee comprising of senior faculty members from different departments. This committee suggests the improvement in the facilities and purchase of books.

Members of Library Committee	
1	Dr P M Udani (Principal)
2	Dr.Nirmal Kumar (HoD, EST)
3	Dr.S.O.Khanna (HoD, IT)
4	Dr Jigar Patel ( Asst.Professor, IC)
5	Mr.Bhavdipsinh Jadeja, Student representative
6	Mr.Jatin Patel ( Librarian)

**4.2.2 Provide details of the following:**

\* **Total area of the library** (in Sq. Mts.) 304.00sqmts

Reading room (Included)

\* **Total seating capacity:** 50

Working hours (on working days, on holidays, before examination days, during examination days, during vacation)

Monday- Friday	10.30 am to 5.30 pm
Saturday	10.30 am to 2.00 pm

Library services are kept open and accessible on examination time irrespective of time schedule.

\* **Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**

The library provides individual reading carrels in the reading room. Five computer terminals with internet and DELNET access have been provided. All students and staff have been provided with common passwords for DELNET.

Library space is divided into

- Stack section
- e-resources & internet section
- Reading room
- Reference section

**4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.**

Every year library collects information regarding budget allotted to each department. The department heads, in consultation with his/ her colleagues, decide on the books to be purchased and the same list is forwarded to the library for the purchase of books. The college library has subscribed DELNET and IEEE e-Journals.

Library	2008-2009		2009-2010		2010-2011		2011-2012	
	Number	Total cost	Number	Total cost	Number	Total cost	Number	Total cost
Text books	999	310763	895	277697	1366	536277	834	360002
Reference Books	104	75044	11	33649	14	29134	27	19829
Journals/Periodicals	38	184391	30	232177	50	392445	39	166092
Magazine/DELNET	05	2028	13	4510	13	4610	13	4810
e-resources IEEE ASPP ONLINE							145 IEEE ejournal + backfile	266430
Any other(specify)	07	8222	07	8222	07	8222	07	8222

#### 4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

The UGC INFLIBNET SOUL 2.0 Software is used for catalogue preparation, circulation, serial control, OPAC, Administration, etc

- **Electronic Resource Management package for e-journals**

College library has the membership of DELNET and IEEE ASPP e-journals access. Institute do not have ERM package.

- **Federated searching tools to search articles in multiple databases**

There are plans to install campus federated searching tool in the CVM campus. But presently DELNET and IEEE ASPP e-journals are the federate tool available and used for e-resources.

- **Library Website**

The library web content is prepared and the details of the library can be viewed on the college web site ([www.istar.edu.in](http://www.istar.edu.in)).

- **In-house/remote access to e-publications**

E publications are accessed through Internet and DELNET and IEEE ASPP e- journals.

- **Library automation**

The library automation is initiated. The UGC INFLIBNET SOUL 2.0 software is used for automation.

- **Total number of computers for public access**

Five computers. There is planning to install five more computers.

- **Total numbers of printers for public access**

One printer with photocopier has been provided.

- **Internet band width/ speed 2 mbps**

- **Institutional Repository**

The college has master server in computer laboratory.

- **Content management system for e-learning : Nil**

- **Participation in Resource sharing networks/consortia (like Inflibnet)**

College library has the membership of DELNET and IEEE ASPP e-journals which facilitates access to e-journals. The library provides e-recourses to all the students and faculty members. Under this programme they are able to access e-journal and e-books. NPTEL and contents are also accessible through internet and SATCOM connectivity respectively.

#### **4.2.5 Provide details on the following items:**

- Average number of walk-ins [including Reading room] – 100/ day
- Average number of books issued/returned – 85
- Ratio of library books to students enrolled – 11:1
- Average number of books added during last three years – 3146
- Average number of users inquiry (title, author) – 25
- Average number of login to e-resources – 15
- Average number of e-resources downloaded/printed – 10

- Number of information literacy trainings organized – Nil
- Details of “weeding out” of books and other materials

SR.NO	DEPARTMENT	NO OF BOOKS WEEDED OUT	PRICE
1	CDC	2	270.00
2	EST	7	2485.00
3	IC	22	4547.00
4	INST	11	1745.00
5	IT	13	3768.00
6	MCA	52	16969.00
7	OFW	1	150.00
8	SCT	3	880.00
	TOTAL	111	30814.00

#### 4.2.6 Give details of the specialized services provided by the library

- **Manuscripts :** No
- **Reference :** Yes
- **Reprography:** Library provides facility for scanning, printing and photocopying.
- **ILLS (Inter Library Loan Service)**

Students and staff of the college have access to all the libraries of CVM and the Bhaikaka (University) Library through SOUL software

- **Information deployment and notification (Information Deployment and Notification)**

All student related articles, advertisement, employment news are displayed prominently on the library notice board.

- **Download:**

Access and download of e-Journals through DELNET is allowed.

- **Printing :** Yes
- **Reading list/ Bibliography compilation :** Yes
- **In-house/remote access to e-resources :** Yes

DELNET and IEEE ASPP e-journals can be accessed in institute and from remote place by using specialized user id.

- **User Orientation and awareness**

The Library conducts orientation program for the newly enrolled students. The students are informed about library services such as Open access system, Reference section, e-resources, and all other library resources

- **Assistance in searching Databases**

INFLIBNET and SOUL, Software provides services for finding information like Title, Author, Subject, Class number, ISBN, Publisher, Accession number, etc.

**4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.**

- The library staff consists of one full time permanent Assistant Librarian and two supporting staff. The library staff is supportive to the students and staff of the college
- The Assistant Librarian places the order for reference books, text books and periodicals as requested by the faculty. Purchase of books is sanctioned by the library committee in accordance with library budget allotted to each department.
- Library staff collects data from staff and students for the issue of identity cards
- The Assistant Librarian also helps the faculty and students in locating the books required
- The peons also help in managing the reading room and photocopying of material
- Students mark sheets are distributed by the library staff

**4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.**

At present there is no such facility but such a facility is under consideration.

**4.2.9 Does the library get the feedback from its users? If yes, how is it analysed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analysed and used for further improvement of the library services?)**

Yes, the library committee goes through the feedback register and makes suggestions to the librarian to make changes which are practicable. The feedback is collected and analyzed for purchasing of new books, journals and volumes.

### 4.3 IT Infrastructure

#### 4.3.1. Give details on the computing facility available (hardware and software) at the institution.

- Number of computers with Configuration (provide actual number with exact configuration of each available system) = **275**

174 desktop: 88 core2Duo, 35 Pentium D, 46 i3 processor, 3 AMD, 2 P-IV

95 laptop: 77 Laptop i5, 7 Dual core, 7 Core2duo, 4 P-IV

6 SERVERS (IBM), (3Rack+3 Towers)

LCD Projector =14 Nos.

- Computer-student ratio: 2:15
- Stand alone facility: Yes
- LAN facility: Yes
- Licensed software : Yes[ All S/W license products)
- Number of nodes/ computers with Internet facility: 74
- Any other:
  - Internet connectivity to all CVM colleges is provided and monitored by our Institute
  - Web site of all the CVM colleges are also maintained by ISTAR
  - A separate network operating center (NOC) is established for the above mentioned tasks. NOC is maintained by trained staff.

#### 4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

- Computer internet facility is available to all students and staff on the campus
- Each department has been provided with a laptop to enable the faculty to use it for off campus academic and research work
- Principal is provided internet facility at his residence

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

- Wi- Fi facility has been installed in the college premises for enabling easy access to Internet
- The idea of connecting all departmental computers of the college is also under serious consideration
- It is planned to share H/W, S/W and data for demonstrating cloud computing technology

**4.3.4 Provide details on the provision made in the annual budget for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)**

	2009-10	2010-11	2011-12	2012-13
Budgeted amount for Computers and accessories	3484990	2223160	1727000	1968000

**4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?**

- The college has installed multimedia projectors in more than 85% class rooms
- Each department has been provided with laptops and USB drives to facilitate computer aided teaching
- The college has installed Wi-Fi facility for students and staff recently
- Broadband Internet facility is also available to each student as the per prepared time slots
- E-content and PPT presentation prepared by teachers are made available to the students

**4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching - learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the**

**centre of teaching-learning process and render the role of a facilitator for the teacher.**

**Independent learning:** We believe that a lot of learning takes place when student follows up the class room teaching with some self-study. Therefore, they are given topics based on what they have been taught in the class to write assignments (unit wise), give seminars and carry out projects (topic wise). These activities have helped the students in motivating them as independent learners

**ICT enabled classrooms:** All our class rooms are equipped with multi-media projectors that enable teachers to teach with the help of power point presentations, graphics, animations etc. The content is prepared by the teachers or downloaded from the Internet

**Learning spaces:** Besides the well equipped classrooms and laboratories, we have two designated rooms for students; 1) Reading room in the library and 2) Internet lab where they access the web resources to do their projects etc. Beautiful, green and well maintained campus also provides a lot of informal learning spaces to students

**On-line teaching - learning resources:** The government is very keen to increase the use of e-learning. So missions like NME-ICT, NPTEL, CEC and BISAG have taken shape. Under this initiatives government is giving free Internet connectivity, free set top box and free access to mentioned resources. To be able to use these resources, within our tightly compartmentalized schedule, we do manage to do on line teaching about relevant topics. BISAG connectivity is established in the institute to receive SATCOM programmes

**4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?** Yes, the KCG (Knowledge Consortium Gujarat), Govt. of Gujarat, has provided 5Mbps Internet connectivity in DELL .In these lab 25 computers are connected through LAN. The Gujarat Govt. has also given 10 Broadband connections to the college which have been distributed to each dept. These resources are used to access NME-ICT, NPT, CEC, INFLIBNET networks.

#### 4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

		2009-10	2010-11	2011-12	2012-13
a.	Building	37,687	1,24,666	39,671	51,600
b.	Furniture	13,791	17,488	0	39,540
c.	Equipment	23,544	3,965	14,292	22,978
d.	Computers	67,003	1,37,263	69,834	1,49,422
e.	Vehicles	8,155	85,750	17,311	24,643
f.	<b>Total:</b>	<b>1,50,180</b>	<b>3,69,132</b>	<b>1,41,108</b>	<b>2,88,183</b>

\* All figures are in Rupees.

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

Every year a fixed amount is allotted to each dept. for maintenance of equipments. The details about the recurring expenditure for different departments is provided below.

S No	Department	Recurring (in Rs.)	Non-recurring (in Rs.)
1	MIHS	20,667	0
2	EST	3,14,835	1155147
3	IC	6,11,916	97702
4	IT	1,19,804	3953086
5	INST	460	78435
6	OC	3,47,103	168425
7	PST	3,00,297	279498
8	SCT	5,46,048	0
9	MV	865	0
10	MCA	24,718	68010
	Total	22,86,713	6021652

\* Non-recurring expenses are made when it is required by departments.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?

Every semester just before the University Exams, technicians are called to calibrate all the equipment /instruments. The expense is paid from maintenance grant/budget.

**4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?**

- All the sensitive equipment is housed properly in their respective laboratories
- Each laboratory is fitted with MCBs and fire extinguishers
- Voltage stabilizers are also used where ever required
- These labs are well maintained and equipped with water connections through overhead tanks
- Water filter and cooling system are installed at 4 locations in the institute
- Generator facility is available for maintaining power supply during power failure

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

Facilities are established for R & D in domain of Mobile Technology, Chemical Sciences, Environment Technolohy, Geoinformatics and Data Mining.

## CRITERION V: STUDENT SUPPORT AND PROGRESSION

### 5.1 Student Mentoring and Support

#### 5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, the institution does publish prospectus and it is given to students with admission form. It is updated every year and it is available on the website of the institute. The prospectus provides information about the CVM management, V.V.Nagar campus, institute, various courses, course content, fee structure, scope for each course, hostel facility, details of departments, faculty profile of each department including visiting faculty, placement details, governing body etc.

The performance of departments and faculties is evaluated regularly and the performance of institute is evaluated by governing body. Also annual report is prepared and presented on annual day celebration. Institute is also publishing Galaxy magazine every year providing details about sports activities, cultural activities and achievements of students.

#### 5.1.2 Specify the type, number and amount of institutional scholarships / free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?

The Management and the industrial houses help the institute in providing scholarship/free ship to students based on their economical condition and academic brilliance.

Management Scholarships

Sr.No	Year	No. and percentage of students who received scholarship	Total amount in Rs.
1.	2009-10	13 (5.5%)	55000
2.	2010-11	02 (0.52%)	10,000
3.	2011-12	01 ( 0.1% )	Tuition fee of all 4 semesters waived
		01 ( 0.1 % )	Tuition fee of 2 semesters waived
4.	2012-13	03 (0.64%)	10,600

### Scholarships by Industries/organizations

Sr. No.	Academic Year	UmeshPathak Scholarship/Asian Paints Scholarship/Lupin Scholarship/MISA Scholarship Amount in Rs.
1.	2009-10	00
2.	2010-11	104354
3.	2011-12	614414
4.	2012-13	480138

#### 5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

The financial assistance for SC, ST and OBC students is given by the government of Gujarat. Academic year wise distribution of scholarship including the number of students and amount is given below in the table.

Sr. No.	Year	Number of students				Total amount(Rs)
		Social	OBC/SEBC	SC	ST	
1.	2009-10	10	18	04	04	6,66,740
2.	2010-11	11	35	07	09	13,24,366
3.	2011-12	00	31	06	13	15,46,830
4.	2012-13	12	29	03	06	9,97,515

#### 5.1.4 What are the specific support services/facilities available for students from SC/ST, OBC and economically weaker sections

- Financial assistance from government
- Free remedial classes for slow learners
- Priority in admission

#### Students with physical disabilities

- Financial assistance from government
- Free remedial classes for slow learners
- Reservation in Admission as per govt. policies

**Overseas students**

- The parents of overseas students are regularly updated about the performance of their wards through e-mail by the respective head of the department .Special efforts are made to take care of the needs of overseas students.

**Students to participate in various competitions/National and International:**

- Students are always encouraged to participate in various competitions like sports, cultural activity etc. Every year students participate and win prizes in competitions like youth festival, sports events organized by ISTAR and other institutes. The financial burden of all above activities is borne by the institution. Students are also encouraged to participate in paper presentation competition.Institute organizes talent evening and publishes Galaxy magazine providing details about student centric activities.

**Medical assistance to students: health Centre, health insurance etc.:**

- The university Health Center is just 10 minutes' walk away from our college and basic health services are provided by taking 50 paisa as case paper charge.

**Organizing coaching classes for competitive exams**

- PDP (Personality Development Programme) is conducted round the year in association with Career Development Center (CDC), Vallabh Vidyanagarand Globearena Technologies Ltd. Hyderabad. Total 24 hours sessions are organized every year and the topics covered are team work, corporate etiquette, aptitude, communication skills, letter writing, resume preparation and group discussion. Pre mock interview sessions and mock interview sessions are organized for the third semester students of all branches. Professionals, HR experts from industry and experts from institute are invited to provide guidance.

**Skill development (spoken English, computer literacy, etc.)**

- The institute has a language laboratory where the students are given assistance in spoken English, English vocabulary enrichment etc.

**Support for “slow learners”**

- Remedial classes are organized for slow learners as per the need.

**Exposures of students to other institution of higher learning/ corporate/business house etc.**

- Students are regularly taken for visits to various industries, various institutions like Forensic Lab, PRL, sanctuaries and national parks etc. to increase their exposure to institutions of higher learning/ research labs/ corporate house and nature.
- Publication of student magazines: Every year the students' magazine "Galaxy" is published by the institute. The students are encouraged to publish various technical and non-technical articles in Galaxy. Magazine also publishes an account of all co-curricular and extra-curricular activities.

**5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.**

- Placement cell of the institute organizes special lectures and interactive sessions by noted alumni and entrepreneurs. Such lectures inspire the students to plan their own ventures. Such interaction with the industrial personnel helps in the placement of the students
- The Personality Development Programme (PDP) which is conducted round the year in association with Career Development Center (CDC), Vallabh Vidyanagar and Globearena Technologies Ltd. Hyderabad. Several sessions are conducted for business development skills, managerial and marketing skills
- All the departments take active interest in getting the students placed in various types of organizations. Every year, the schedule for campus interview is prepared. The process starts in the month of December and continues till July every year
- Above efforts have resulted in good placement scenario

**5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.**

The institute has a well planned policy about students' activities and gives ample opportunity and encouragement to students to bring out their inner skill and exhibit the same. Every year under the presidential guidance of the Head of the institute, the Students' Central Committee is formed and one of the heads of department is selected as the Vice President. The central committee organizes series of activities round the year to

select and nominate talented students for inter college and inter university competitions. The winners are felicitated on the annual day. Galaxy magazine published by the institute provides complete details about extra curricular activities.

- **Additional academic support, flexibility in examinations**

Students engaged in sports or cultural meets are allowed to appear for arrear tests if they miss regular tests due to events/ practice. Such students are also given extra coaching through extra classes (if necessary).

- **Special dietary requirements, sports uniform and materials**

During the sport activities, the institute provides meals/refreshments to the students. The college has its own sports uniform and the equipment used by the college students is provided by the college. The college also has all the sports equipments needed for sports like badminton, table tennis, cricket, volley ball, basket ball, and football and for track and field events.

- **Any other**

- All students are encouraged to deliver seminars and make presentation about their project work
- Students are also sponsored for paper presentation based on their academic excellence, attendance and presentation skills
- Expert lectures are arranged for guiding about co-curricular activities

**5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.**

The details of students who took part in various competitive exams in the last two years is given below.

	<b>GATE</b>	<b>NET</b>
No. of students appeared	15	10
No. of students qualified	04	00

**5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)**

At the time of admission during vacation, teachers counsel the students about courses available in the college and career prospectus about each course. Moreover, the college also has a unique policy of counseling. Group of students is allotted one counselor. The counselor appointed is from the same department of the student. The counselor keeps track of the academic and general performance of the student. In case of need like attendance shortage and poor performance, parents are informed through letter or phone. Placement assistance is also provided by counselor

A sample copy of counseling form is attached in **annexure 9**.

Open house is conducted every semester which gives an opportunity for parents and teachers to interact and discuss about the performance/problems of students.

**5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).**

Yes. The college has a Placement Cell. All the departments also take active interest in getting the students placed in various types of organizations. The institute has plan to appoint training cum placement officer and institute is committed to provide job assistance.

**5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.**

The problems and needs of girl students are taken care of by the Women Cell. The institute has an Anti ragging cell also to take care of the freshers. No issues are reported yet. In addition to this, the counselor during his/her discussion with their wards takes feed back from them and complaints if any are passed on to the respective Head of The Department.

Actions taken for reported grievances

- Removal of teacher in the subject of Organic Chemistry
- The irregularity of sweeper is regularized specially in respect of class cleaning

- Internet speed has been increased.

**5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?**

The institute has Women Cell headed by senior woman faculty member and comprising of four other women faculty members and two student representatives. In case there is an issue regarding sexual harassment the committee looks into it to resolve it. Fortunately, till date there has not been a single case of sexual harassment in the institute. The details of the committee are put up on the college web site also. The institute is proud of the fact that the IQAC coordinator and chair person of Anti Ragging committee are lady staff members.

<b>Women –harassment cell, ISTAR</b>		
<b>Sr.No</b>	<b>Name</b>	<b>Position</b>
1	Prof.(Dr.) Merlin Thomas	Chair person
2	Prof.(Dr.) Priyanka Sharma	Member-Teaching
3	Ms. Gupta Subodhini Khaira	Member-Teaching
4	Mrs. Dhruvi Patel	Member-Teaching
5	Mrs. Parul Thakker	Member-Non-Teaching
6	Ms. Tulsi Thakker	Student Member
7	Ms. Rutu Suthar	Student Member

**5.1.12 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 on these?**

The college does have an Anti-Ragging Committee as per the guidelines of UGC. The college is fortunate that till today not a single case of ragging has been reported. The details of the anti-ragging committee are put up on the college web site also.

<b>Anti-Ragging Committee -ISTAR</b>		
<b>Sr.No</b>	<b>Name</b>	<b>Position</b>
1	Dr. PriyaSwaminarayan	Chair person
2	Prof.(Dr.) S.O.Khanna	Member-Teaching
3	Dr. Jigar Patel	Member-Teaching

4	Dr. Kalpesh Patel	Member-Teaching
5	Mr. Rupesh Shah	Member-Teaching
6	Mr. Sushil Patel	Student member
7	Mr. Arpit Patel	Student member
8	Mr. Anuj Sharma	Student member

**5.1.13 Enumerate the welfare schemes made available to students by the institution.**

The following welfare schemes are made available in the college:

- Thalessemia and blood group check up camps are organized for all freshers every year in association with Indian Red Cross, Ahmedabad. Expenditure of the event is fully borne by the institute.

**Details of Thalassemia testing & blood group checking done in the last two years**

	<b>No. of students tested</b>	<b>Agency</b>	<b>Date</b>
2011-12	248 students + 2 staff ( 5 tested positive for thalassemia minor)	Indian Red cross, Ahmedabad & Jaycess, V.V.Nagar	5 <sup>th</sup> Sep, 2011
2012-13	181 students ( 6 tested positive for thalassemia minor)	Indian Red Cross, Ahmedabad	7 <sup>th</sup> Aug 2012

- Students are provided with basic medical facility in the University Health Centre by paying 0.50 paisa as case fees.
- Hostel facility has been provided for both boys and girls.
- Every day before the beginning of the first period, prayer is played from central audio system for all the classrooms and corridors for mental peace of the students.
- Students who want to take part in sports events are given practice and guidance before and after the college hours.
- All the students are counseled by their respective counselors about the above mentioned facilities. The counselor also tries to solve academic and personal problems of the students. Parents are also informed about their wards' issues. They are also invited to attend Parent-Teachers meeting at least once in each semester.
- Free remedial classes are organized for Students who have failed to in some papers and for late joiners and slow learners

**5.1.14 Does the institution have a registered Alumni Association? If ‘yes’, what are its activities and major contributions for institutional, academic and infrastructure development?**

The college has an Alumni Association and it is managed by committee comprising of senior faculty members.

	<b>Members of alumni committee</b>
1	Mr. Baiju Varughese (Co-ordinator)
2	Mrs. Dhruvi Patel
3	Dr. Jigar Patel
4	Dr. Kalpesh Patel

- In addition to the alumni association of the institute, some of the departments have their own well established associations. The Industrial Chemistry students have their association named MISA (M.Sc. Industrial Chemistry students association) and members are post graduate industrial Chemistry students of the department passed out starting from 1992 batch. Get together is conducted once in a year. MISA gives scholarship to economically weak meritorious students.
- The Master of Industrial Hygiene and safety department runs CIHA (Central Industrial Hygiene Association) which was established in 2004. They publish a quarterly journal Indian Journal of Occupational Hygiene and Safety. Get together is conducted once in a year.
- The Master of valuation department arranges annual get together of all passed out professionals of the department working in the field of valuation of real estate & plant and machinery.

All these associations are helping in the placement of students in esteemed organizations.

**5.2 Student Progression**

**5.2.1 Provide the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.**

Student progression	%									
	IC	SCT	PST	EST	INST	IT	MCA	OC	MIHS	MV
UG to PG	-----NA-----									
PG to M.Phil/M.Tech/M.B.A	1.35	----	5.5	----	1.1	0	0	0	0	0
PG to Ph.D.	4.5	0.5	1.8	0.4	----	0	0	0	0	0
• Campus selection	90	85	81	80	18	16	35	26	82	73

**5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.**

Sr.No	Subject	2009 (%)	2010(%)	2011(%)	2012(%)
1	EST	100	100	100	100
2	IC	98	100	100	100
3	INST	100	-----	-----	100
4	IT	100	100	100	100
5	MIHS	100	100	100	100
6	MV	100	100	100	100
7	OC	-----	-----	-----	100
8	PST	100	100	100	100
9	SCT	100	100	100	100
10	MCA	100	98	96	91.49

**5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?**

Ours is an institution conducting post graduate degree programmes in pure and applied Sciences and also inter disciplinary courses .All the courses are job oriented and designed as per the industry requirements. Institute has a very good rapport with the most of the

industrial organizations and recruiting agencies. The institute has assigned placement activities to team of faculties. Thus, our students have better employment prospect.

**5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?**

Special remedial classes are organized for such students free of cost to prevent failure and dropout. Besides, students are also counseled from time to time and given proper guidance about examination pattern and course preparation. Faculties are also helping in solving papers of previous examinations.

**5.3 Student Participation and Activities**

**5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar. The college conducts various sports and games competitions and also participates in inter college sports events. We have a sports advisor who manages these events and trains and guides students for the same.**

Year	Sports		Cultural Activities
	Inter	Inter Class	Inter Class
<b>09-10</b>		1. Table Tennis 2. Cricket 3. Volleyball 4. Football 5. Chess	1. Kite Cutting Competition 2. Kite Decoration Competition 3. Poster Making Competition 4. Rangoli competition
<b>10-11</b>	1. Table Tennis 2. Cricket 3. Volleyball 4. Football 5. Chess	1. Table Tennis 2. Cricket 3. Volleyball 4. Football 5. Chess	1. Kite Cutting Competition 2. Kite Decoration Competition 3. Essay Writing Competition 4. Best Message Competition (Teachers' Day) 5. Rangoli competition (Ozone Day) 6. Greeting Card Making Competition (Ozone Day) 7. Poster Making Competition (Women Dev.)

<b>11-12</b>	1. Table Tennis 2. Cricket 3. Volleyball 4. Football 5. Chess	1. Table Tennis 2. Cricket 3. Volleyball 4. Football 5. Chess	1. Essay Writing Competition 2. Greeting Card Making Competition 3. Poster Making Competition 4. On the Spot Painting Competition
<b>12-13</b>	1. Table Tennis 2. Cricket 3. Volleyball 4. Football 5. Chess	1. Table Tennis 2. Cricket 3. Volleyball 4. Football 5. Chess	1. Science Talk Competition (English & Gujarati) 2. Elocution Competition 3. Poster Making Competition ( Teachers Day) 3. Technical Article Writing Competition 4. Poem Writing Competition 5. Garba Competition 6. Poster Presentation Competition ( Aids Awareness) 7. Clay Modeling Competition 8. On The Spot Photography Competition 9. Inter Departmental Quiz Competition

**5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.**

<b>Year</b>	<b>Achievements in co-curricular, extracurricular and cultural activities</b>
09-10	Mr. NayanSolanki was selected in the S.P.U team of Table Tennis to play the Inter University Table Tennis Tournament
10-11	<ul style="list-style-type: none"> <li>• Mr. NayanSolanki was selected in the S.P.U Table Tennis team to play the Inter University Tournament</li> <li>• Mr. Anish Singh was selected in the S.P.U Foot Ball team to play the Inter University Tournament</li> <li>• Mr. Sachinkumar was selected in the S.P.U Chess team to play the Inter University Tournament</li> </ul>
11-12	<ul style="list-style-type: none"> <li>• ISTAR won the S.P.Uni. Inter Collegiate Table Tennis Tournament</li> </ul>

	<ul style="list-style-type: none"> <li>• ISTAR remained runners-up in the S.P.Uni. Inter Collegiate Chess Tournament</li> <li>• Mr.Raj Mehta secured Second position in “NFS Most Wanted Event” of Ignite 2012 at CHARUSET, Changa</li> <li>• Mr.PranavVagadiya and Sudhir Patel developed a Website for International Journal of MCA Dept</li> <li>• Mr.VimalVadher secured Second position in State Level Quiz Competition in Env. &amp; Safety Aspects in Chemical Industries @ D.D.U., Nadiad</li> <li>• Mr.Rushi M. Desai and Mr.ParthDeshpande selected in the S.P.U Table tennis team to play the Inter University Tournament</li> <li>• Sachinkumar, Adarsh S. Pillai and Pawan J. Wani selected in the S.P.U Foot Ball team to play the Inter University Tournament</li> <li>• Mr.Adarsh S. Pillai secured 3rd position in both 100 m Run and 200 m Run in Athletics competition organized by the Sardar Patel University.</li> </ul>
12-13	<ul style="list-style-type: none"> <li>• ISTAR won the S.P.Uni. Inter Collegiate Table Tennis Tournament</li> <li>• The Volley Ball team of ISTAR secured Third position in the Sardar Patel University Inter College Tournament</li> <li>• Mr.ParthDeshpande and Mr.SachinThakkar were selected in the S.P.U Table Tennis team to play the Inter University Tournament</li> </ul>

**NSS:**

The NSS unit of the college is very active .Faculty and students are actively participating in organizing NSS camps.

Sr.No	Members of NSS cell
1	Dr. Nirmal K.Patel ( Co-ordinator)
2	Dr. Sanjay H. Panjabi
3	Mrs. Unnati A. Patel
4	Ms. Kamini H. Solanki

**5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?**

The students are asked to fill the feed back forms which include the details regarding knowledge base, communication skills, commitment and accessibility of the teacher. The IQAC team analyzes these forms and submits the report to the Head of the institute.

The suggestions and complaints of the students collected during counseling sessions are also communicated to the respective Head of The department .Head of the institute and all HoDs are designing and implementing action plans as per the suggestions of IQAC team.

The individual departments also take feedback from the employers of its students and make the necessary improvements in teaching learning process and syllabus. A sample copy of the feed back form is attached in **annexure 8**.

**5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications / materials brought out by the students during the previous four academic sessions.**

The institute publishes its magazine “**Galaxy**” every year in which various technical and non-technical articles, poems by students and staff are published. The editorial board of the magazine invites articles from the students and staff every year. Appropriate articles are published after scrutinization by editorial board.

**5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.**

The central committee comprises of president who is the director of institution and one HoD is selected as vice-president.A meeting of all class representatives is called and election/selection of General Secretary, Ladies Representative, Cultural Secretary and Sports secretary is made. Round the year, series of co-curricular, sports & cultural activities are planned and organized by the central committee. The institute management provides funding for all the activities.

**5.3.6 Give details of various academic and administrative bodies that have student representatives on them.**

Each class has a Class Representative selected by the students. All the class representatives are members of the central committee. In addition to this, students are members of

- Anti-Raggingcommittee

- Women Cell
- IQAC
- Library Committee

**5.3.7 How does the institution network and collaborate with the Alumni and former Faculty of the Institution.**

All departments of the institution are in constant touch with the alumni and the former faculty. Most of them are spread out and holding position in their organization. Very often we invite them for attending college during functions and sharing their knowledge and experience. We also get guidance and suggestions from our faculty and alumni.

In addition to the alumni association of the institute, some of the departments has their own well established associations. The Industrial Chemistry department has formed association named MISA. Get together is conducted once in a year. MISA gives scholarship to economically weak meritorious students.

The Master of Industrial Hygiene and safety department runs CIHA (Central Industrial Hygiene Association) which was established in 2004. They publish a quarterly journal Indian Journal of Occupational Hygiene and Safety. Get together is conducted once in a year.

The Master of valuation department is maintaining records of all passed out professionals working in the area of valuation of real estate & plant and machinery and organizes annual get together function.

All these net working and collaborating efforts help in the placement of students in esteemed organizations.

**Any other relevant information regarding Student Support and Progression which the college would like to include.**

SICART is a sister unit of the institute well equipped with analytical instruments and located in the same building. Students of IC, EST, PST, SCT, OC and Industrial Hygiene are provided 3 days free training on analytical instruments by senior faculty members of SICART and training certificates are also provided to the students.

<b>Department</b>	<b>Analytical Instruments in SICART on which training is provided</b>
IC	HPLC,FTIR,GCMS
PST	TGA & DSC,FTIR,SEM
SCT	GPC, Particle Size Analyzer, FTIR
EST	GCMS,FTIR,ICP
MIHS	GC,HPLC,FTIR
OC	FTIR ,HPLC,NMR

- EST department is conducting, a specialized training programme in collaboration with Missouri University of Science & Technology. The MoU for joint academic programme was signed between EST department and Missouri University on 11th January, 2012
- Six students of MCA programme were selected by GTU for students training programme conducted by Laurentian University, Canada. Six weeks training was conducted during 15th June to 29th July, 2012. One faculty member of MCA department was selected as a leader for mentioned GTU sponsored Canada study tour. This has provided international exposure to our students
- Students are also informed about various research activities conducted by the institute and encourage to participate in seminar/presentations organized by Ph.D. research scholars of the institute

## **CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 Institutional Vision and Leadership**

#### **6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?**

##### **Vision:**

To add significantly to our enduring civilizational tradition of pioneering excellence in learning, knowledge, enlightenment and self-realization, in a universally relevant context.

##### **Mission:**

We dedicate ourselves to the perpetuation our founders' vision of providing the infrastructure ,facilities, operating conditions and overall environment conducive for the education of young scholars, along with the desired physical, mental and character building inputs; we firmly renew our commitment in providing value added globally relevant education with an emphasis on the techno management domain to ensure that our scholars fruit fully explore their knowledge skills and values in the global economy.

Our college follows the above mentioned vision and mission in letter and spirit. Ours is a secular institution whose focus is on imparting quality education in the field of pure & applied sciences and inters disciplinary courses and creating opportunity for young students to expand their knowledge and skills. Moreover, the faculty is always keen to upgrade themselves and always strive to improve the curriculum to make it relevant to the changing times. The college also gives ample opportunities for the overall development of the students by allowing the students to participate in various sports events, academic meets and cultural events. We do believe that overall development of students is essential besides academics and therefore institute has initiated a personality development program. It is said that future leaders of the nation are born in our educational institutions. To make this happen, students are inducted in central committee and given responsibility to manage and organize various events in the collage. This involvement nurtures future leaders and managers besides building the character.

### **6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?**

#### **Top Management**

CVM is headed by the Chairman and supported by secretaries and joint secretaries to monitor functioning of various colleges. Each secretary is assigned a group of colleges. The CVM holds meetings with Principal and sometimes with the staff members to appraise about the policy matters and implementation plans. The progress of the institute is monitored by CVM management.

CVM has constituted a Governing Board for ISTAR. The policy matters and required action plans are discussed in the governing board meeting and overall performance of institute is monitored. CVM takes necessary action for improvement of infrastructure, faculty development, teaching learning process and research. CVM appreciates the achievements of faculty and students of the institute. The head of the institute and faculty members are allowed to participate in national /international conferences and workshops for knowledge up gradation.

#### **Principal**

Principal holds regular meeting with the Heads of the Departments of the institute to discuss and plan strategies about various programmes conducted by the institute. Collective planning is done for implementing policies. Initiatives are taken by the principal for development of liaison with academic & research institutes, scientists, industry and professionals. Principal provides information and guidance regarding education scenario and starting of new courses and up gradation of syllabus. The results of internal and university exams, attendance of students in classes, placement records of the departments, project assignment of students, progress of PDP sessions, requirements of individual departments and outcome of IQAC initiatives are closely monitored by the principal.

## **Department Faculty**

The Head of departments are the intermediates between the departmental staff and the Head of the institute. Departmental meetings are conducted every month and the Head of the department provides the feedback on departmental meeting to the principal. Faculty members of various committee implements policy and plans defined by the management for improving the functioning of the institute.

### **6.1.3 What is the involvement of the leadership in ensuring?**

- **The policy statements and action plans for fulfillment of the stated mission.**

CVM has prepared a detailed rule book for all the concerned departments of the institute.

Principal plays a key role along with the Heads of the departments and other senior faculty members in the preparation of action plans. Action plans are prepared for academic programmes, infrastructure improvement, evaluation method and research work.

- **Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan.**

The action plans for all major operations and incorporation of the same into the institutional strategic plans are made during the meeting with the Heads after careful consideration and discussion.

- **Interaction with stakeholders**

Principal meets the management and apprises them about issues, challenges and progress with regard to accomplishment of the goals. Besides, the Head of the institute and the staff also counsel the students about various issues, policies, facilities, schemes etc. The parents are also called to interact with the staff during ‘open house meeting’. During such meetings, Principal clearly spells out the objectives, policies, evaluation system etc. These interactions help in ensuring the stake holder’s participation in the achievement of objectives.

- **Proper support for policy and planning through need analysis ,research inputs and consultations with the stakeholders**

As stated above, regular meetings are held with the stake holders to know about the

students' needs and accordingly, policies are planned. Our efforts have always been to achieve stated objectives. For this purpose, the Head of the institute and the Heads of the department frame teaching learning policies considering the students' present and future needs. Keeping this in mind we have taken the following actions:

- Provided ICT facilities in the classrooms
- Subscribed to e-resources in the library
- Upgraded the laboratories
- Provided Internet & Wi-Fi facility
- Started Personality Development Program
- Started Open House Program
- Started SICART training
- Signed MoU with reputed academic, R& D institutes and Industries.

We also realize the student's dilemma when they first come to seek admission because they are not fully aware of the future prospects in pure & applied sciences. Therefore, it has been our practice to counsel them at the time of admission so that they acquire proper guidance prior to selection of program.

- **Reinforcing the culture of excellence**

We in our college always strive for excellence and have adopted participative style of working. Teachers are always encouraged to deliver their best in teaching and other activities. Teachers who complete their Ph.Ds are honored on the Annual Day. Students who excel in academics, sports and cultural activities are given prizes and certificates on the annual day.

Students who represents the University at State Level or National Level Sports Meet are given a cash prize of Rs. 5000/-

- **Champion organizational change**

Inputs of all stakeholders, changing requirements of recruiting agencies, exposure to business and academic scenario, various survey reports etc. are understood and organizational changes are implemented for improving the performance of the institute.

IQAC suggestions regarding academic and administrative performance are implemented for quality improvements. Major changes in organization structure,

policies, financial requirements are discussed in governing body meeting and implemented after due approval

**6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?**

Institutes adopts the following procedures

- IQAC suggestions are discussed and follow-up action plans are defined for timely implementation
- Course planning is done by faculties and head of the department.
- Unit tests, quiz and internal tests are conducted
- Extra classes are conducted for slow learners
- Attendance of students is monitored
- Student's skills and interest is analyzed prior to project assignments.
- Principal and head of departments jointly work out the schedule of campus interviews and placement is done for almost all passing out students.

**6.1.5 Give details of the academic leadership provided to the faculty by the top management?**

Principal in consultation with the management appoints a head for each department who is responsible for the academic and the administrative affairs of the department. The faculty is allowed to plan out the academic design and it is mentioned in teachers' diary. The class room teaching is the special privilege of teacher and freedom is given to complete the curriculum at his/her own way and inviting experts for special lectures. Faculties are involved in various committees and are given freedom to work out plans as per the objective and goals of mandated task. Participative style of functioning is practiced and management support is provided for improvements in infrastructure facilities, workshop and seminar planning. Management does analysis of University results and placement and provides direction for necessary action plan.

### **6.1.6 How does the college groom leadership at various levels?**

Role and responsibility of Head of the institute, Head of department, Head of various committees, faculty and students representatives are well defined and all are given freedom to function independently. This is done for building leadership at various levels in the institute. Leadership is developed only if responsibility is given for various tasks/ activities. This applies to both students as well as faculty. Therefore, for every activity, there is committee headed by a faculty and supported by other staff & students. They get enough opportunity for demonstration of their leadership skill and take independent decision about selection and organization of an event. Such a decentralized practice helps in building the leadership and organizational skills. The Class Representative and Ladies Representative also get the opportunity to present the issues of their classes to the Head of the institute. Student representatives play an important role in conveying management decisions to their classmates.

### **6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?**

Decentralized governance structure is followed by the institute. The multilevel functioning hierarchy is made up of Management, Principal, HoDs, IQAC team, Faculty and various committees. In this decentralized governance system, each department enjoys required autonomy regarding departmental decisions protecting the interest of students and the institution. Each department has a Head who works as the intermediate between the Head of the institute and the members of the department. The Head of the institute does not interfere with the Head of any department regarding the allotment of periods to different faculty unless there is serious conflict. Moreover, the departments also have the autonomy to adjust laboratory sessions within the overall frame work provided that they do not clash with other classes. If a faculty has to leave the campus for some time due to some academic work, he/she can go after informing the head. A faculty is allowed to air his/her grievance to the Head of the institute directly or through the Head. If a faculty has to avail leave, he/she has to inform the respective Head in advance so that an alternate arrangement can be made for his/her classes as far as possible.

The college also has a Students' Central Committee. Its operational head is the Vice President who enjoys partial autonomy and is selected every year. This Vice President in consultation with other members of the central committee selects participants for each event. Various committees are formed for smooth conduction of institute activities. Each department is allowed to conduct additional courses and plan for its own unit test, evaluation mechanism, term work and extracurricular activities.

**6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.**

The institution always follows and promotes a culture of participative management. The most important decisions are mostly taken jointly by the Head of the institute and the Heads of the various departments. Besides when it comes to purchasing of new equipment, each department is asked to submit their requirement as per priority. Even when policies are decided and framed, the faculty members are taken into confidence. All faculty members are free to express their opinion and suggestions which the principal does take into consideration.

The students are also made a part of the scheme of participative decision making regarding laboratory facilities, seminars topics and welfare activities. For the smooth conduction of events, all the student secretaries are called to attend the pre event meeting. They are also entrusted with the responsibility of maintaining discipline in the college and during the events. Non-teaching staff are also involved in decision making process. Their suggestions are also taken into considerations. Our IQAC team contains four student members and one non-teaching staff.

**6.2 Strategy Development and Deployment**

**6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?**

The IQAC has been formally set up in the college. The committee comprises of five senior faculty members, one non-teaching staff, four student representatives, one management representative and one member from outside the institute. This committee in consultation with the Principal and heads of various departments deploys various policies

that improve the quality in the institution. The policies and decisions are reviewed during meeting of Principals with the Heads and corrective measures are taken if required.

Students requirements are collected and mapped through infrastructure development, curriculum development and student's development programs

Research activities are monitored by Head of the institute and Joint secretary of CVM. The Core areas of interest for each faculty member are considered prior to the term work/subjects assignment.

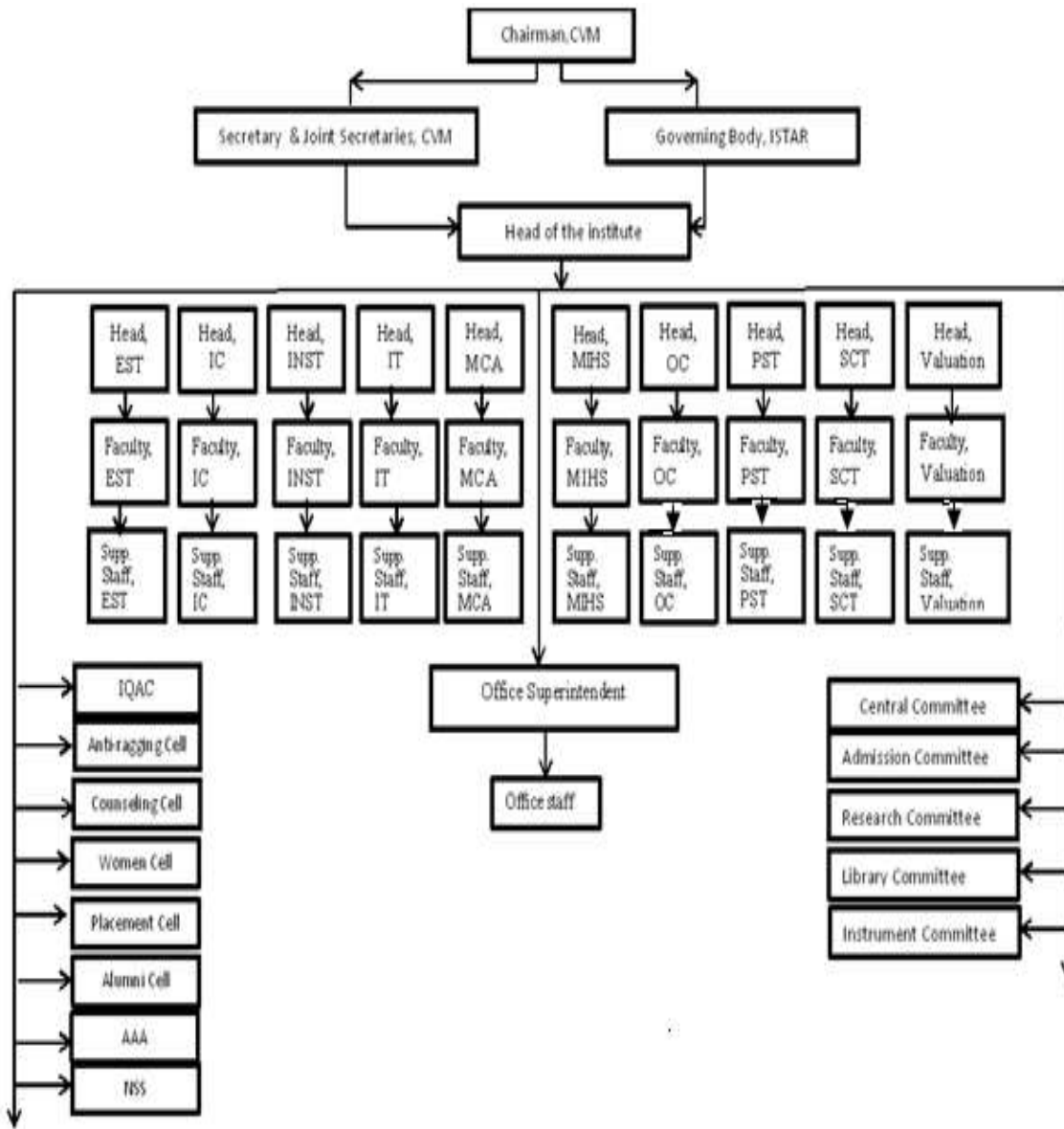
**6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.**

Development planning and long term prospective planning is done during of governing board meeting. Suggested plans are discussed and implemented for improving the teaching learning process, staff participation, student-teacher interaction, infra-structure development, development of library, establishment of research laboratories etc. Planning is done for improving the result and participation in academic and cultural meets. The plan is prepared for expansion of infrastructure facility in terms of class rooms and conference room etc.

Major Decisions of perspective plans are described below:

- To start corporate training program in the field of chemical sciences
- Enhancement of M.Sc. IT program by introducing elective paper on Mobile Computing & Applications
- Initiate consultancy work by PST department regarding filler blending in polymers
- Establish R & D laboratory for demonstrating applications in emerging research domains viz. Storage and Cloud Computing , Statistical Analysis, Network Management & Security, Geospatial Technology
- To start integrated two years MCA program from the academic year 2013-2014
- Install Biometric Attendance System

**6.2.3 Describe the internal organizational structure and decision making processes.**



1	Chairman, CVM	Dr. C.L.Patel
2	Secretary in charge of institute	Dr. J.D.Patel
3	Principal	Dr. P.M.Udani
4	Head, EST	Dr. Nirmal Kumar
5	Head, IC	Dr. Merlin Thomas
6	Head, INST	Dr. Himanshu Kapse
7	Head, IT & Geo informatics	Dr. S.O.Khanna
8	Head, MCA	Dr. Priya Swaminarayan

9	Head MIHS	Prof. J.H.Patel
10	Head, OC	Dr. Sanjay Panjabi
11	Head, PST	Dr. M.M.Raj
12	Head, SCT	Dr. Ashok Dighe
13	Head, Valuation( Real Estate & Plant and Machinery)	Mr. Rupesh Shah

Most decisions regarding the college, administration, examination, remedial classes, plan outlay, events, etc are taken during meeting of Principals with the Heads and IQAC team after a thorough discussion. During HoDs meeting, each department head puts forward the views of his/her department. All the department proposals are thoroughly discussed and decisions are finalized. Follow- up actions are defined and informed to the staff members through the minutes of the meeting.

**6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following**

• **Teaching & Learning**

We realize that many of our students are from vernacular medium. So care is taken by teachers to teach in bi-lingual initially. More than 85 % class rooms have ICT facility. This ensures effective content delivery and no student misses out anything. Assignments are given regularly and quiz test is conducted as soon as a particular section is covered. All the students have to prepare for seminar and deliver talk using power point presentation. The assignments are based on the examination pattern so that the students are well prepared for the exams. Students are also issued books from the library and each student is given two library tickets. Photocopying facility and internet access are provided to students. Industrial study tour and project assignments are given due importance for proving exposure to business and industry scenario.

• **Research & Development**

More than 60 % our staff members are Ph.D holders, seven staff members are actively involved in guiding students for Ph.D. At present 20 students are pursuing Ph.D under the guidance of various faculty members. Many of the staff members are also involved in carrying out major/minor research projects funded by UGC, DST, GUJCOST, NPTEL

etc. The institute has an active research committee that monitors and helps faculty aspiring to pursue research. The faculty is encouraged to apply for UGC projects and present papers in national and international seminars/ conferences/ workshops.

226 research papers were published by the faculty and faculties have attended 155 seminars /conferences/workshops during the last four years.

- **Community engagement**

Through programmes like NSS, students are encouraged to relate to the community. In NSS, students do various social activities in nearby villages and do participatory work with NGOs. For example, we have organised free eye check up camp and spiritual lecture for the inmates of old age home in Bakrol village. The NSS unit in association with Local Blood banks arranges blood donation camp and Thalassemia check-up camp every year.

<b>Academic Year</b>	<b>Blood donation camp dates</b>	<b>Agency</b>	<b>No. of blood units collected</b>
2011-12	22 <sup>nd</sup> Dec,2011	Rotary Club ,Anand Down town & Indian Red cross, Anand	70
2012-13	5 <sup>th</sup> Sep, 2012	A.D.Gorawala Blood bank, Pramukh Swami Medical college, Karamsad	88

<b>Academic Year</b>	<b>Thalassemia check-up camp dates</b>	<b>Agency</b>	<b>No. of people participated</b>
2011-12	5 <sup>th</sup> Sep,2011	Indian Red cross, Ahmedabad & Jaycess, V.V.Nagar	250
2012-13	7 <sup>th</sup> August,2012	Indian Red Cross Society,Ahmedabad	181

- **Open house**

The open house meet gives a chance for guardians and parents of the students to visit the college and interact with the faculty. Parents who come to college are shown around the

campus. Parents are informed about the general rules of the college and also about the functioning of the college, the internal evaluation system, placement activities etc.

Sr. No.	Department	Date of open house
1	Environmental Science & Technology	22/09/2012
2	Information Technology	22/09/2012
3	M.C.A	22/09/2012
4	Surface Coating Technology	6/10/2012
5	Industrial Chemistry	13/10/2012
6	Polymer Science & Technology	13/10/2012
7	Instrumentation	13/10/2012
8	Industrial Hygiene & Safety	13/10/2012
9	Organic Chemistry	26/09/2012

The institutes also carry out activities in association with Nature club, Vallbh Vidyanagar. Tree plantation, snake show and lecture on ozone layer depletion were arranged in association with Nature club during the year 2012-13.

- **Human Resource Management**

College is a place that provides an ample opportunity to faculty and staff to display their skills. Various activities are conducted throughout the year and for each activity right person is selected having desired aptitude. Similarly, student secretaries are selected considering his/her interest and aptitude. Fresh recruitment is done through interviews conducted by approved selection committee having nominees from GTU /SPU.

**6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?**

The Head of the institute is the intermediary between the management and the institution. He keeps the management abreast with the activities of the college. He also informs the management about special requirement of the college, faculty or students.

Governing body meeting is conducted regularly and detailed information of each department is presented. Annual report is prepared and presented during Annual Day celebrations. The report is prepared based on the inputs of departments, students, central committee etc.

**6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

CVM (Charutar Vidya Mandal) management is always kept informed about the functioning of the institute. CVM holds meetings with the Principal and the staff to share its concern about issues relating to attendance, results, research etc. Management appreciates and welcomes suggestions from one and all for improving the teaching - learning, attendance, university exam results, placement etc. The secretary in-charge of our institute conducts regular meetings with the staff and encourages them for pursuing research activity. Permission is granted for interested faculty for Ph.D study. Faculty members are involved in planning and implementation of strategic decisions taken for improving effectiveness and efficiency of institutional process.

**6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

To encourage research, the management has decided to pay 25% of the total fees of Ph.D. to the Internal Guide of the College. Governing board has approved P.G. diploma course in Geo Informatics and it is to be started from the academic year 2013-14.

Renovation of SCT laboratories was requested and the management approved the required budget and job is done. Need was felt for lab facilities enhancement for Instrumentation Department and it was approved and PLC, Robotic Kit etc. are purchased. The required s/w has been installed in M.Sc. IT lab for mobile applications development. Infrastructure enhancement and purchase requirements are collected from each department prior to starting of academic year and the same is always approved by the management. The establishment of language lab is planned as per the recommendation of CVM management. Institute organized and participated in Education Fair covering major cities of Gujarat as per the directives of CVM management.

It was suggested to apply for NAAC accreditation and institution has initiated the process and process would be completed by December 2013.

**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?**

Yes, but we have not yet applied for Autonomy.

**6.2.9 How does the Institution 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?**

The problems and needs of girl students are taken care of by the Women Cell. The institute has an Anti ragging cell to take care of the fresher's complaints. Till today, no such issues are reported. In addition to this, the counselor during his/her discussion with their wards takes feedback from them and any complaint reported is passed on to the respective head of the department. Complaints, grievances and suggestions are collected and analyzed by IQAC team for proper action.

**6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?**

Yes.

Case filed by: Mr. Mohan P. Vaghela, Typist

Delinquent employee Mr. Mohan P. Vaghela was dismissed from services vide office order No.CVM/50/2012-2013/3481-83 dated 8/11/2012 after holding full-fledged departmental enquiry.

The delinquent employee has filed application no.72/2012 before the Hon'ble Gujarat Affiliated College Service tribunal, Ahmedabad challenging his dismissal order. The proceedings of said application before the Service tribunal is pending and no decision is taken by tribunal.

**6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?**

The students are asked to fill the feedback form, which includes the details regarding knowledge base, communication skills, commitment and accessibility of the teacher. The IQAC team analyzes these forms and submits the report to the Head of the Institute. Similarly if there are any issues regarding institutional provisions, they are seriously looked into and if possible suitable changes are made. Feed back regarding academic programmes, infrastructure, administrative procedures and placement are taken and appropriate improvements are made.

Action taken by institute are listed below,

- Strengthening of placement activities
- Started personality development and soft skill development courses
- Provided Wi-Fi access to students in institute campus and hostel

### **6.3 Faculty Empowerment Strategies**

#### **6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?**

The teaching staff is encouraged to participate in short term workshops and exchange programs. H.M.Patel Career Development Centre and Globe arena are hired for organizing short Skill Development Programs for staff. Faculty members are encouraged to pursue higher studies. MOUs are signed with R & D institute, national and international academic institute for promoting collaborative learning.

Non-teaching staff are also encouraged to attend workshops and seminars which can help them in improving their efficiency. Our Head Clerk has recently attended training on new TDS provisions organized by Shantinath Softwares, Anand on 4th May, 2013.

#### **6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?**

Institute believes that a trained manpower is an asset. Institute always grants duty leave to staff desirous of attending workshops / training etc. relevant to their teaching assignments. Faculties are encouraged for higher studies also. Faculty members are

inducted in different committees and empowered to take decisions for the delegated tasks.

**6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.**

The performance appraisal form used by the institute has been approved by the Commissioner of Higher Education, Govt. of Gujarat. The appraisal forms are collected every year from the staff which provides details about teaching, research, co-curricular, counseling and other institute activities taken up by them. Report is discussed by HoD and Head of the institute and consolidated report is prepared for all the departments and presented to CVM management. This record is used for future promotion and sponsoring faculty for participation in conferences and seminars.

**6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?**

The management is more concerned about the research activities taken up by the faculty. Faculty members who have not done Ph.D are given permission to complete Ph.D in stipulated time period.

In case of few faculties, activities done apart from academic work is not significant. In such cases, management recommends the faculty to carry out consultancy work and product/process development for industries.

**6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

- CVM management has introduced group insurance scheme for all employee. Teaching staff is insured for 1.5 lakhs each and non teaching staff is insured for 1 lakh in addition to the group insurance cover of Government of Gujarat.
- All HoDs are provided with laptop. Wi-Fi connectivity is provided to all staff members.
- The class III & IV employees get the facility of advance for buying grain/oil/ and

festival. Most of the employees avail this facility.

- Provident fund, gratuity, privilege leave, casual leave, medical leave, maternity leave etc. welfare schemes are implemented by the institute.

### **6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

The appointment of staff in the college is strictly as per the norms of the UGC/ Govt of Gujarat / Sardar Patel University/GTU and CVM. As and when there is a requirement, the post is advertised and appointments are done after conducting interview. In case no suitable candidate is found ad-hoc appointments are made. Besides, we do invite eminent scholars to deliver lectures in the college. Unbiased performance appraisal system and opportunity for growth and development for all is practiced. All staff members are paid salary as per 6th pay scale and faculty members are encouraged to represent institute in board of studies, paper setting and paper checking committee.

## **6.4 Financial Management and Resource Mobilization**

### **6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?**

Every year, institute budget is prepared based on possible source of earnings and expenditure. Salary, infrastructure development, maintenance etc. are considered in preparation of recurring budget. Non recurring budget is prepared based on past records and anticipatory requirements.

At the beginning of the academic year, each department is allotted a budget under recurring and non- recurring heads. Each department uses the funds for laboratory expenses from the recurring budget. For any additional non-recurring expense (like buying equipment etc), each department has to get it sanctioned by the Head of the institute and CVM management .For all purchases, quotations are invited from different vendors and best one is selected by the purchase committee of the institute. Each dept. maintains a stock register and it is time to time verified by the HoD and the Head of the institution.

**6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.**

The CVM conducts the internal audit of the college two times during every financial year, followed by the external audit by CVM nominated auditor once in every year. The last internal audit was done in April 2013 and external audit was done in May, 2012.

No minor or major objections were found.

**6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.**

The major sources of institutional receipts/funding are from

- Fees receipt
- Research projects funded by various agencies
- Research & analytical charges(third party testing)
- Bank interests on savings account
- Consultancy
- Endowment fund and alumni association of the institute (ISTARAA)

In case there is a deficit, the management is generous enough to bear the expense. The college has a reserve fund in the form of endowment fund.

Audited Balance sheet showing all the details for the last four years are attached in **Annexure 11a -11 h.**

**6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).**

The institute encourages all staff to apply for major and minor projects. Many of our staff members are awarded research projects sanctioned by UGC, DST, GUJCOST, NPTEL etc.( The details are given in category III)

## 6.5 Internal Quality Assurance System (IQAS)

### 6.5.1 Internal Quality Assurance Cell (IQAC)

- **Has the institution established an Internal Quality Assurance Cell (IQAC)? If ‘yes’, what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Yes, the IQAC was established in the year 2012. The college is committed to pursue excellence in all the fields. The coordinator is invited to attend the Heads’ Meeting for suggestions regarding the institutional development and functioning.

- **How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?**

The suggestions made by IQAC are honored by the institution and authority and all suggestions are implemented successfully.

Sr.No	Suggestions	Implementation
1	Introduction of student feedback	Implemented
2	Detailed Academic calendar for each department	Introduced
3	Provide Wi-Fi facility in the campus.	Introduced from 2012
4	Up gradation of Class rooms and laboratory	Process going on
5	Start institutional Journal	The computer science department has started its own international journal
6	Motivation of faculty for Ph.D studies	Many have joined for Ph.D. study
7	Additional certificate/diploma courses	P.G.diploma in geo informatics to be started from June 2013
8	Take up more consultancy work and research projects	Significant improvement from last year

- **Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

In addition to the teaching staff, 1 non-teaching staff, 4 student representatives, 1 management representative and 1 representative from other institution are in the

IQAC team.

Sr.No.	Status	Name of the	Address
1.	Chairperson	Dr. P.M. Udani	Principal
2.	Coordinator	Dr. Merlin Thomas	Professor, IC department.
3.	Members – Teaching Staff	Dr. Nirmal Kumar Dr Ashok Dighe Dr.Samrat Khanna Dr.Kalpesh Patel	Professor, EST dept. Professor, SCT dept. Professor, IT dept. Asst. Professor, SCT dept.
4	Administrative	Mr.Alpesh Patel	Junior Clerk
5	Student representatives	Ms.Shamiya Khan	Ph.D student
		Mr. Harshil Soni	M.Sc. student
		Mr.Ankur Sharma	M.Sc. student
		Mr.Chandan Yadav	M.Sc. student
6.	Management Nominees	Dr.J.D.Patel	Hon. I/C Secretary, CVM
7.	Member from other institution	Dr. V.S. Patel	Director, SICART V.V. Nagar (Former Vice Chancellor, S.P. U)

Director, SICART is helping in jointly conducting workshops for MIHS, IC, OC departments of ISTAR and planning and conducting 3-days certificate course for all the students of PST, EST, IC, OC and SCT departments of ISTAR.

- **How do Students and alumni contribute to the effective functioning of the IQAC?**

Suggestions are invited from our esteemed alumni and current students through meeting and try to implement them. The feedbacks we receive from them are valuable and are found useful in improving the quality of teaching-learning, facilities for students and beautification of campus.

Role / Contribution of external member:

Monitoring of chemical science department and providing guidance for consultancy & project work

Arrangement of on-site training for our students in SICART labs

- **How does the IQAC communicate and engage staff from different constituents of the institution?**

The IQAC holds meetings as and when necessary and the IQAC coordinator remains present in all the HoD meetings. The staff is engaged for preparation of documents

for accreditation preparation, requisition for equipment grants and students' activities.

**6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.**

The institute has integrated frame work of quality assurance of academic and administrative activities. The frame work components are

- Merit based admission
- Preparation of academic calendar prior to starting of admission.
- Providing detailed information about courses offered and other relevant institute information in the prospectus
- Attempt is made to keep maximum number of teaching days
- Attempts are made to ensure that classes are conducted in absence of a teacher or when a teacher is on leave
- Use of ICT facilities in class rooms and research
- Counseling: Each student is allotted a faculty for counseling that looks into the students' academic and other issues.
- Remedial classes are organized for academically weak students who have failed to clear some papers and late joiners
- Internal tests and quiz are conducted
- All students are issued two library tickets each.
- Personality development [PDP] classes and Communication skill classes [CDC] through external agencies [Globe arena].
- Language Laboratory
- The head of the institute conducts monthly meetings with each department for progress monitoring and defining action plan
- Faculty and departments evaluation is done regularly based on comprehensive feedback of all involved in teaching learning process

**6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.**

The institute nominates staff to attend workshops/training camps conducted by the IQAC of Sardar Patel University. In the last four years, three of our staff members have attended the training programs of Sardar Patel University. The insight obtained from these training has brought improvement in the teaching learning process of the institute.

<b>Sr.No</b>	<b>Name of staff</b>	<b>Details of staff training</b>
1	Dr.Merlin Thomas	Challenges and problems in implementing CBCS, organized by IQAC, S.P.University,24 March,2011
2	Dr.H.N.Kapse	Workshop on API and PBAS,IQAC,SPU,Sep 5,2011
3	Dr.H.N.Parikh	Workshop on API and PBAS,IQAC,SPU,Sep 5,2011

**6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If ‘yes’, how are the outcomes used to improve the institutional activities?**

Yes, College does undertake external Academic and Administrative Audit by The Commissioner of Higher Education. The institute has an AAA coordinator who submits the report for AAA to the Commissioner of Higher Education.

**6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?**

The college IQAC is in direct contact with IQAC of Sardar Patel University and follows its guidelines and recommendations. IQAC members of the institute regularly attend the workshops conducted by IQAC department of Sardar Patel University. In the last four years, our staff members have attended three IQAC training programs conducted by Sardar Patel University. NAAC guidelines are also followed for implementing internal quality assurance measures.

**6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

The college follows the academic schedule prepared by the S P University. Based on the

term schedule of university, each department prepares own academic calendar considering the number of working days. This academic calendar is displayed on all departmental notice boards. The Head of the Dept. reviews the course completion and class room teaching of the faculty. The Principal reviews all this in the HoDs meeting. If any course is running behind schedule, the concerned department or teacher is advised to conduct extra classes to complete the syllabus.

We have also installed suggestion boxes for students in main ISTAR building and Industrial Chemistry building. If there is any issue regarding the teaching method of any teacher, the teacher concerned is advised for necessary action.

The student attendance is reviewed and those with inadequate attendance are specially identified, their parents are informed and called for attending extra classes. Remedial classes are arranged for those who have joined late and failed in some courses.

The results are also reviewed and same is discussed during the Heads' meet to improve the student performance. CVM management and governing body is also monitoring and evaluating the performance of the institute.

Due to the above mentioned mechanisms our students are satisfied as syllabus is always completed in time and the college academic environment has been conducive to learning.

#### **These efforts have ensured**

- Nearly 100% results for all the departments of the institute.
- Placement of students in reputed companies and industries
- Sustaining of our intake in different departments

#### **6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

- The institute conducts open house, Alumni meetings and IQAC meetings through which policy matters are communicated and discussed with external stakeholders.
- Annual report is prepared and presented during annual day function.
- The Governing body meeting is conducted once in every academic year. Principal presents the summary of all activities and each head of the department presents detailed departmental report during the governing board meeting. With the help of guidance and valuable inputs from the members of governing body, action plans are

made and implemented for improving the performance of the institute.

**Any other relevant information regarding Governance Leadership and Management which the college would like to include.**

- ISTAR is the only institution of its kind in India conducting 13 diversified post graduate courses and Ph.D courses. Some of the P.G. programs of the institute are very unique and started for the first time in India. Successful recruitment and retention of faculties and good track record of placement are big achievements for the institute and CVM.
- Recently, Dr. P.M. Udani (Ex-Scientist-ISRO) having 29 years of research and development experience has taken over as the Head of the institute. His expertise in the field of Information System, Geospatial Technology, Project Management, team building and software development is used for deciding priority research areas and planning for students project work for computer science, environmental science & technology and instrumentation departments.
- The governing body of the institute consists of principals of various engineering colleges, science colleges & pharmacy college of CVM and department of computer science, SPU, nominated members from SPU and GTU. All members of governing body provide guidance and constructive suggestions for the effective implementation of institute policies.

## CRITERION VII: INNOVATIONS AND BEST PRACTICES

### 7.1 Environment Consciousness

#### 7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

No.

#### 7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

**The following initiatives are taken by the institute for making eco- friendly campus**

- Energy conservation: Solar water heater in hostels
- Care is taken to ensure that fans and lights are switched off when the students leave the room
- PNG is used in laboratories
- Limited use of air conditioners
- Use of ISI marked electric appliances
- Water harvesting in Industrial Chemistry building
- Tree Plantation in association with Nature Club, Vidyanagar
- Hazardous waste management
- e-waste management
- Wormi Composting
- Restriction on the use of Mobile
- No Smoking Zone

### 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 college.

The institute tries to develop supportive environment for innovation among the students.

- During the last four years the college has added multimedia resources to most of the class rooms and each department has been equipped with a PC, laptop, printing facility and internet connection. Moreover, the campus has been made Wi-Fi enabled
- Seminar presentation/projects have been introduced for practicing student centric teaching
- The innovation enabled teaching –learning. The students and faculty are doing

- innovative projects for thorough understanding of subjects
- M.Sc.IT and MCA departments have many faculties with Ph.D and the task of establishing R&D laboratories for demonstrating cloud computing, semantic web technology, geo-informatics, mobile computing & data mining is assigned to different faculty. This will lead to creating a centre of excellence in the institute.
  - Corporate training by faculties of Chemical Science department is taken up, modules are prepared for on-site and in house training.
  - The above mentioned innovative ideas and practice would be used for obtaining funding from different agencies.
  - Regularly seminars are conducted by research scholars ( doing Ph.D. inISTAR) for appraising students about the scope and oppertinities of their Ph.D. study

### **7.3 Best Practices**

#### **7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.**

#### **BEST PRACTICE NO: 1**

##### **1. Title**

Students Counseling

##### **2. Goal**

Counseling ia aimed at helping the students to help themselves. The objectives of counseling are:

- To acquaint the students with the institute, faculties , programmes & CBCS system
- To make them aware about the Aims and Objectives of the Institution
- To get information about difficulties faced by students, so that their problems/ difficulties can be solved
- To build a reciprocal relation between students and teacher.
- To encourage for developing special abilities and right attitudes
- To assist the student in planning for educational and career choice

Counselor provides necessary guidance for all above mentioned goals.

### **3. The Context**

**Describe any particular contextual feature or challenging issues that have had to be addressed in designing and implementing the Practice in about 150 words.**

More than 50 % of the teaching staff holds Ph.D degree and majority of them are well experienced in research and teaching area. All the teachers have ability to articulate concepts and ideas for better understanding of students. The most challenging issue is the busy schedule and diversity of the students joining the various programmes. The busy teaching schedules pose a challenge in preparing schedule for counseling session. The contact time for all teaching faculties is displayed on the department notice boards. Still it happens that when the counselor is free, the group is not free and vice versa .To solve this problem, the teachers allow the students to contact them any time even on telephone. Another issue that counselors are facing is contacting and communication with parents. Many of the parents live in different parts of the state and do not participate during open house. Parent-teachers meeting are conducted after the assessment of internal exam papers.

Counselor is also guiding students in defining project work, identifying institute and organization for their internship. Counselor is monitoring of project work of students and this helps in placement of students.

### **4. The Practice**

Describe the Practice and its implementation. Include anything about this practice that may be unique in the Indian higher education. Please also identify constraints or limitations, if any, in about 400 words.

The institute has a counseling cell with 2 senior faculties as coordinators. Designated coordinators monitor the counseling practice regularly based on inputs received from various faculty counselors.

There are 40 teachers involved in counseling practice. Each student is allotted a counselor. Normally the batch is selected from the group he/she is teaching so that it becomes easier for the counselor to meet the group frequently.

Students are informed through class room announcement and through notice board. Soon after the allotment, the concerned teacher holds a meeting with allotted students

by personal contact. A special form is given to all students to provide information like Photo, contact no. of Father, contact no. of local guardian, father's occupation, annual income etc. The monthly attendance for all subjects and marks obtained by the student in quiz/test is also included in the form. During every meeting the signature of student is taken for the maintenance of attendance record. Parents are informed by the telephone and letter whenever student is found absent.

The newly joined students are acquainted with the glorious history of the Institute, CVM, the facilities provided and the various activities conducted by the institute.

Students are also asked to inform about the problems face during the study and in the hostel. The head of the department and head of the institute are informed about the same. Mostly problems are resolved by the head of the institute and if required it is communicated to CVM for appropriate action.

Students are also counseled regarding examination and results. The counselor informs the parents about his/her ward's results after every internal exam. The college arranges open house (parent-teacher meeting) to interact with teacher counselor and parents are informed about his/her ward's progress.

Counseling Coordinators	Dr. M.M. Raj
	Dr. Himanshu Kapse

The details of counselors along with their departments and number of students allotted in the last academic year are given below.

Sr.No	Name of the faculty	Department	No.of students allotted
1	Dr.HirenSoni	EST	35
2	Dr.Pankaj Kumar	EST	34
3	Mrs.DhrutiSwapnil	EST	35
4	Ms.ApurvaRana	EST	22
5	Dr.Merlin Thomas	IC	25
6	Dr.Jigar Patel	IC	35
7	Dr.Rohit Dave	IC	35
8	Dr.Nirmal Patel	IC	35
9	Mr.BaijuVarughese	MIHS	29
10	Dr.S.O.Khanna	IT	20
11	Ms.Unnati Patel	IT	40

12	Ms.Suchita Patel	IT	35
13	Ms.Niky Jain	IT	35
14	Ms.KaminiSolanki	IT	40
15	Mr.ArpanRaval	IT	39
16	Dr.HimanshuKapse	INST	19
17	Mr.H.N.Parikh	INST	17
18	Dr.Dipika Patel	INST	19
19	Ms.Radhika Shah	INST	17
20	Dr.Sanjay Panjabi	OC	16
21	Dr.AbhishekDadhania	OC	23
22	Dr.Darshaha Patel	OC	23
23	Dr.PriyaSwaminarayan	MCA	07
24	Dr.Priyanka Sharma	MCA	16
25	Dr.KamleshVaishnav	MCA	16
26	Mr.Nitin Patel	MCA	16
27	Ms.KunjaliMankad	MCA	16
28	Mr.NirbhayChoubey	MCA	16
29	Dr.Narayan Joshi	MCA	16
30	Mr.ParagMoteria	MCA	17
31	Mr.Bhavesh Patel	MCA	16
32	Mr.MijalMistry	MCA	16
33	Mr.Pritesh Patel	MCA	17
34	Dr.M.M.Raj	PST	20
35	Dr.AmitThummar	PST	28
36	Dr.A.K.Dighe	SCT	20
37	Dr.Kalpesh Patel	SCT	25
38	Dr.Mayank Patel	SCT	30
39	Mr.Vikas Mishra	SCT	30
40	Mr.RupeshT.Shah	MV	27

## 5. Evidence of Success

**Provide evidence of success such as performance against targets and benchmarks and review results. What do these results indicate? Describe in about 200 words.**

This practice has been carried out since the last three years. The continuation of this practice is a great evidence of the success. Students became familiar with the teacher concerned and total records of student are managed by the counselor. This practice is also helpful to resolve some issues related to hostel facilities, examination drop out, co and extra-curricular activities.

The following steps are taken by the college through counseling experience.

- The students who participated in University sports activities and NSS events are

allowed to appear in arrear test

- One additional girls common room was made in Industrial Chemistry building as a follow-up action based on students requirements
- The hostel warden initiated action for the supply of hot water early in the morning so that students could easily attend the morning classes
- Provision of water storage tank is made in hostel

## **6. Problems Encountered and Resources Required**

**Please identify the problems encountered and resources required to implement the practice in about 150 words.**

The most challenging issue is the diversity of the students joining the various programmes. The busy teaching schedules poses difficulties in arranging frequent counselors meeting. To solve this problem, teachers allow the students to contact them any time on telephone for advice and guidance. To manage the meetings with students in a group the students are allotted to the teacher of practical batch. On many occasions, teacher has to hold meetings during spare time slot of practical batch. It is felt to put in more efforts for the placement of final year students. Convincing institutes, organizations and companies for allowing students for internship and providing required facilities is involved and difficult task. To solve this problem, students are divided in to groups and associated with faculty based on their domain of project work. Same faculty and students group works collectively for placement activities including preparation of schedule for campus interviews and inviting recruiting companies and agencies for conducting campus interviews.

## **7. Notes (Optional)**

**Any other information that may be relevant and important to the reader for adopting/ implementing the Best Practice in their institution about 150 words.**

CVM Estate Department is looking after maintenance of all CVM institutes and therefore burden on individual institutes is much reduced. This helps in devoting more time for core academic activities.

Governing body of the institute is constituted and meetings are conducted regularly. The best practices followed by other CVM institutes are also discussed and implementation plans are prepared for better functioning of the institute.

## **BEST PRACTICE NO: 2**

### **1. Title**

Creating a research culture among faculty and students

### **2. Goal**

To motivate the faculty and students to do research

- To identify emerging areas of research and to organize conferences, workshops and seminars to create awareness among faculty and students about emerging technology and relevant applications
- To identify thrust areas of research for faculty and department
- To create awareness about various funding agencies and motivate the faculty to write good research proposals
- To motivate the staff to pursue higher studies and specifically for Ph.D
- To create awareness about patent/intellectual rights
- To encourage consultancy in related areas
- To motivate faculty and students to present and publish research papers.
- To organize visits to research organization and national laboratories

### **3. Context**

Creating postgraduate man power of global standards requires committed participation of faculties and students in planning, decision making and implementation process. We have 23 faculties having research background. All the departments of the institute are actively engaged in research work.

The need of the society is to develop employable postgraduates having research mind sets, ethical values and entrepreneurship skills. The involvement of more and more faculty in research activities is required for the overall professional development of students. Encouraging faculty to do research will improve the subject understanding and delivery of lectures by faculty in class rooms. The research activities carried out in the institute provides exposure to the students regarding outcome and will make them better prepared for job and solving real world problems. Teaching learning process and conceptual understanding of the subjects can be improved by the research culture only. We have expertise in the following fields.

Sr.No	Department	Expertise
1.	Principal	Information System, Geospatial Technology, Space Technology, Project Management & Institution/Team Building
2.	EST	Environmental Science, Botany and Biotechnology
3.	IC	Polymer Precursors, Biostimulants, Bio polymers, Adsorption, Synergistic Extraction
4.	MCA	Cloud Computing, Semantic Web, Data Warehousing and Data Mining.
5.	SCT	UV curing coatings, Construction Chemicals, water base paint and resin formulations
6.	PST	Polymeric blends, Composites, Polymer modification
7.	OC	Coordination polymers, Copolymer surfactants
8.	INST	Micro Controller and Embedded System, Sensors, PLC , RF systems
9	IT	Mobile Computing and Application, IT Infrastructure, Geo informatics

#### 4. Practice

23 teachers are involved in research activity and during the last five years many research papers have been published in various National and International research journals and many papers presented in various seminars and national/ international conferences. Nine faculties are engaged in guiding Ph.D. scholars. Out of 23 faculties with Ph.D, 12 have been granted major and minor projects from various funding agencies like UGC, DST, NPTEL and MHRD .Faculties are also carrying out consultancy, analysis & testing as per requirements of industries. The management encourages the faculty to participate in various seminars and conferences.

#### 5. Evidence of success:

- An amount of Rs.25 lakhs was generated by Consultancy &Analytical testing during the last five years
- Research projects worth Rs.27 lakhs and funded by various agencies are currently handled by the institute

- 260 research papers have been published by faculty in the last five years
- Faculties have participated in 155 seminars/workshops/conference during the last 5 years
- 20 students are currently registered for Ph.D study under different departments of the institute.
- 31 % faculty members of our institute have worked as resource persons in various activities organized by external agencies
- Impressive placement record of the students and faith of students in joining in our institute
- Sustainability of faith of industries and recruiting agencies in institute and team of our faculty

These results indicate that the faculties of our institutes have efficiently blended /integrated research activities along with the teaching process.

#### **6. Problems Encountered and Resources Required**

The problems faced by the faculty engaged in research are mainly due to non availability of quality students for research work.

Our institute received 2(f) and 12(b) recognition by U.G.C in May 2012 only. Previously the research proposals to UGC had to be submitted in association with other institutes.

**Evaluative Report of the Departments  
(Environmental Science and Technology)**

1. **Name of the department:** Environmental Science and Technology
2. **Year of Establishment:** 2000
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

Name of the Program	Year of Establishment
M.Sc Environmental Science And Technology	2000
Ph.D in Environmental Science	2005
Ph.D in Biotechnology	2005
Ph.d in Botany	2005

4. **Names of Interdisciplinary courses and the departments/units involved:**

Sr. No	Name of course or subject	Name of the department involved
1	Hygiene	Dr. Hemendra Ravel, Baroda
2	Safety	Dr.N J Joshi, Ahmedabad
3	Fermentation tech.	Dr. Swati Narolkar, ARIBAS

5. **Annual/ semester/choice based credit system (programme wise):**  
Choice Based Credit System (Semester)
6. **Participation of the department in the courses offered by other departments:**  
Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**

Sr. No	Name of course or subject	Name of the department /university involved
1	Hygiene,Water Pollution,	Dr. Daniel Oerther, Missouri University of Science & Technology, Rolla, USA
2	Health Aspects	Ms.Sarah Oerther , Missouri University of Science & Technology, Rolla, USA

8. **Details of courses/programs discontinued (if any) with reasons:**  
Nil

**9. Number of teaching posts:**

Post	Sanctioned	Filled
Professors	1	1
Associate Professors	0	0
Asst. Professors	2	2
Adyapak Sahayak	2	1

**10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. / Ph.D. / M. Phil. etc.,)**

Sr. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided the last 4 years
1	Dr.Nirmal Kumar,J.I	M.Sc ,Ph.D FNEA, AFGSA	Professor and Head	Ecology, Environ.Biol. Nutrient Dynamics, Molecular toxicology	22	7 completed , 2 submitted synopsis, 6 ongoing
2	Dr.Hiren Soni	M.Sc. Ph.D	Asst. Prof.	Biodiversity, Limnology, Environmental Science	7	1 on going
3	Dr.Pankaj Kumar	M.Sc ,Ph.D	Asst. Prof.	Hydo-geology, Air Pollution	2	NIL
4	Ms.Dhruti S Patel	M Sc (Gold Medalist)	Adyapak Sahayak	Water pollution and GHGs	3	NIL

**11. List of senior visiting faculty:**

Sr. No	Name of the Person	Organization
1	Dr.Ankita Singh	ADIT,New Vidyanagar
2	Dr. Hemendra Ravel,	Consultancy, Baroda.

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 15%**

**13. Student-Teacher Ratio (programme wise): STR = 25:1**

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Type of Staff	Sanctioned	Filled
Technical & Administrative	04	04

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.:**

S.No	Degree	Faculty
1	Ph.D	3
2	M.Sc but Pursuing Ph.D	1

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:**

Total amount : Rs. 16,00,000/ + Two Ph.D students direct projects.

Sr. No	Name of PI	Title of Project	Funding Agency	Amount of funding	Status of project
1	Prof. NirmalKumar,J.I	Biochemical, Phylogenetic, Barcoding of marine seaweeds	UGC ,Delhi	Rs12,30,000/	On Going (2013-2016)
2	Prof. NirmalKumar,J.I	GHG emissions Air pollutants On Human health	GUJCOST, Gandhinagar	Rs.2,30,000/	On Going (2013-2016)
3	Ms.Dhruti Patel	Climate change and Air pollutant effect on Human health	UGC, Pune	1,40,000/	On Going (2013-2015)

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. And total grants received:**

Total amount : Approx. Rs. 64,00,000/

Name of the agency	Year		Total Budget(Rs.)	Title of the Projects
	Started	Completed		
1. Indian Institute of Sciences, Bangalore	1994	1996	1,00,000/-	Conservation of Biodiversity of Western Ghats – Navapur Forest, Maharashtra
2. Gujarat Forest Department, Gandhinagar	1997	1999	3,51,000/-	Environmental Studies of Certain Forests of Gujarat with special reference to Biodiversity & Ethnobotany
3. Gujarat Forest Department, Gandhinagar	1998	2000	3,50,000/-	Ecological Studies of Protected Areas of Gujarat with special reference to Anthropogenic Pressures
4. Ministry of Environment and Forest (MoEF), New Delhi	2003	2006	7, 25, 625/-	Environmental Studies of Wetland – Nal Sarovar of Gujarat with Particular Reference to Biodiversity, Eutrophication and Anthropogenic Pressures

5. sponsored by University Grants Commission, New Delhi.(C0.I)	2005	2008 (March)	5,06,600/-	Study of Biodiversity, Ethnobotany and Anthropogenic interventions of Saputara and Purna Forests of North Extreme Part of Western Ghats, India,
6. Foundation for Ecological Security,NDDDB Campus, Anand, 388 001 Gujarat.	2007	2009	6,00,000/	An evaluation of nutrient dynamics and plant community studies in dry tropical forests of Rajasthan:
7. Foundation for Ecological Security,NDDDB Campus, Anand, 388 001 Gujarat.	2007	2009	4,00,000/	Environmental study of some important wetland habitats of Anand district, Gujarat with special reference to biodiversity, eutrophication, anthropogenic pressures and their site specific management strategies
8. Ministry of Earth Science, New Delhi, India	2007	2010	7,93,000/	An Evaluation of Pollution status in relation to Biodiversity of Narmada and Tapi Rivers of Gujarat, India.
9. University Grants Commission, New Delhi, India.	2008	March, 2011	11,00,000/-	Morphological, Biochemical, Phylogenetic and Molecular characterization of xenobiotic Cyanobacteria
10. Ministry of Environment and Forest (MoEF), New Delhi	2008	March, 2011	14,89,000	Environmental studies of pollution inrelation to Biodiversity of Gulp of Kambat, Gujarat, India.

### 18. Research Centre /facility recognized by the University:

SICART is the sister institute of ISTAR which is funded by DST, New Delhi as a National Research Laboratory provides all the sophisticated instrumental facilities in the same building and is Ph.D program center of S P University, therefore the registration of Ph.D students is done through SICART

### 19. Publications :( last 5 years)

Number of papers published in peer reviewed journals (national / international) by faculty and students	128
Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	NIL
Monographs:	1
Chapter in Books:	13
Books Edited :	3

Books with ISBN/ISSN numbers with details of publishers	NIL
Citation Index :	NIL
SNIP:	NIL
SJR:	NIL
Impact factor :	NIL
h-index:	NIL

## 20. Areas of consultancy and income generated:

### Areas of Consultancy (Dr. Hiren B. Soni):

- i. **Consultant** in Environmental Impact Assessment (**EIA - Ecology & Biodiversity**), in Enviro Care Associates, Gujarat, affiliated with **NABET** (National Accreditation Board for Education & Training), Ministry of Environment & Forests (**MoEF**), New Delhi.
- ii. **Consultant** in Environmental Science (**Hydrology**), in United Nations Educational, Scientific and Cultural Organization (**UNESCO**).
- iii. Credited as United Nations Volunteers Programme (**UNVP**) in United Nations Organization (**UNO**).

## 21. Faculty as members in

- National committees
- International Committees
- Editorial Boards

No.	Professional Body/ Society	Name of the Faculty member	Membership
1	BOS, Biosciences, S.P.Uni.	Dr.Nirmal Kuamr,J.I	Member
2	National Environmental Association ,Ranchi	Dr.Nirmal Kuamr,J.I	Fellow
3	Gujarat Science Academy, Ahmedabad	Dr.Nirmal Kuamr,J.I	Asso. Fellow
4	Division of Environmental Chemistry, American Chemical Society, USA.	Dr.Nirmal Kuamr,J.I	Member
5	Asian J of Environmental Science,Muzaffarnagar, 251 001, India	Dr.Nirmal Kuamr,J.I	Executive council member
6	Editorial Board of the' International Journal of Pollution Research	Dr.Nirmal Kuamr,J.I	Member
7	Editorial Board of the' International Journal of Nature ,Environment and Pollution Technology	Dr.Nirmal Kuamr,J.I	Member
8	National Institute of Ecology (NIE), New Delhi	Dr.Nirmal Kuamr,J.I	Life member
9	Indian Association for Air Pollution Control, Baroda	Dr.Nirmal Kuamr,J.I	Life member

10	Indian Science Congress Association (ISCA), Kolkata	Dr.Nirmal Kuamr,J.I	Life member
11	Research Committee of Sophisticated Instrumentation Center for Applied Research & Testing (SICART), DST funded, Vallabh Vidyanagar, Gujarat	Dr. Nirmal Kumar,J.I.	Member
12	Member of an Editorial Board of Journal of Pharmacy, Biotechnology and Allied Sciences (JPBAS), India.	Dr. Hiren B. Soni	Editorial Member
13	Member of an Editorial Board of Life Sciences Leaflets (LSL), International Open Access Research Journal (IOARJ), Gujarat, India. (ISSN: 0976-1098)	Dr. Hiren B. Soni	Editorial Member
14	American Geophysical Union, USA	Dr. Pankaj Kumar	Member
15	Geological Society of America, USA	Dr. Pankaj Kumar	Member
16	Japanese Association of Hydrologist	Dr. Pankaj Kumar	Member

## 22. Student projects

- **Percentage of students who have done in-house projects including inter departmental/programme:**

Year	No. of students on roll	No. of students doing in-house projects.	%
2008-2009	32	4	12.5
2009-2010	47	5	10.63
2010-2011	44	5	11.36
2011-2012	43	5	11.6
2012-2013	68	7	10.29

- **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies:**

Year	No. of students on roll	No. of students doing outside projects.	%
2008-2009	32	28	87.5
2009-2010	47	42	89.37
2010-2011	44	38	88.64
2011-2012	43	38	88.4
2012-2013	68	61	89.71

### **23. Awards/ Recognitions received by faculty and students:**

#### **Name of Students/Faculty Event**

- **Awards & Honors received by Dr.Nirmal kumar,J.I**

1. Award of Exemplary performance as a teacher, researcher .student activities accelerator and all round praiseworthy work with cash prize of Rs. 20,000/ and a Certificate for the year 2007 by Charutar Vidya Mandal, Vallabh Vidya Nagar, Gujarat.
2. Conferred Dr. C.K. Shah award for the best research paper in the in the field of Plant sciences , Plant biotechnology and Agriculture Botany for the year 2007-8
3. National Environmentalists Association at Ranchi honored me as a FELLOW of National Environmentalists Association (FNEA) during National Conference on Environmental Science and Technology at Srikakolam , A.P on 18th January, 2009.
4. Recognized as a Student Inspirer in Science by Department of Science and Technology, New Delhi.(www.inspire-dst.gov.in)
5. Dr. C.K. Shah award for the best research paper in the in the field of Plant sciences , Plant biotechnology and Agriculture Botany for the year 2010-11.
6. Confirmed Bharat Shikshak Ratan Award for the year -2011 by Global Society for Health & Education Growth, G.D.Chambers, Delhi.
7. Gujarat Science Academy, Ahmadabad honored me as Associate Fellow in the year 2011.
8. ‘Hari Ohm 8. .’ 8. Hari Ohm Ashram’ Award for the year 1995 for my one of the research papers selected as the best papers in the field of Botany.
9. Reviewer of99.9. Reviewer of research papers in more than dozen national and international journals

- **Awards received by Dr.Hiren Kumar Soni**

1. Awardee of ‘ARIBAS Publication Award’ for highest number of National and International Publications during the Academic Year 2007-08.
2. Awardee of ‘Best Research Paper Award (Dr. C.K. Shah Award)’ in ‘Plant Sciences’ for the Year 2008-09 by Sardar Patel University, Vallabh Vidyanagar, Gujarat

3. Won 2nd Prize in Oral Presentation for Paper presented at National Seminar on “Bird Habitats & Their Conservation”, Organized by Department of Life Sciences, Hemchandracharya North Gujarat University (HNGU - Patan) and Bird Conservation Society of Gujarat (BCSG), on 16th February 2013.

- **Awards received by Dr.Pankaj Kumar**

1. Selected as Chapter Scientist for the WGII, Technical Support Unit, IPCC, Fifth Assessment Report. Currently, serving as a Chapter Scientist for the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC). Mainly associated with the IPCC’s Working Group-II report that focuses on “Impacts, Adaptation, and Vulnerability” with chapter assigned “Foundations for Decision making” and is scheduled for release in March 2014.
2. Awarded Japanese Government Monbukagakusho Scholarship (MEXT), for PhD study at University of Tsukuba, Japan.
3. Awarded Junior Research Fellowship by Indian Council of Medical Research (Government of India) to pursue research at Jawaharlal Nehru University, New Delhi, India- August 2006.
4. Awarded National Eligibility Test for Lectureship in Environmental Science by University Grant Commission (Ministry of Human Resource Development, Government of India) – December 2005.
5. Reviewer of research papers submitted to the Journal of Environmental Geochemistry and Health, Journal of Environmental Earth Science, Journal of Physics and Chemistry of the Earth, Industrial Hygiene and Toxicology, Journal Archives of Industrial Hygiene and Toxicology, Arabian Journal of Geosciences, Applied Water Science, Journal of Water Quality Exposure and Health, Journal of Soil Science and Environmental Management, International Journal of Water Resources and Environmental Engineering, Journal of Geography and Regional Planning. Have offered voluntary services to these journals so far.

**24. List of eminent academicians and scientists/ visitors to the department:**

- Dr. Ranjan Ravaliya, Bostan USA
- Dr. Caral Rice, Professor and Head, Hygiene and Health Department , University of Cincinnati, Ohio ,USA,
- Dr. Soct Clark, Professor and Head, Hygiene and Health Department , University of Cincinnati, Ohio ,USA,
- Ms. Sarah Daniel, Rolla, USA

- Prof. Daniel Oerther, EST, Rolla, USA.
- Prof. Subrashu Goswami, CEPT, Ahmedabad.

**25. Seminars/ Conferences/Workshops organized & the source of funding a) National:**  
Nil

**26. Student profile programme/course wise:**

Sr. No	Program	Year	Applications received	Selected	Enrolled		Pass percentage
					M	F	
1	EST	2009-10	46	46	6	40	100
2	EST	2010-2011	43	43	10	33	100
3	EST	2011- 2012	75	66	30	36	100
4	EST	2012-2013	57	57	31	25	100

**27. Diversity of Students**

Sr. No	Program	Year	No of student from same state	No. of student from other state	No. of student from Abroad
1	EST	2009-2010	100	0	0
2		2010-2011	93	07	0
3		2011-2012	97	03	0
4		2012-2013	95	05	0

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

01- NET

01-GATE

**29. Student progression**

Student progression	Against % enrolled
PG to M.Phil.	NA
PG to Ph.D.	3%
Ph.D. to Post-Doctoral	NA
Employed in campus recruitment	80 to 90%
Entrepreneurship/Self-employment /Higher studies in USA,UK, Australia	10-15%

**30. Details of Infrastructural facilities**

- **Library Books Available**

Sr. No.	Number of Titles	Number of Volumes	Number of Journals	Number of e-Journals
1	337	574	6	-----

- **Internet facilities for Staff & Students:**

10 Mbps Wi-Fi Campusz

Centralized computing facility along with departmental computer labs.

- **Class rooms with ICT facility:** LCD and Laptop

- **Laboratories:**

TWO, and one-Store room ( 10'X15'),

General Lab size: 35' X 60'

Research Lab size: 20 X 15 '

Store room: 10'X15'

**31. Number of students receiving financial assistance from college, university, government or other agencies:**

Year	Type of assistance	No. of students
2009-10		None
2010-11	Social minority	01
2011-12	OBC	03
	ST	01
2012-13	Social minority	01

**32. Details on student enrichment programmes (special lectures/workshops/ Seminar) with external experts:**

Particular	Name of Expert	Subject	Date
Short term course & Project work	Prof. Daniel Oerther, EST, Rolla, USA	Sustainable Development and Health.	20.12.2012 to 12.01.2013
Short term course & Project work	Ms. Sarah Daniel, Rolla, USA.	Sustainable Development and Health	20.12.2012 to 12.01.2013
Guest lecture	Dr. Scot Clark, Professor and Head, Hygiene and Health Department , University of Cincinnati, Ohio ,USA,	Hygiene and Safety	Once in every year in the month of December

Guest lecture	Dr. Carol Rice, Professor and Head, Hygiene and Health Department , University of Cincinnati, Ohio ,USA	Hygiene and Safety	Once in every year in the month of December
Guest lecture	Dr. Ranjan Ravaliya, Boston, USA	Climate change and Global Warming	Jan,2012
Guest lecture	Prof. Subrashu Goswami, CEPT, Ahmedabad.	Environmental Impact Assessment	11th July, 2010
Guest lecture	Ms. Shloka Parik and Abelon Energy Limited. Ahmedabad.	Climate change	4 <sup>th</sup> December,2010
Guest lecture	Mr. Gunajan Bhattacharya,	Global carbon sequestration	4 <sup>th</sup> December,2010

### 33. Teaching methods adopted to improve student learning:

- Effective Black Board teaching
- Experts Seminar on important topic on advanced EST
- Tutorial session on emerging topics for all students
- Active and collaborative teaching
- Use of LCD
- Power point/Educational Animations presentation
- Audio-video lectures

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Competition events like On the spot painting, greeting card making, collage making, poster making , rangoli , extempore, campus cleaning

#### Strength:

- Unique course entitled with M.Sc Environmental Science and Technology not a general M.Sc Environmental Science .Various aspects of technological components are covered
- Short term course and project work conducted by faculty of MST,Rolla,USA

- Free practical training program on instrumentation for three days at SICART for M.Sc IV semester students of EST every year.
- Course covers all aspects of Pollution control and Management , Ecology ,Environmental Biology and Hygiene and Safety ( four papers )
- Assistance provided in placements of students as the course entitled with M.Sc Environmental Science and Technology, so more number of opportunity rose to students even in Engineering, Pharmacy and Agriculture Colleges as Assistant Professors.
- Course is taught by experienced guest faculty
- This course is offered only in this center therefore we have flexibility in incorporation of curriculum as per the need of society and industries.
- Ph.D students also share their knowledge in their field of specialization with M.Sc students
- Instruments are installed and used for wastewater monitoring, air monitoring, solid and hazardous waste management, molecular aspects.
- Conducting study trips, industrial visits for appraising about the latest developments and theoretical knowledge emerging in the field
- Department continuously arrange quiz, presentations, surprising tests, internal examination for the overall quality development of students
- Active support from Principal and CVM Management

**Weaknesses:**

- More active participation of industry is required
- Improvement of student – teacher interactions on campus
- Improvement of presentation skills of the students

**Opportunities:**

- Students on completion of the M.Sc course in EST will have ample of opportunity in getting the jobs in Industries and research organizations of Gujarat
- Planning to start a short term or certificate course

- Trying to establish more joint venture schemes with research and academic organizations of national and international repute

### **Challenges**

- Maintaining of quality in competitive environment
- More efforts required for student placements in MNCs.
- Students required to clear the national competitive tests

### **Future Plan:**

- Short term course or certificate course can be started on Climate studies, Disaster risk and Hazards management
- Establishment of more liaisons with eminent personality & Industry.
- Department can enhance teaching learning and research by availing the existing facilities
- Organization of National and International Conference in collaboration with other MoU institutes
- Utilization of infrastructure is planned with Academic Staff Colleges for planning short term course
- Short term course on inrelation to Pollution , wastewater, air, hazardous waste monitoring and control

**EVALUATIVE REPORT OF THE DEPARTMENTS**  
(Details of last five years)

**1. NAME OF THE DEPARTMENT:**

Industrial Chemistry

**2. Year of Establishment:**

1990(From 1990 June-1999 May, the course was conducted in V.P. & R.P.T.P.Science college,Vallabh Vidyanagar)

**3. Names of the Programmes:**

Sr.No	Name of the course	Duration
1	M.Sc. Industrial Chemistry	4 semesters
2	Full time Ph.D in Industrial Chemistry	6 semesters
3	Part time Ph.D in Industrial Chemistry	8 semesters

**4. Names of interdisciplinary courses and the departments involved:**

Sr.No	Name of the course	departments involved
1	Industrial Management	BJVM Commerce College,Vidyanagar
2	Chemical Reaction Engg & utility Engineering	Department of Chemical Engineering,GCET
3	Processing of Polymers	Dept. of Polym Science & Tech.ISTAR
4	Polymer Characterisation	Dept. of Polymer Science & Tech.ISTAR
5	Technology of paint manufacturing,printing inks	Dept. of surface coating techn.,ISTAR
6	Technology of resins for surface coating	Dept. of surface coating technology,ISTAR

**5. Annual/Semester/Choice based credit system:**

Semester Choice based credit system

**6. Participation of the department in the courses offered by other departments:**

All the staff of the department is involved in the teaching of M.Sc. Polymer science and technology.

Sl.No	Name of staff	Subjects taught	Department
1	Dr.Merlin Thomas	Industrial Chemistry-I	Polymer Science & Technology
2		Industrial Chemistry –II	Polymer Science &

			Technology
3	Dr.Jigar Patel	Industrial Analysis	Polymer Science & Technology
4		Characterisation of raw materials & polymers-	Polymer Science & Technology
5	Dr.Rohit Dave	Sophisticated Instrumental Analysis	Polymer Science & Technology
6	Dr.Nirmal patel	Organic & Polymer Chemistry	Polymer Science & Technology

**7. Courses in collaboration with other universities, industries, foreign institutions etc.:**

- MoU with National Institute of Technology (NIT),Surat for for academic & research involvement of students & faculty
- MoU with Lupin Ltd., for student training ,scholarship & placement

**8. Details of courses/ programmes discontinued if any with reasons:**

Nil

**9. Number of teaching posts:**

Post	Sanctioned	Filled
Professors	1	1
Associate professors	1	----
Assistant professors	3	3

**10. Faculty profile**

Sr. No	Name	Qualification	Designation	No. of years of Experience	No. of students awarded Ph.D. in last 4 years
1	Dr.Merlin Thomas	<b>B.Tech.</b> (Chemical engg.) <b>M.Tech.</b> (Chemical engg.) <b>Ph.D.</b> (Chemical engg.)	Professor	23 years	1
2	Dr.Jigar V Patel	<b>B.Sc.</b> ( Industrial Chemistry) <b>M.Sc.</b> ( Industrial Chemistry) <b>Ph.D</b> (Industrial Chemistry)	Assistant professor	14 years	1

3	Dr.Rohit H Dave	<b>B.Sc.</b> ( Chemistry) <b>M.Sc.</b> ( Analytical Chemistry) <b>Ph.D</b> (Chemistry) PGDIM	Assistant professor	15 Years	0
4	Dr Nirmal K Patel	<b>B.Sc.</b> ( Industrial Chemistry) <b>M.Sc.</b> ( Industrial Chemistry) <b>Ph.D</b> (Industrial Chemistry)	Assistant Professor	13 years	0

**11. List of Senior visiting faculty**

Sr.No	Name	Organization
1	Dr.Sanjay Ajmeri,Ph.D.(Commerce) Associate prof	B.J.V.M.,BJVM Commerce college,Vidyanagar
2	Ms.Sejal Patel, M.E. ( Chemical Engineering ), Associate prof	Dept. of Chemical Engg.,G.H.Patel College of Engineering,Vidyanagar

**12. Percentage of lectures delivered and practical classes handled by temporary faculty:**

Nil

**13. Student-teachers ratio:**

27:1 (This does not take into account, the guest faculty)

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Type of staff	Sanctioned	Filled
Laboratory assistant	02	02
Hamal	02	02
Departmental Clerk	01	01

**15. Qualifications of teaching faculty**

Degree	No. Of faculty
Ph.D	04
Ph.D pursuing	00
PG	00
PG pursuing	00

**16. Number of faculty with ongoing projects from national and international funding agencies:**

03

**17. Departmental projects funded by DST, UGC, DBT, ICSSR etc.**

**Ongoing projects**

Sr.No	Name of staff	Agency	Name of the project	Amount in Rs
1	Dr.Merlin Thomas	UGC	Surfactants as additive for enhancement of enzyme aided phenol removal from aqueous effluents	75,000
2	Dr.Jigar Patel	UGC	Synthesis of bioplastics from renewable and waste	85,000
3	Dr.Nirmal Patel	NPTEL	Development of e- content for in the area of Heavy and fine chemicals	7,00,000
4		NPTEL	Development of e- content in the area of chemical process industries	7,00,000
5		UGC	bio conversation of glycerol	85,000

**18. Research centre/facility recognized by university:**

Recognized as Ph.D centre for Industrial Chemistry, by Sardar Patel University

**19. Publications in the last 5 years**

Number of Papers published in peer reviewed journals	24
Number of publications listed in international database	24
Patents	02
Monographs	Nil
Chapters in books	Nil
Books Edited	Nil
Books with ISBN	Nil
Citation index	Nil
SNIP	Nil
SJR	Nil
Impact factor	Nil
h-index	Nil

**20. Areas of consultancy and income generated:**

Nil

## 21. Faculty as members in various bodies

Sr.No.	Name of faculty	Association
1.	Dr. Merlin Thomas	Board of studies, SPU
2	Dr. Jigar V Patel	Board of studies, SPU
3	Dr. Rohit H Dave	Board of studies, SPU
4	Dr. Merlin Thomas	Life Member, Indian Institute of Chemical Engineers
5	Dr. Merlin Thomas	Senate Member ,SPU

## 22. Student projects

- Number of students who have done in-house projects including inter departmental/programme:

Year	No. of students enrolled	No. of students doing in-house projects	Percentage
2010-11	70	70	100
2011-12	69	69	100
2012-13	65	65	100

- **Percentage of students placed for projects in organizations outside the institution: Nil**

## 23. Awards/ Recognitions received by faculty and students:

Name of student/faculty	Event
Dr.Merlin Thomas	Award of Exemplary performance as a teacher, researcher .student activities accelerator and all round praiseworthy work with cash prize of Rs. 20,000/ and a Certificate for the year 2007 by Charutar Vidya Mandal, Vidya Nagar,Gujarat
Ravi Anuragi	Recipient of Lupin Scholarship
Kamlesh Diya	Recipient of MISA Scholarship
Vimal Vadher	Secured Second position in State Level Quiz Competition in Env. & Safety Aspects in Chemical Industries @ D.D.U., Nadiad,Nov,2011-12
Dixit Patel & Vimal Vadher	First prize in Inter class Quiz competition organized by Rotary Club,Anand Downtown, 2012-13
Sachin Thakker	First prize in table tennis in Inter college tournament of sardar patel university,2012-13

**24. List of eminent academicians and scientists/visitors to the department:**

- Prof. S.R.Patel, Retired Head of dept, Chemistry, SPU
- Prof. R.M.Patel, Retired Head of dept, Chemistry, SPU
- Mr. Paresh Brahmhatt, Co-ordinator, Vinayak Mission University
- Dr. Vashist Bhatt, Head-Chemical Science dept., NVPAS
- Dr. Yogendrasinh Chauhan, Manager, R & D, Bayer Material Science Division, Noida
- Mr. D.M. Joshi, Sr. Manager, Lupin Ltd., Ankleshwar
- Mr. Snehal Seth, Sr. Manager, Lupin Ltd., Dabasa

**25. Seminars/Conferences/Workshops organized and the source of funding-****National:**

A one day National Seminar on Best Practices in Pharmaceutical Industries is planned on 10 August, 2013.

**State Level**

Name of the work shop	Sponsorers
Live Life King Size, December 2010	Lupin Ltd., Ankleshwar

**International: Nil****26. Student profile programme/course wise:**

Sr. No.	Programme	Year	Applications Received	Selected	Enrolled	Pass percentage
1	Industrial Chemistry	2009-10	47	47	47	98
2		2010-11	82	70	70	100
3		2011-12	76	70	70	100
4		2012-13	70	66	66	100

**27. Diversity of Students**

Sr. No.	Programme	Year	% of Student from same state	% of student from other state	% of student from abroad
1	M.Sc Industrial Chemistry	2009-10	95	5	00
2		2010-11	86	14	00
3		2011-12	88	12	00
4		2012-13	95	5	00

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defence services etc.-**

Mr.Viraj Bhanvadia - GATE

**29. Student progression IN THE LAST FIVE YEARS**

<b>Student progression</b>	<b>No of students( last 4 years)Total – 220</b>
PG to M.Phil. /M.Tech/M.B.A	03
PG to Ph.D.	12
Employed through Campus selection	197
Entrepreneurs	05

**30. Details of infrastructural facilities**

- **Library Books Available:** 471
- **Number of Journals:** 05
  1. Chemical Engineering World
  2. Nandini Chemical Journal
  3. Journal of Scientific and industrial research
  4. Indian Journal of Chemical Technology
  5. Indian Journal of Natural Products nad Resources
- **Number of e-sources:** 01
- **Internet facilities for staff and students:**
  1. All staff are individually provided desktop with internet facility.
  2. Department has one laptop with Wi-Fi connection which is used in regular teaching
  3. Students are provided internet facility in the internet lab as well as the department computers and their personal laptops with Wi-Fi connection.
- **Class rooms with ICT facility:** 01
- **Laboratories:** 05+ 1 Chemical store
  1. Unit Operation/Synthesis Planning Laboratory
  2. Analytical /Research laboratory
  3. Analysis Lab
  4. Heat transfer lab

5. SICART facilities used by the department for training on instruments

**31. Number of students receiving financial assistance from college, university, government and other agencies.**

Year	Type of assistance	No. of students
2012-13	Social Minority	03
	SEBC/OBC	05
	SC/ST	02
	Management Scholarship	02
	Lupin Scholarship	01
	MISA Scholarship	01
2011-12	Social Minority	00
	SEBC/OBC	06
	SC/ST	00
	Management Scholarship	01
2010-11	Social Minority	01
	SEBC/OBC	07
	SC/ST	00
	Management Scholarship	02
2009-10	Social Minority	02
	SEBC/OBC	00
	SC/ST	00
	Management Scholarship	00

**32. Details on student enrichment programmes (special lectures/workshops/seminars) with external experts:**

Sr. No.	Name of speakers for Expert lectures/seminars	Topic
1	Mr.Jayen Barochia, Senior Research associate ,SABIC,Saudi Arabia	Recent development in petrochemical technology
2	Mr.Brijesh Parikh,Rasayan Labs,M.D.,Anand	Calibration of laboratory instruments
3	Mr.D.M.Joshi,Sr.Manager,Lupin Lt., Ankleshwar	Good Manufacturing Practices
4	Mr.Manoj Mavani,M.D.,Bhumi Electrochem,Ankleshwar	Chemicals for Electroplating
5	Dr.Prashant Pandya,Asian Paints, Mumbai	Role of Industrial chemists in polymer & paint R&Ds
6	Dr.Vashist Bhatt,Head-Chemical Science department,NVPAS	Conducting polymers
7	Dr.Yogendrasinh Chauhan,Manager,R &D,Bayer Material Science	Polymers and h-tech plastics

	Division, Noida	
8	Mr. Paresh Brahmhatt, Co-ordinator, Vinayak Mission University	Scope of Industrial Chemistry students for higher education
9	Mr. Umesh Gondaliya, Managing Director, Riddhi-Siddhi Chemicals, Ankleshwar	Solvent recovery operations
10	Mr. Mohammedi Khokhawala, Sr. Manager, Alembic Industries, Vadodara	Utility of Industrial Chemistry students in Pharmaceutical production units
11	Mr. Keyur Thakker, Sun Pharma, Vadodara	Recent developments in process engineering
12	Mr. Snehal Seth & Mr. Piyush Detroja, Lupin Ltd., Dabasa	Inculcation of managerial efficiency in students
13	Ms. Rima Seth, SICART	1 day practical training on
14	Dr. Gautam Chauhan, SICART	1 day practical training on FTIR
15	Dr. M.R. Tiwari, SICART	1 day practical training on GCMS

### 33. Teaching methods adopted to improve student learning:

- Effective blackboard teaching
- Expert's lectures on important topics
- Tutorial sessions
- Active and collaborative teaching.
- Use of LCD
- Power point/educational animations/educational videos
- NPTEL Video lectures
- Audio-visual lectures
- Assignments
- Best project reports of past students discussed as case studies

### 34. Participation in Institutional Social Responsibility and Extension activities:

- Blood donation camp
- Thalassemia camp
- NSS

### 35. SWOT analysis of the department and Future plans

#### Strength:

- Dedicated, Young and Dynamic faculty with Ph.D degree in diverse disciplines.

- The curriculum covers all the functional areas of chemical engineering, chemical technology and chemistry which make our students much more employable than students of pure chemistry & pure chemical engineering.
- Good retention of faculty
- Excellent training & placement record, 100 % placement through campus interviews
- Department has its own library in addition to the institute library.
- Mini research projects are allotted to the final semester students and supervised by internal faculty.
- Excellent Interaction with Industries in and around Gujarat State.
- Good laboratory facilities
- Good rapport between student and staff
- No gender inequality
- Approved Ph.D center for full time & part time Ph.D in Industrial Chemistry. 3 out of the 4 staff members are approved Ph.D guides.
- Use of ICT in teaching
- Regular Industrial Visits
- Use of SICART facility for 3 day training on analytical instruments to all final semester students
- Active support from Principal and CVM Management

**Weakness:**

- More faculty at Associate professor rank desired
- Department research required to have patents
- Department required to obtain more research funding from various agencies

**Opportunities:**

- Establishment of more liaison with industries
- Inter disciplinary research
- Consultancy based on laboratory facilities
- Incorporation of new technologies
- Opportunity to offer need based programmes to working professionals

**Challenges:**

- Development of soft skills in students
- Difficult to mould students as per changing industrial & technology requirements
- Societal and students perception of education solely as a means for getting job
- Delivering the course as per the intellectual level of admitted students
- Development of state of art research facilities

**Future plan:**

- Starting certificate & diploma courses at institute level
- Organize workshop/seminar
- MoUs with research organizations
- Corporate training and consultancy

## Evaluative Report of the Departments (MCA)

**1. Name of the department:**

MCA

**2. Year of Establishment:**

2001

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

Name of the Program	Year of Establishment
PG (MCA)	2001

**4. Names of Interdisciplinary courses and the departments/units involved:**

Following Interdisciplinary courses are included in curriculum of MCA Program:

Sr. No	Name of Interdisciplinary course	Department
1	Software Development for Embedded Systems	Instrumentation
2	Bioinformatics	Environmental Science & Technology

**5. Annual/ semester/choice based credit system (programme wise):**

Semester based credit system

**6. Participation of the department in the courses offered by other departments:**

Sr. No	Name of course	Name of Collaboration
1	Instrumentation and Computer	M.Sc. EST, ISTAR
2	Data Structure	M.Sc. IT, ISTAR
3	Windows programming	M.Sc. IT, ISTAR
4	PHP Programming	M.Sc. IT, ISTAR
5	Internet security	M.Sc. IT, ISTAR
6	Dist application development	M.Sc. IT, ISTAR
7	Web programming	M.Sc. IT, ISTAR
8	Java programming	M.Sc. IT, ISTAR

9	Network Application	M.Sc. IT, ISTAR
10	E-Commerce and M-Commerce	M.Sc. IT, ISTAR
11	Data warehousing	M.Sc. IT, ISTAR
12	Fundamentals of Programming Language	M.Sc. Instrumentation, ISTAR

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.:**

Nil

**8. Details of courses/programmes discontinued (if any) with reasons:**

Nil

**9. Number of teaching posts:**

Post	Sanctioned	Filled
Professors	1	2
Associate Professors	2	1
Asst. Professors	8	9

**10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. /Ph.D. / M. Phil. etc.,)**

SR. NO.	NAME	Qualifications	Designation	Specialization	No. of years of experience	No. of Ph.D. Students guided for the last 4 years
1	Dr.Priya Swaminarayan	Ph.D., MCA	Prof. & Head	Semantic Web	16	0
2	Dr.Priyanka Sharma	Ph.D., MCA	Professor	KBS	13	0
3	Dr.Kamlesh M Vaishnav	Ph.D., MCA	Associate Prof.	Semantic Web	17	0
4	Nitin B Patel	MCA	Asst. Prof.	MANET	31	0
5	Niirbhay Chaubey	Ph.D. (Pursuing), MCA	Asst. Prof.	AI	9 Teaching and 10 Industry	0
6	Bhavesh B Patel	MCA	Asst. Prof.	Database	9	0
7	Mijal A Mistry	Ph.D. (Pursuing), MCA	Asst. Prof.	AI	6	0
8	Dr.Narayan Joshi	Ph.D., MCA	Asst. Prof.	OS & Distributed Computing	10	0

9	Pritesh N Patel	Ph.D. (Pursuing), MCA	Asst. Prof.	Mobile & web Tech.	4	0
10	Parag Moteria	Ph.D. (Pursuing), MCA	Asst. Prof.	Data Mining	3	0
11	Subodhini Gupta	Ph.D. (Pursuing), MCA	Asst. Prof.	Data Mining	7	0
12	Megha Patel	Ph.D. (Pursuing), MCA	Asst. Prof.	Chem-informatics	4.8	0

**11. List of Senior Visiting Faculty:**

Sr. No.	Name of the Person	Organization
1	Dr. Sonalde Desai	Retired faculty of V.P. Science College

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**

Nil

**13. Student-Teacher Ratio (programme wise):**

STR = 15:1

No. of Students	No. of Faculty
180	12

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Type of Staff	Sanctioned	Filled
Technical & Administrative	09	09

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.:**

Degree	No of Faculty
PhD	04
PhD Pursuing	06
Post Graduate (PG)	02
PG Pursuing	00

**16. Number of faculty with ongoing projects from**

- National
- International funding agencies and grants received

Sr. No.	Name of PI	Title of Project	Funding Agency	Amount of Funding	Status of project
1	Dr. Priyanka Sharma	Development of Web and Mobile enabled Knowledge Based System for identification of irrigation water quality and suitability of crops	UGC India	Rs.70,000/-	Completed (2010 – 2012)
2	Dr. Priyanka Sharma	Analysis, Design and development of Intelligent system for monitoring and automation of multiple greenhouses	UGC India	Rs. 77,000/-	On Going (2013-2015)

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. And total grants received:**

Nil

**18. Research Centre /facility recognized by the University:**

- Ph.D Computer Science Center
- Establishment of Research Centre is in process.

**19. Publications:**

Number of papers published in peer reviewed journals (national / international) by faculty and students	50
Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	NIL
Monographs:	NIL
Chapter in Books:	2
Books Edited :	NIL

Books with ISBN/ISSN numbers with details of publishers	2
Citation Index :	NIL
SNIP:	NIL
SJR:	NIL
Impact factor :	NIL
h-index:	NIL

## 20. Areas of consultancy and income generated:

Name of the Area	Income generated
Crash course on .Net Technology	In process
1-Day Workshop on Semantic Web	In process
1-Day Workshop on SPSS	In process
Linux Server Setup (FTP, HTTP, Proxy)	In process
1-Day Workshop on Advanced Object Oriented Concepts and Programming	In process
1-Day Workshop on Knowledge Based System	In process

## 21. Faculty as members in

- National committees
- International Committees
- Editorial Boards

Sr. No.	Professional Body/Society	Name of Faculty Members	Membership No.
1	IEEE	Dr. Narayan Joshi	00109376
2		Mr. Nirbhay Chaubey	
3		Dr. Priyanka Sharma	
4	CSI	Dr. Priyanka Sharma	00146172
5		Dr. Swaminarayan Priya R.	Institutional Membership
6		Dr. Kamlesh Vaishnav	Institutional Membership
7		Dr. Samrat Khanna	Institutional Membership
8	International Association of Engineers (IAENG),	Dr. Priyanka Sharma	114878
9	SIGAI (Special Interest Group of Artificial	Dr. Priyanka Sharma	00146172

## 22. Student projects

- Percentage of students who have done in-house projects including inter departmental/programme:

Year	No. of students on roll	No. of students doing in-house projects.	%
2010-2011	58	58	100
2011-2012	48	48	100
2012-2013	58	58	100

- Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies:

Year	No. of students on roll	No. of students doing in-house projects.	%
2010 - 2011	58	58	100
2011 - 2012	48	48	100
2012 - 2013	58	56	96.55

6 months Final semester Project work at IT Industries (IDP-Industry Defined Project)

6 months final semester project work at ISTAR College (UDP – User Defined Project)

## 23. Awards/ Recognitions received by faculty and students:

Name of Students/Faculty	Event
Dr. Narayan Joshi	Best Research Paper Award at 2-day simposia organized by S. P. University
Dr. Narayan Joshi	Best Paper award at National Conference by AES Journals in Engineering, Technology & Management
Dr. Kamlesh Vaishnav	Best Paper Award, ETA – 2005, RAJKOT Best Paper Award, Tech Symposia – 2006, ANAND Second Best Research Paper Award, NCIIRP – 2006, BARDOLI

## 24. List of eminent academicians and scientists/ visitors to the department:

Eminent Academicians	Scientists/ visitors
Prof. D.B.Choksi	Dr. P.M.Udani
Prof. Sanjay Vij	Dr. H.S. Mazumdar

Prof. P.V. Virparia	
Prof. Priti Sajja	
Prof. D. M. Shah	
Prof. B. P. Patel	
Prof. Sahanubhoge	

## 25. Workshops organized & the source of funding

- **National:**

Particular	Name of Event	Source of Funding	Date	Remark
Workshop	NS2 (Network Simulator - 2)	Self	2010	National

- **International:** Nil

## 26. Student profile programme/course wise (Final Year):

Sr. No	Program	Year	Applications received	Selected	Enrolled		Pass percentage
					M	F	
1	MCA	2008-09 *	Admission through ACPC	60	47	13	96%
2		2009-10 *	Admission through ACPC	60	47	13	91.49%
3		2010-11 *	Admission through ACPC	60	48	12	96.30%
4		2011-12 *	Admission through ACPC	60	47	13	As students are in final year, result awaited
5		2012-13	Admission through ACPC	60	40	20	As students are in final year, result awaited

“\*“M=Male F=Female

“\*\*“: indicates year of admission

## 27. Diversity of Students

Sr. No	Program	Year	% of student from same state	% of student from other state	% of student from Abroad state
1	MCA	2008-2009	60	0	0
2		2009-2010	60	0	0
3		2010-2011	60	0	0
4		2011-2012	60	0	0
5		2012-2013	60	0	0

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc? ?

Name of Students	Competitive Examinations
NIL	NIL

## 29. Student progression

Student progression	Against % enrolled
PG to M.Phil.	NILNA
PG to Ph.D.	01
Ph.D. to Post-Doctoral	NIL
Employed • Campus selection • Other than campus	35% 65%
Entrepreneurship/Self-	00%

## 30. Details of Infrastructural facilities

### • Library Books Available

Sr. No.	Number of Titles	Number of Volumes	Number of Journals	Number of e-Journals
1	3559	7875	10 National 09 International	IEEE AICTE-

### • Internet facilities for Staff & Students:

- Wi-Fi Campus
- High-Speed Internet Lab
- Faculty room equipped with laptop and Internet Facility
- Each classroom equipped with LCD Projector and Internet Facility

- **Class rooms with**

ICT facility: 04

- **Laboratories: 04**

**31. Number of students receiving financial assistance from college, University, government or other agencies:**

Year	Type of assistance	No. of students
2012-13	Social Minority	4
	SEBC/OBC	7
	SC	1
2011-12	SEBC/OBC	7
	SC	2
	ST	2
2010-11	Social Minority	1
	SEBC/OBC	16
	SC	4
2009-10	Social Minority	5
	SEBC/OBC	13
	SC	4
	CVM Scholarship	9

**32. Details on studentenrichment programmes (special lectures/workshops/Seminar) with external experts:**

Particular	Name of Expert	Subject	Date
Guest Lecture	Dr. Darshan Choksi	Distributed Computing	JAN 2013
Guest lecture	Dr. Ashok Shanubhogue	Research Methodology	April' 12
Guest lecture	Mr. Bharat Patel	SDLC Cycle	April 2012
Guest lecture	Mr. Priyank	Dot Net Technology	April 2012
Workshop	Prof. Bhagirath Prajapati	Dot Net Framework	August 2012
Workshop	Prof. Nikhil Gondaliya	C# Language	August 2012
Workshop	Prof. Bharat Patel	Web Application Design	August 2012
Workshop	Prof. Brijesh Patel	ADO.NET	August 2012

Workshop	Prof. Mosin Hasan	AJAX and Web Service	August 2012
Workshop	Prof. Kamlesh Vaishnav	State Management	August 2012
Guest Lecture	Prof. Atul Patel,	Computer Networking	March 2011
Guest Lecture	Prof. Ninad Bhavsar	Distributed Computing	March 2011
Guest Lecture	Prof. Ninad Bhavsar	DBMS	March 2011

### **33. Teaching methods adopted to improve student learning:**

- Effective Black Board teaching
- Expert talk on important topic
- Tutorial session on subject
- Active and collaborative teaching
- Use of LCD
- Use of On-line materials such as slides, animated demo etc.
- Power point/Educational Animations presentation
- E-learning Material for teaching
- Live demonstration during practical sessions
- Audio-video lectures
- NPTEL E-Learning Material for teaching CVM-MBICT (<http://202.129.241.238/localg/>) on real IP of CVM
- Personality Development Program

### **34. Participation in Institutional Social Responsibility (ISR) and Extension activities:**

- Blood Donation Camp
- Thalassemia Camp
- NSS Camp
- Yoga Session

### **35. SWOT analysis of the department and Future plan**

#### **Strength**

- Out of 12 faculty members, 4 –Ph..D. Holders, 6 – Ph.D (Pursuing)
- Dedicated, young, dynamic and experienced faculty
- Faculty retention is good
- Faculties has diverse specializations
- Research & Development center for enrichment of knowledge
- Institute located in one of the eminent educational hub
- Institute managed by well-known trust CVM having 68+ years of experience

- Faculties have diverse specialization in areas of IT like Semantic Web, Web Technology, GIS, Data Mining etc.
- Active support from Principal and CVM Management

#### **Weaknesses**

- Department research can be used to have patents and IPR
- Department waiting for approval of R & D Center

#### **Opportunities**

- Department has scope for more research work
- Establishment of more liaisons with eminent personality & Industry.
- Department can enhance teaching learning and research by availing the facilities of sister institutes of CVM

#### **Challenges**

- Quality & competitive environment stresses puts the challenge for good result in GTU
- There is need to offer more programs covering contents beyond syllabi to make the students employable.
- Intake of students having poor merit-no in GCET exam
- Attract more number of students towards different IT program run by IT department.

#### **Future Plan**

- Organization of International Conference
- Improvement in result of students
- Incubation center for students
- Planning for workshops on latest trends in IT market

**Evaluative Report of the Departments  
(Last 5 years)**

**1. Name of the department:**

Instrumentation

**2. Year of Establishment:**

2002

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

Name of the Program	Year of Establishment
M. Sc. Instrumentation	2002

**4. Names of Interdisciplinary courses and the departments/units involved: Following Interdisciplinary courses are involved in curriculum of programs:**

Sr. No	Name of Interdisciplinary course	Department
1	8-bit Microprocessors & Microcontrollers	Electronics
2	Advanced Microprocessor Systems	
2	Industrial Communication Techniques	
3	Digital Signal Processing	
4	Optoelectronics	Electrical
5	Network Analysis	
6	Power Electronics	Computer
7	Programming in C / C++	
8	Artificial Intelligence & Neural Networks	Mechanical
9	Boiler Instrumentation	
10	Robotics & Fuzzy Logic	

**5. Annual/ semester/choice based credit system (programme wise):**

Semester / Choice based credit system

**6. Participation of the department in the courses offered by other departments:**

Sr. No	Name of course	Name of Collaboration
1	Analytical Instrumentation	V. P. Science College (as visiting faculty)
2	Spectroscopy & Biomedical Instrumentation	
3	Control System Components	
4	Control Room Instrumentation	
5	Analytical Instrumentation	S. M. Patel College of Home

	Science (as visiting faculty)
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**7. Courses in collaboration with other universities, industries, foreign institutions, etc.:**

- In pipeline with BSNL, Ahmedabad
- In pipeline with International Society of Automation (ISA)

**8. Details of courses / programmes discontinued (if any) with reasons:**

Nil

**9. Number of teaching posts:**

Post	Sanctioned	Filled
Professors	1	Nil
Associate Professors	Nil	Nil
Asst. Professors	3	3
Trainee Assistant Professor	1	1

**10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. / Ph.D. / M. Phil. etc.,)**

Sr. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1	Dr. H. N. Kapse	M. Sc. Ph.D.	Assistant Professor	Electronics Instrumentation	10	---
2	Mr. H. N. Parikh	M. Sc. NET	Assistant Professor	Electronics Instrumentation	14	---
3	Dr. D. B. Patel	M. Sc. Ph. D.	Assistant Professor	Physics	2	---
4	Ms. R. B. Shah	M. Sc.	Trainee Assistant Professor	Instrumentation	1	---

**11. List of visiting faculty**

Sr. No.	Name of the Person	Organization
1	Dr. Basudeb Bakshi	Principal, NVPAS college
2	Dr. K. K. Makhija	Rt. Prof., Electronics Dept. S.P. University
3	Mr. P. A. Lashkari	Head, Electronics-Instrumentation, V. P. Science
4	Mr. B. Hindocha	Electrical Dept. GCET
5	Mr. Ajay Patel	Mechatronics Dept., GCET
6	Mr. Ravi Rathod	Mechanical Dept., GCET

7	Mr. D. K. Dhruv	Instrumentation Dept., NVPAS college
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**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty**

Theory: 12 %

Practical: 25 %

**13. Student-Teacher Ratio (programme wise)**

STR = 17:1

No. of Students	No. of Faculty
71	4

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Type of Staff	Sanctioned	Filled
Lab assistant cum Technician	1	1
Peon	1	1

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.:**

Degree	No of Faculty
PhD	02
PhD Pursuing	nil
Post Graduate (PG)	02
PG Pursuing	nil

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:**

Sr. No.	Name of PI	Title of Project	Funding Agency	Amount of funding	Status of project
1	Mr. H. N. Parikh	Development of Bio-Medical data logging system for Patients under prolonged period of observation.	UGC	1,74,500/- (Minor)	Applied
2	Mr. H. N. Parikh	Development of reliable Patient Monitoring System for Remote locations with open architecture.	UGC	10,02,500/- (Major)	Applied

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. And total grants received:**

Sr. No.	Name of PI	Title of Project	Funding Agency	Amount of funding	Status of project
1	Mr. H. N. Parikh	Development of Electronic Devices based on Organic Semiconductors	UGC	Rs. 1,16,000/- (minor)	Completed

**18. Research Centre /facility recognized by the University:**

Sophisticated Instrumentation Centre for Applied Research and Testing (SICART)

**19. Publications:**

Number of papers published in peer reviewed journals (national / international) by faculty and students	14
Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	--
Monographs:	--
Chapter in Books:	--
Books Edited :	--
Books with ISBN/ISSN numbers with details of publishers	--
Citation Index :	
SNIP:	--
SJR:	--
Impact factor :	
h-index:	--

**20. Areas of consultancy and income generated:**

Name of the Area	Income generated
-----	-----

**21. Faculty as members in**

- National committees
- International Committees
- Editorial Boards

Sr. No.	Professional Body/ Society	Name of Faculty Members	Membership no.
1	Indian Association Physics Teacher	Dr. D. B. Patel	

**22. Student projects**

- Percentage of students who have done in-house projects including inter

**departmental/programme:**

Year	No. of students on roll	No. of students doing in-house projects.	%
2010-2011	11	11	100%
2011-2012	38	38	100%
2012-2013	33	33	100%

- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies: 0%

**23. Awards/ Recognitions received by faculty and students:**

Name of Students / Faculty	Event
Dr. H. N. Kapse	Received first prize for oral presentation for the research work coauthored at National Seminar on Novel Trends in Polymer Science & Technology (NSNTPST), Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar during March - 2007.
Dr. D. B. Patel	Best Oral Presentation Gujarat Science Congress 2007 held at Hemchandracharya North Gujarat University, Patan, Gujarat, India 11 <sup>th</sup> March, 2007
	Got best Poster award in seminar in Gujarat Science Congress 2008, held at Bhavnagar, 9 <sup>th</sup> March, 2008

**24. List of eminent academicians and scientists/ visitors to the department:**

Academicians	Visitors
Shri Nilesh Desai Group Director (MSDG & MSTG/MRSA), Space Application Centre, ISRO, Ahmedabad	Mr. Jadish Shukla, Director, Servilink Systems, Vadodara
Dr. V. N. Kamat, Principal, MBICT	Mr. Dharmesh Doshi, Manager, Essar Steel Ltd., Surat
Mr. H. B. Sharma, Sub Div. Engg. BSNL Training Centre, Ahmedabad	Mr. Chirag Dholakiya, Sr. Application Specialist, Waters India Ltd., Ahmedabad
	Mr. C. R. Kataria, Prop. Asaba Electronics, VUnagar

**25. Seminars/ Conferences/Workshops organized & the source of funding**

- National: Nil

Particular	Name of Event	Source of Funding	Date	Remark
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Conference	Frontiers in Instrumentation (FI-2012)	Charutar Vidyamandal ISTAR	18-02-2012	State level
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- **International:** Nil

**26. Student profile programme/course wise:**

Sr. No	Program	Year	Applications received	Selected	Enrolled	Pass percentage
1	M. Sc. Instrumentation	2008-09	NIL	NIL	NIL	----
2		2009-10	NIL	NIL	NIL	----
3		2010-11	11	11	11	100%
4		2011-12	40	40	40	100%
5		2012-13	34	34	34	100%

**27. Diversity of Students**

Sr. No	Program	Year	% of student from same state	% of student from other state	% of student from Abroad state
1	M. Sc. Instrumentation	2008-09	NIL	NIL	NIL
2		2009-10	NIL	NIL	NIL
3		2010-11	100%	NIL	NIL
4		2011-12	98 %	2%	NIL
5		2012-13	100%	NIL	NIL

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Name of Students	Competitive Examinations
Rikin Hingrajiya	Gate

**29. Student progression**

Student progression	Against % enrolled
PG to M. Tech	01 student
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed • Campus selection • Other than campus recruitment	10%
Entrepreneurship/Self	Nil

### 30. Details of Infrastructural facilities

- **Library Books Available**

Sr. No.	Number of Titles	Number of Volumes	Number of Journals	Number of e-Journals
1	412	720	1	--

- **Internet facilities for Staff & Students:**

- Wi-Fi Campus, Internet facility in Library & Staff room
- Centralized computing facility in Library

- **Class rooms with ICT facility: 01**

- **Laboratories: 01**

(Equipped with Temperature, Flow, and Level control PLC modules, HMI, Robotics, Fuzzy Logic, DSP, Microprocessor, Microcontrollers interfacing etc.)

### 31. Number of students receiving financial assistance from college, University, government or other agencies:

Year	Type of assistance	No. of students
2012-13	OBC/SEBC/SC	4
2011-12	OBC/SEBC	1

### 32. Details on student enrichment programmes (special lectures/workshops/ Seminar) with external experts:

Particular	Name of Expert	Subject	Date
Guest Lecture	Mr. C. R. Kataria, Asaba Electronics VUnagar	Transducers	08-02-08
Workshop	Forbes Marshall, Pune, at DDU Nadiad	Hands on Distributed Control Systems	4-8-08 to 8-8-08
Workshop	Vi Microsystems, Chennai, at Electronics Dept. SPU	Embedded Systems	23 & 24-03-09
Seminar	Rishi Prajapati from Emearson, Mumbai at NVPAS	Distributed Control System ,	28-8-10
Conference	Shri Nilesh Desai Group Director (MSDG &	Frontiers in	18-2-12

	MSTG/MRSA), Space Application Centre, ISRO, Ahmedabad Dr. V. N. Kamat, Principal, MBICT Mr. Dharmesh Doshi, Manager, Essar Steel Ltd., Surat Mr. Chirag Dholakiya, Sr. Application Specialist, Waters India Ltd., Ahmedabad	Instrumentation at ISTAR	
Guest Lecture	Mr. H. B. Sharma, Sub Div. Engg. BSNL training Centre, Ahmedabad	BSNL programs & Scope	15-2-13
Technical Session-I& II	Pratik Suthar from M. Manchal & Sons, Vadodara	PLC (Siemens S7-300/1200)	5-3-13 & 5-4-13
Guest Lecture	Mr. Jadish Shukla, Director, Servilink, Vadodara	Process Automation	4-4-13

### 33. Teaching methods adopted to improve student learning:

- Black Board teaching
- Experts Seminar on important topic
- Technical session on specialized subject
- Active and collaborative teaching
- Use of LCD
- Power point/Educational presentation
- Industrial Visits
- In plant trainings

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Blood Donation Camp
- NSS activities

### 35. SWOT analysis of the department and Future plans

#### Strength:

- Young, dynamic faculty with dedication
- Faculty retention is good
- Faculties have diverse area of interests

- Healthy competitive atmosphere among students
- Active support from Principal and CVM Management

**Weaknesses:**

- Department waiting for approval of Ph.D. program

**Opportunities:**

- Department has scope to start PhD course
- Establishment of more liaison with reputed Institutes and Industries
- Involvement of scientific and industry experts for improvement and designing new course.
- Enhancement of students' skills by interaction with Technocrate from Industries

**Challenges**

- Competitive environment puts the challenge for PG program
- Tie up with recruiting industries for campus interviews

**Future Plan:**

- Organization of National Conferences / Workshops
- Start short term technical courses in domain like
- Mobile Communication, RF Systems & VSAT Technology, PLC-SCADA etc.
- Collaborations with Industries

## Evaluative Report of the Departments

### (M.Sc. Information Technology)

**1. Name of the department:**

M.Sc. (Information Technology)

**2. Year of Establishment:**

2010 (before 2010, the name of the course was Information Science)

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., and Integrated Masters; Integrated Ph.D., etc.):**

Name of the Program	Year of Establishment
PG – M.Sc. (Information Technology)	2010

**4. Names of Interdisciplinary courses and the departments / units involved:**

Nil

**5. Annual/semester/choice based credit system (programme wise):**

Semester Choice Based Credit System

**6. Participation of the department in the courses offered by other departments:**

Nil

**7. Courses in collaboration with other universities, industries, for eign institutions, etc.:**

Nil

**8. Details of courses/programmes discontinued (if any) with reasons:**

Nil

**9. Number of teaching posts:**

Post	Sanctioned	Filled
Professors	1	1
Asst. Professors	2	2
Adhyapak Sahayak	3	3

**10. Faculty profile with name, qualification, designation, Specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.)**

Sr. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided in the last 4 years
1	Dr. S. O. Khanna	PhD CS, MTECH (IT),MCA	Professor & Head	Web Technology, Mobile Computing	15	NIL
2	Mrs. Niky K. Jain	MCA	Asst. Prof.	Java, C++, Software Engineering	3	NIL
3	Mrs. Unnati A. Patel	MCA	Asst. Prof.	Software Management & Engineering, Software Analysis & Design, Operating Systems	Industry - 06 Teaching- 01	NIL
4	Mrs. Suchita B. Patel	MCA	Asst. Prof.	Information System, Mathematics for Computer Science, C++, C#.Net	Industry- 02 Teaching- 03	NIL
5	Mrs. Kamini H. Solanki	M.Sc(IT), M.Phil, Pursuing Ph.D.	Adhyapak Sahayak	Networking	3	NIL
6	Mr. Arpan G. Raval	MCA	Adhyapak Sahayak	Web Development PHP	3	NIL

#### 11. List of senior visiting faculty:

Sr. No.	Name of the Person	Organization
1	Dr.D. B. Choksi	PG Dept. of Computer Science, SPU
2	Dr. P. V. Virparia	PG Dept. of Computer Science, SPU
3	Dr. B. B. Patel	PG Dept. of Computer Science, SPU
4	Dr. Priti Sajja	PG Dept. of Computer Science, SPU
5	Dr. Shashikant Patel	ISRO

#### 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Nil

**13. Student-Teacher Ratio(programme wise):**

S T R =34:1

No. of Students	No. of Faculty
205	6

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Type of Staff	Sanctioned	Filled
Lab Assistance	02	02

**15. Qualifications of teaching faculty with DSC/D.Litt/Ph.D/MPhil/PG.:**

Degree	No of Faculty
Ph.D	01
Ph.D Pursuing	02
Post Graduate(PG)	03
PGPursuing	-

**16. Number of faculty with ongoing projects from**

- National
- International funding agencies and grants received: Nil

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, Etc.****Andtotalgrants received:**

Sr. No.	Name of PI	Title of Project	Funding Agency	Amount of funding	Status of project
1	Dr. S. O. Khanna	Wireless home security system with Mobile (WHSSM)	DST, New Delhi	Rs. 8,52,200/-	On Going (2011-2013)

**18. Research Centre/facilety recognized by the University:**

- PhD Computer Science Centre

**19. Publications:**

Number of papers published in peer reviewed journals (national / international) by faculty and students	50
Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.)	NIL
Monographs:	NIL
Chapter in Books:	NIL
Books Edited :	NIL
Books with ISBN/ISSN numbers with details of publishers	NIL
Citation Index:	NIL
SNIP:	NIL
SJR:	NIL
Impact factor :	NIL
h-index:	NIL

**20. Areas of consultancy and income generated:**

Name of the Area	Income generated
Web & Wireless Technology	2 lakh

**21. Faculty as members in**

- National committees
- International Committees
- Editorial Boards

Sr. No.	Professional Body/Society	Name of Faculty
1	Editorial	Dr S.O.khanna
2	Editorial	Mrs Suchita Patel

**22. Student projects**

- **Percentage of students who have done in-house projects including inter departmental/programme:**  
Nil
- **Percentage of students placed for projects in organizations Outside the institution i.e. in Research:**

100%

• **Laboratories/Industry/other agencies:**

Year	No. of students on roll	No. of students doing project outside	%
2010-11	67	67	100
2011-12	67	67	100
2012-13	138	Ongoing batch	----

**23. Awards/Recognitions received by faculty and students:**

Name of Students/Faculty	Event
Dr. S. O. Khanna	Charutar Gaurav Award -2013

**24. List of eminent academicians and scientists/visitors to the department:**

Eminent Academicians	Scientists/visitors
Dr.D. B. Choksi	Dr. P.M.Udani
Dr. P. V. Virparia	Dr. H.S. Mazumdar
Dr. B. B. Patel	
Dr. Priti Sajja	
Dr. S. K. Vij	

**25. Seminars/Conferences/Workshops organized & the source of funding**

- **National:** Nil
- **International:** Nil

**26. Student profile programme/course wise:**

Sr. No	Program	Year	Applications received	Selected	Enrolled		Pass percentage
					*M	*F	
1	M.Sc.(IT)	2010-2011	70	70	47	23	100%
2		2011-2012	70	70	38	32	100%
3		2012-2013	140	138	96	42	100%

**27. Diversity of Students**

Sr. No	Program	Year	% of student from same state	% of student from other state	% of student from Abroad state
1	M.Sc.(IT)	2010-2011	100%	100%	0%
2		2011-2012	100%	100%	0%
3		2012-2013	100%	100%	0%

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services etc?**

Nil

**29. Student progression**

Student progression	Against % enrolled
UG to PG	NA
PG to M.Phil.	NA
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
Employed • Campus selection • Other than campus	25% 50%
Entrepreneurship/Self	05%

**30. Details of Infrastructural facilities**

• **Library Books Available**

Sr. No.	Number of Titles	Number of Volumes	Number of Journals	Number of Journals
1	436	917	Nil	Nil

• **Internet facilities for Staff & Students:**

- 10 Mbps WI-Fi Campus
- Centralized Computing facility along with departmental computer lab
- Each faculty with laptop
- Additional Internet Lab & Laptop Lab

• **Class rooms with ICT facility: 04**

• **Laboratories: 03**

**31. Number of students receiving financial assistance from college, University, government or other agencies:**

Year	Type of assistance	No. of students
2012-13	Minority	01
	OBC/SEBC	03
	ST	01
2011-12	OBC-FS	
	OBC/SEBC	02
	ST	01
	Minority	
2010-11	Minority	02

**32. Details on student enrichment programs (special lectures/ workshops/ Seminar) with external experts:**

Sr.No	Name of Expert	Subject	Date
1	Dr. D. B. Choksi	Distributing Computing	27/07/2012
2	Dr. P. V. Virpariya	Data Warehousing	08/08/2012
3	Dr. Priti Sajja	Artificial Intelligence	03/08/2012
4	Dr. B.B. Patel	RDBMS	02/11/2012
5	Shree Shashikant Patel Dr. P.M. Udani	Open Source GIS	

**33. Teaching methods adopted to improve student learning:**

- Effective Black Boardteaching
- Expert's Seminar on important topics
- Tutorial session covering subject topics.
- Active andcollaborativeteaching
- Use of LCD
- We are having BISAG terminal
- Power point/EducationalAnimationspresentation
- NPTEL e-learningMaterial for teaching CVM-MBICT (<http://202.129.241.238/localg/>) on real IP of CVM.

- Audio-videlectures
- PDP programming

#### **34. Participation in Institutional Social Responsibility (ISR) and Extension activities:**

- Blood Donation Camp
- NSS Camp
- Yoga Session
- Social Trust (Mogri)
- PDP Programme

#### **35. SWOT analysis of the department and Future Plans**

##### **Strength:**

- Dedicated, young and dynamic faculty
- Faculty retention is good
- Faculty has diverse specializations in areas of IT like Mobile Communication, Web Technology, Geoinformatics
- IT and Electronics industries are located around Institute
- Web Development centre for IT enabled services & Web Hosting
- In-house NOC centre for distribution & maintenance of 100 MBPS bandwidth of 45 CVM institutes.
- Web Hosting & maintenance of all CVM institutes
- 3000 anti-virus software operational for CVM institutes
- Active support from Principal and CVM Management

##### **Weaknesses:**

- Department waiting for approval of R&D center
- Department research can be used to have patents and IPR
- Department waiting for the approval of MOU with other foreign Institutions and R&D centre like ISRO

##### **Opportunities:**

- Department has scope to start new specialization in M.Sc. Courses.

- Establishment of more liaison with eminent personalities & Industry
- Department can enhance teaching learning and research by availing the facilities.

**Challenges:**

- Faculty development & taking up research activities in emerging areas of IT.
- Quality in maintaining and sustainability of competitive environment is a big challenge for PG programs
- There is need to offer more programs covering contents beyond syllabi to make the students employable

**FuturePlan:**

- Organization of International Conference
- Start of PG and Ph.D.Programs
- Incubation Centre for students

**Evaluative Report of the Departments  
(Organic Chemistry)**

**1. Name of the department:**

Organic Chemistry

**2. Year of Establishment:**

2010

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

Name of the Program	Year of Establishment
PG (Organic Chemistry)	2010

**4. Names of Interdisciplinary courses and the departments / units involved:  
Following Interdisciplinary courses are involved in curriculum of programs:**

Sr. No.	Name of Interdisciplinary course	Department
Nil		

**5. Annual/ semester/choice based credit system (programme wise):**

Semester structured choice based credit system

**6. Participation of the department in the courses offered by other departments:**

Sr. No	Name of course	Name of Collaboration
Nil		

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.:**

Nil

**8. Details of courses/programmes discontinued (if any) with reasons:**

Nil

**9. Number of teaching posts:**

Post	Sanctioned	Filled
Professors	1	0
Associate Professors	0	0
Asst. Professors	3	3

**10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. / Ph.D. / M. Phil. etc.,)**

Sr. No.	Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D. Students guided for the last 4 years
1.	Dr. Sanjay Panjabi	M.Sc., Ph.D.	Assistant professor	Physical Chemistry	06	NIL
2.	Dr. Abhishek Dadhania	M.Sc., Ph.D.	Assistant professor	Organic Chemistry	01	NIL
3.	Dr. Darshana Patel	M.Sc., Ph.D.	Assistant professor	Inorganic Chemistry	01	NIL

**11. List of senior visiting faculty:**

Sr. No.	Name of the Person	Organization
1.	Dr. K. K. Makhija	Electronic Dept., S. P. University
2.	Dr. V. D. Bhatt	N. V. Patel College of Pure and Applied Sciences, V. V. Nagar
3.	Dr. K. N. Patel	
4.	Dr. Bhavin Patel	
5.	Dr. Smita Srivastav	

**12. Percentage of lectures delivered and practical classes handled(programme wise)by temporary faculty:**

Nil

**13. Student-Teacher Ratio (programme wise):**

STR = 20:1

No. of Students	No. of Faculty
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60	03
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**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Type of Staff	Sanctioned	Filled
Lab Assistant and Peon	03	03

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.:**

Degree	No of Faculty
PhD	03
PhD Pursuing	NIL
Post Graduate (PG)	NIL
PG Pursuing	NIL

**16. Number of faculty with ongoing projects from a)National b) International funding agencies and grants received:**

Sr. No.	Name of PI	Title of Project	Funding Agency	Amount of funding	Status of project
1	Dr. Darshana Patel	Studies on novel coordination polymers containing 8 hydroxy quinoline derivatives as selective fluorescent sensors for Fe <sup>+3</sup> metal ion	UGC (WRO)	75,000=00	On Going (2013-2015)

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. And total grants received:**

- One minor project funded by UGC entitled “Studies on novel coordination polymers containing 8 hydroxy quinoline derivatives as selective fluorescent sensors for Fe<sup>+3</sup> metal ion.”

**18. Research Centre /facility recognized by the University:**

Nil

**19. Publications:**

Number of papers published in peer reviewed journals (national / international) by faculty and students	12
Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	NIL
Monographs:	NIL
Chapter in Books:	NIL
Books Edited :	NIL
Books with ISBN/ISSN numbers with details of publishers	NIL
Citation Index :	NIL
SNIP:	NIL
SJR:	NIL
Impact factor :	1.2
h-index:	NIL

**20. Areas of consultancy and income generated:**

Name of the Area	Income generated
	Nil

**21. Faculty as members in**

- National committees
- International Committees
- Editorial Boards....

Sr. No.	Professional Body/ Society	Name of Faculty Members
1	Member of Board of study, Sardar Patel University	Dr. Sanjay Panjabi

**22. Student projects**

- **Percentage of students who have done in-house projects including inter departmental/programme:**

Year	No. of students on roll	No. of students doing in-house projects.	%
Project work is not part of M.Sc. Organic chemistry program and teaching and practical classes are conducted for all four semesters			

- **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies:**

Nil

**23. Awards/ Recognitions received by faculty and students:**

Name of Students/Faculty	Event
Nil	

**24. List of eminent academicians and scientists/ visitors to the department:**

Nil

**25. Seminars/ Conferences/Workshops organized & the source of funding**

- National:**

Particular	Name of Event	Source of Funding	Date	Remark
Nil				

- International:**

Nil

**26. Student profile programme/course wise:**

Sr. No.	Program	Year	Application received	Selected	Enrolled		Pass percentage
					M	F	
1.	M. Sc (Organic Chemistry)	2010-11	33	29	28	1	100
2.		2011-12	70	68	51	17	81
3.		2012-13	12	12	6	6	Students in final year

**27. Diversity of Students**

Sr. No	Program	Year	% of student from same state	% of student from other state	% of student from Abroad state
1	M. Sc. (Organic Chemistry)	2010-11	100	0	0
2		2011-12	94	6	0
3		2012-13	100	0	0

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Nil

## 29. Student Progression

Student progression	Against % enrolled
UG to PG	NA
PG to M.Phil.	NA
PG to Ph.D.	2 students are preparing Ph.D exam
Ph.D. to Post-Doctoral	Department being just 2 years old no student has joined for Ph.D programme
Employed • Campus selection • Other than campus recruitment	50% for 2012-13 Batch
Entrepreneurship/Self-employment	NIL

## 30. Details of Infrastructural facilities

### • Library Books Available

Sr. No.	Number of Titles	Number of Volumes	Number of Journals	Number of Journals
1	90	320	Nil	Nil

### • Internet facilities for Staff & Students:

- 10 Mbps Internet connectivity and Wi-Fi facility is provided for staff and students.
- Centralized Internet lab facility is available.

### • Class rooms with ICT facility:

02

### • Laboratories:

03

### • Equipment detail of all the laboratories:

P<sup>H</sup> Metry, Potentiometry, Conductometry, Polarimetry, Refractometer, Spectrophotometer etc.

### • SICART Facility:

Instruments like HPLC, FT-IR, NMR, UV-Visible, GC, GC-MS etc.

## 31. Number of students receiving financial assistance from college, University, government or other agencies:

Year	Type of assistance	No. of students
2010-11	Social Minority	01
	OBC/SEBC	01
	SC	NIL
	ST	NIL
2011-12	Social Minority	Nil
	OBC/SEBC	05
	SC	02
	ST	
2012-13	Social Minority	Nil
	OBC/SEBC	02
	SC	02
	ST	01

**32. Details on student enrichment programmes (special lectures/workshops/ Seminar) with external experts:**

Particular	Name of Expert	Subject
Guest lecture	Leena Gupta	Intellectual properties right
Workshop	Ms. Rima Seth (SICART)	Practical training on HPLC
Workshop	Dr. Gautam Chauhan	Training on FTIR
Workshop	Dr. M. R.Tiwari	Training on GCMS

**33. Teaching methods adopted to improve student learning:**

- Effective Black Board teaching
- Expert's Seminar on important topic
- Tutorial session on required subjects and topics
- Active and collaborative teaching
- Use of LCD
- Power point/Educational Animations presentation
- Audio-video lectures

**34. Participation in Institutional Social Responsibility (ISR) and Extension activities:**

- Blood Donation Camp

- NSS camp

### **35. SWOT analysis of the department and Future plans**

#### **Strength:**

- Ph.D entrance examination cell (PEEC) for preparing students is conducted by all the faculties in-house facilities
- Dedicated, young and dynamic faculties and all having Ph.D
- Faculty retention is good
- Faculties has diverse specializations in many core courses
  - Nearly 100% placement, sicart facility for students
  - Active support from Principal and CVM Management

#### **Opportunities:**

- Establishment of more liaisons with eminent personality & Industry.
- To start 3 month certificate course jointly with industry partner & SICART

#### **Challenges:**

- More programs covering contents beyond syllabi are required to be conducted for making student employable.

#### **Future Plan:**

- Organization of National Conference

**Evaluative Report of the Departments**  
(MIHS Department)

**1. Name of the department:**

Master of Industrial Hygiene and Safety.

**2. Year of Establishment:**

1997 at BVM subsequently transferred to ISTAR in 1999

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated:**

Master of Industrial Hygiene and Safety

Name of programme	Year of Establishment
Master of Industrial Hygiene and Safety	1997

**4. Names of Interdisciplinary courses and the departments/units involved:**

Following Interdisciplinary courses are involved in curriculum of programs:

Sr. No.	Name of Interdisciplinary course	Department Of Institute	Department of other Institute
1	Introduction to Human Physiology		Departments Pramukh Swami Medical College
2	Introduction to Biostatistics and Epidemiology		
3	(a)Air Sampling Analysis (b) Principles of Ergonomics	(a) only EST Department of ISTAR	(a) & (b) Environmental Engg Department and Production Engg dept of BVM Engg. College VVNagar
4	Safety in Chemical Industries	Chemical Sciences	Chemical Engg. Department of GCET
5	Dissertation/Project Work	MIHS Department of ISTAR	Safety Depts of Various Industries

**5. Annual/ semester/choice based credit system (programme wise)**

- Semester system + credit system with 10 point score in MIHS and Valuation Department
- All Remaining Dept. Semester with Choice Based Credit System

**6. Participation of the department in the courses offered by other departments**

Sr. No.	Name of Course	Department of	Faculty of MIHS
1	Waste Management and	EST	Prof. J.H.Patel

	Control Technology		
2	Safety Principle (partial)	EST	Prof. Baiju. V.
3	EIA in Valuation	Valuation	Prof. J.H.Patel

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.**

- **Collaboration with Foreign Institute**

The Program is run with collaboration of Environment and Industrial Hygiene programme of the University of Cincinnati, Ohio, USA. One faculty from the University of Cincinnati regularly comes to India & teaches important aspects and confirm the certificate to each student of the MIHS programme.

- **National Institute and local Institute** of the campus and around the campus and from the state of Gujarat the following collaborative courses are run

Sr. No.	Name of the course	Department of other Institute/University / Industries
1	Introduction to Human Physiology	Departments of Physiology , Community Medicine and Biostastics of Pramukh Swami Medical College Karamsad
2	Introduction to Biostatistics and Epidemiology	
3	Introduction to Industrial Hygiene, Occupational Health &	Scientist from National Institute of Occupation Health (NIOH) Ahmedabad
4	Hazard Identification, Assessment and Control Techniques	
5	Safety Engineering- I and II	Industrial experts from various industries and consultant
6	Safety in Chemical Industries	Chemical Engg. Department of GCET GTU
7	Dissertation/Project Work	Safety Depts of Various Industries like 3M, Essar power, L & T , Lupin and many mor

**8. Details of courses/programmes discontinued (if any) with reasons:**

Nil

**9. Number of Teaching posts:**

Sr. No	Post Sanctioned	Filled Since
1	Adjunct Professor	19-07-2011
2	Assistant Professor	16-06-2012

3	Associate Professor	advertized
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**10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)**

Sr. No	Name faculty	Specilization	Post	Qualification
1	Prof. J.H.Patel	Environmental Engineering	Adjunct Professor	B.E. © ,M.E. (Env. Engg.)
2	Prof. Baiju Verghese	Hygiene and safety	Assistant Professor	B.Sc. (chemistry) M.Sc( Material sci.), Master Of Industrial hygiene and safety

**11. List of senior visiting faculty**

Sr. No.	Name of the course	Name of Visiting faculty	Department of other Institute/University / Industries
1	Introduction to Human Physiology	Dr. S.K. Singh and his team name two only Dr. Wasim sheikh Ms Dr. Archana Nibalkar,	Departments of Physiology , Community Medicine and biostastic of Pramukh Swami Medical College Karamsad
2	Introduction to Biostatistics and Epidemiology	Dr. Dinesh bhanderi Dr.Tushar patel Ms Dr. Jaishree Gajenwale	
3	Introduction to Industrial Hygiene, Occupational Health & Environmental Toxicology Hazard Identification, Assessment and Control Techniques	Dr. H.G. Sadhu Scientist. E Dr.Rajnaray T iwari Scientist. D	Scientist from National Institute of Occupation Health (NIOH) Ahmedavad
4			
5	Safety Engineering- I and II	Mr. D.H. Patel. Mr. Hemedra Rawal Mr.Shrenik ranpura Mr. Krunal Gohil	Industrial experts from various industries and consultant
6	Safety in Chemical Industries	Ms. Sejal Patel Ms. Tejal Patel	Chemical Engg. Department of GCET GTU

7	Principle of Ergonomics	Ms. Purvi Chauhan	Department of Production Engineering BVM Engineering College
8	Dissertation/Project Work	Mr. D.H. Patel. Mr. Hemedra Rawal Mr. Shrenik ranpura Mr. Krunal Gohil Ms Swati rajput	Safety Depts of Various Industries like 3M, Essar power, L & T , Lupin and many more

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty**

Nil

**13. Student -Teacher Ratio (programme wise):**

MIHS Department 15:1 (30 Students: 2 Faculties)

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled Technical Staff**

Nil

**15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ MPhil/PG.**

Sr. No	Name faculty	specilization	Post	Qualification
1	Prof. J.H.Patel	Environmental Engineering	Adjunct Professor	B.E. Civil, M.E. (Env. Engg.)
2	Prof. Baiju Verghese	Hygiene and safety	Assistant Professor	B.Sc. (chemistry) M.Sc( Material sci.), Master Of Industrial hygiene and safety

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received**

Nil

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received**

Nil

**18. Research Centre /facility recognized by the University**

University has funded no research projects.

**19. Publications: Nil**

## 20. Areas of consultancy and income generated

Non-formal mode consultancy is done by department so income generated is NIL.

A good will is established with many small scale industries in which a post of safety and environmental specialist is not created/ employed

## 21. Faculty as members in

- National committees
- International Committees
- Editorial Boards....

J.H.Patel Adjunct Professor as member of professional bodies

Institution/Committee/board	Member status	Working period/since	Remarks
Institution of Engineers (I)	Chairman of Local Centre Member executive committee Fellow	1999-2001 1996 till date	
Institution of Environmental Engineers (I)	Honorary Fellow	1998 till date	
committee of sewerage system of Vallabh Vidyanagar Nagarpalika	Technical Expert Member	16-07-2004 till date	
Indian Society for Technical Education	Life member	1978 till date	
Journal of Engineering and Technology of Sardar Patel University	Member of editorial board	Since 1995 till date	
Worked as member of board of Studies following Universities till 31-05-2011 Sardar Patel University Vallabh Vidyanagar Gujarat University Ahmedavad Ganpat University Kherva Mehasana Gujarat			
Worked as various committee of Sardar Patel University <ul style="list-style-type: none"> <li>• Environmental Cell</li> <li>• Building Committee</li> <li>• Syndicate of SPU</li> </ul>	Expert Technical member Head Civil Department Representative of CVM 24-01-2005 to 31-03-2010	30-01-03 to 31-05-13 1995 to 2011	

## 22. Student Projects

- **Percentage of students who have done in-house projects including inter departmental/programme**

Nil

- **Percentage of students placed for projects in organizations outside the institution** i.e. in Research laboratories/Industry/other agencies all 100% students are placed for project related Safety and Hygiene in following industries (listing Few )

- Reliance Ltd., 3 M., L&T, ESSAR Steel Ltd. Surat, ESSAR Power, International Safety System, Industrial Hygiene services, Jaypee Group, Jubliant Infrastructure Ltd, John Energy, TCS Mylan Pharma, TATA, Linde Engineering DRL, Dishman Pharma, United Phosphorous Ltd, Genpact Jaipur, Vapi Environtech Ltd. Etc.

## 23. Awards/ Recognitions received by faculty and students

- All students awarded a student membership of American Council of Government Industrial Hygiene.
- Prof. J.H.Patel is Expert member for various committees like staff selection University of Gujarat State
- Gujarat Agricultural University Anand , Dantivada and Junagadh (b) Charotar University of Science and Technology (CHARUSAT Changa (c) C.U. Shah University Vadhawan

## 24. List of eminent academicians and scientists/ visitors to the department

Sr. No	Name of Person	Institute / Organization	Event	Remarks
1	Dr. Scot Clerk	Environmental and Industrial Hygiene Programme of the University of Cincinnati, Ohio, USA	Confirmation of Degree of UC during Graduates meets from 1999 to 2010	
2	Dr. Carol Rice	University of Cincinnati, Ohio, USA	(i) Confirmation of Degree of UC during Graduates meets from 1999 till 2012 (ii) The role of worker training in building health and safety infrastructure	

## 25. Seminars/ Conferences/Workshops organized & the source of funding

- **National:** Nil

**26. Student profile programme/course wise**

Sr. No.	Course	Year	Application Recieved	Selected	Enrolled	Pass Percentage
1	MIHS	2009-2010	25	15	15	100
2	MIHS	2010-2011	30	15	15	100
3	MIHS	2011-2012	20	14	14	Continue
4	MIHS	2012-2013	50	15	15	Continue

**27. Diversity of Students**

Sr. No	Program	Year	Student from same state	Student from other state	Student from Abroad state
1	MIHS	2009-2010	15	0	0
2	MIHS	2010-2011	14	1	0
3	MIHS	2011-2012	11	3	0
4	MIHS	2012-2013	13	2	0

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Nil

**29. Student progression: Campus Interview and Jobs = 82%****30. Details of Infrastructural facilities**

- **Library Books Available:** 590
- **Internet facilities for Staff & Students**
  - 10 MBPS bandwidth Centralized Computer centre along with departmental Computer Lab. With all computers in LAN connected.
  - Each faculty is provided with Laptop and Modems with WiFi Connected Campus
- **Class rooms with ICT facility**  
03 with WiFi and LCD Projectors
- **Laboratories:** 08

**31. Member of students receiving financial assistance from college, university, government or other agencies****Social Minority:**

Branch	2009-10	2010-11	2011-12	2012-13
MIHS	0	0	0	0
OBC/SEBC				
MIHS	0	0	2	4

SC				
MIHS	0	0	0	0
ST				
MIHS	0	0	0	0

**32. Details on student enrichment programme (special lectures /workshops / seminar) with external experts.**

Sr. No.	Particular	Year
1	National Workshop on Chemical Safety in Industry	2010-11
2	Awareness programme and Competition on Home Safety, Road Safety and Industrial Safety	2011-12

**33. Teaching methods adopted to improve student learning**

- Designing efficient and effective questionnaire for student assessment
- Arranging field trips
- Use of NPTEL video lectures
- Group teaching, Group Exercises and technical quiz
- Use of Webinars
- Use of Tablets for teaching

**34. Participation in Institutional Social Responsibility (ISR) and Extension Activities**

- Blood Donation Camp
- Tree Plantation
- Programme on Protection of Birds and Snakes

**35. SWOC analysis of the department and Future plans**

**Strengths**

- Young Faculty with average age of 32
- Situated in Mechanical Small Scale industrial hub
- Good Infrastructure
- Faculty with specialization in all areas
- Faculty members from local region
- Good rapport between student and staff
- Equipped lab with latest technology
- No Gender inequality
- All faculty pursuing for higher qualification
- Programme is conducted with internal Coordination with various Department of Engineering, Science and Medicine
- Placement to be sustained
- Active support from Principal and CVM Management

**Weaknesses**

- Ample scope to add senior faculty
- Department is waiting for PhD Programme
- Research Lab recognition
- Highly Demand course but due to restrictions only 15 students intake.

**Opportunities**

- MOUs with industries
- Scope for starting Ph.D. Programme
- Research grants from AICTE, DST and University
- New technologies incorporation
- Consultancy based on laboratory facilities
- Inter disciplinary research

**Challenges**

- Maintain academic quality
- Need based education
- Retain qualified and experienced faculty
- Impart non technical skills
- Sustaining of Placement Record.

**Future Plans**

- Setup Entrepreneurship Cell, Research , Ph.D Programs and Research Center
- Organize workshop/seminar and conferences
- MOUs with research organization

## Evaluative Report of the Department

**1. Name of the department:**

Centre for Valuation Studies

**2. Year of Establishment:** 1994

Programmes of Master of Valuation (Real Estate) and Master of Valuation (Plant & Machinery) were started by Charutar Vidya Mandal (CVM) in 1994 at BVM Engineering College, Vallabh Vidyanagar. Both programmes were shifted from BVM to ISTAR in 1999.

**3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated):**

- Master of Valuation (Real Estate)
- Master of Valuation (Plant & Machinery)

Name of programme	Year of Establishment
<ul style="list-style-type: none"> <li>• Master of Valuation (Real Estate)</li> <li>• Master of Valuation (Plant &amp; Machinery)</li> </ul>	1994

**4. Names of Interdisciplinary courses and the departments/units involved:**

Following Interdisciplinary courses are involved in curriculum of programs:

Sr. No.	Name of Interdisciplinary course	Department of other Institutes involved
1	Book Keeping and Accountancy	BJVM Commerce College, Vallabh Vidyanagar
2	Introduction to Statistics	Dept. of Statistics, SPU
3	Finance, Business and Management Studies	SEMCOM, Vallabh Vidyanagar
4	Environmental Impact Assessment	BVM Engg. College, Vallabh Vidyanagar

**5. Annual/ semester/choice based credit system (programme wise)**

- Semester System + credit system with 10 point score  
Evaluation is done based on S.P.I. and final class is given based on final C.P.I.

**6. Participation of the department in the courses offered by other departments**

Sr. No.	Name of Course	Department of	Faculty
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7. Courses in collaboration with other universities, industries, foreign institutions, etc.

- Collaboration Foreign Institute: Nil
- National Institute and local Institute: Nil

8. Details of courses/programmes discontinued (if any) with reasons:

Nil

9. Number of teaching posts:

Sr. No	Name faculty	Post	Since
1	Shah Rupeshkumar Thakorlal	Assistant Professor	01-07-2000

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D. / M. Phil. etc.,)

Post	Sanctioned	Filled
Assistant Professor	1	1

11. List of senior visiting faculty

Sr. No.	Name of the course	Name of Visiting faculty	Department of other Institute/University / Industries
1	Principles of Economics	Dr. Sunny Thomas	Principal, ILSAS College, Vallabh Vidyanagar
		Mr. Jayant Athavale	Management Consultant, Ahmedabad
2	Book Keeping and Accountancy	Prof. R.M.Patel	BJVM Commerce College, Vallabh Vidyanagar
3	Elementary Surveying and Engineering Drawing (part)	Prof. P.J.Shah	BVM Engineering College, Vallabh Vidyanagar
4	Introduction to Statistics	Dr. Ashok Shanubhog	Head, Department of statistics, SPU
5	Environmental Impact Assessment	Prof. J.H.Patel	MIHS Dept. ISTAR
6	Finance, Business and	Dr. Kamini Shah	SEMCOM, Vallabh

	Management Studies		Vidyanagar
		Mr. Jayant Athavale	Management Consultant, Ahmedabad
7	Valuation of Plant & Machinery I, III and IV; Industrial Processes	Mr. Amish Patel	Director, R.B.Shah & Associates, Ahmedabad, (Ex-Faculty, ISTAR)

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty**

Nil

**13. Student -Teacher Ratio (programme wise):**

- Master of Valuation (Real Estate): 28:1
- Master of Valuation (Plant & Machinery): 7:0 (all visiting faculties)

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled Technical Staff :**

Nil

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.**

Sr. No	Name faculty	specialization	Post	Qualification
1	Shah Rupeshkumar Thakorlal	Real Estate Valuation	Assistant Professor	B.E.(civil), Master of Valuation (Real Estate), LL.B.(Special) PGDVES

**16. Number of faculty with ongoing projects from**

- National
- International funding agencies and grants received

Nil

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received**

Nil

**18. Research Centre /facility recognized by the University:**

Nil

**19. Publications: Papers presented/ published**

1.	A series of two articles published in <b>Indian Valuer</b> May 2008 and June 2008 on “Indian Easements Act” and Valuation.
2.	Presented a Paper on “Checklist for Bankers” at <b>National Seminar</b> on Valuation of Assets for Safety and Security of Banking Sector at Surat on 16-10-2010
3.	Presented a paper – “Comparison between Fair Market Value, Special Value and Jantri Value at a <b>Seminar</b> held by Institution of Valuers, Vadodara branch at Vadodara on 23-10-2010
4.	Presented a paper - <b>Research work in Valuation - Jantri Value vis-à-vis Market Value - A case study at Anand, Gujarat at National Conference</b> on Valuation of Assets organised by Institution of Valuers, Mumbai Branch at Mumbai on 26 <sup>th</sup> November 2011
5.	Presented a paper <b>CHALLENGES IN VALUATION FOR FINANCIAL INSTITUTIONS</b> at a <b>National seminar organised by Institution of Valuers, Udaipur branch at Udaipur in June 2012.</b>
6.	Presented a paper - <b>Contents of a Valuation Report – an IVS perspective</b> at a National Seminar organised by Institution of Valuers, Vadodara branch, at Vadodara on 13/10/2012

## 20. Areas of consultancy and income generated

Non-formal type of consultancy work of Valuation is done by the department, so Income generated is nil.

## 21. Faculty as members in

- National committees
- International Committees
- Editorial Boards....

### Shah Rupeshkumar Thakorlal

Name of Body/organization	Status of membership
Sardar Patel University	Senate member since 2012
Institution of Engineers (India)	Member (life)
Institution of Surveyors	Member (life)
Institution of Valuers	Fellow (life)
Institution of Valuers, Vadodara branch	Member, Executive Committee from 2013
BVM Alumni Association	Life Member

## 22. Student projects

- Percentage of students who have done in-house projects including inter departmental/programme  
Nil

- **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies**  
100% students of Master of Valuation (Plant & Machinery) do their Project Work in the Industries.

### 23. Awards/ Recognitions received by faculty and students

**Faculty:** Shah Rupeshkumar Thakorlal

**Award:** Merit Certificate by Institution of Valuers, Udaipur branch for one of the best papers in the conference on 17<sup>th</sup> June 2012.

**Student:** Mr. Shirishkumar Sharma (ID No. 09VP705)

**Awarded:** 'BHARTIYA VIKAS RATAN AWARD' by All India Business Development Association, New Delhi for his 'Excellence in chosen field of activity'.

### 24. List of eminent academicians and scientists/ visitors to the department

Sr. No	Name of Person	Institute / Organization	Event
1	Mr. R.K.Gandhi	M/s K.C. Gandhi & Co., Mumbai,Practicing Enggr and Valuer with about 48 years of experience	Guest Lecture

### 25. Seminars/ Conferences/Workshops organized & the source of funding

**National:** Nil

### 26. Student profile programme/course wise:

Sr. No	Name of the programme	Academic Year	Application Received	Selected	Enrolled	Pass percentage	Gender wise *M *F	Remarks
1	Master of Valuation (Real Estate)	2012	14	14	14	100	13+1	
2		2011	15	15	14	100	13+2	one female student left
3		2010	12	11	11	100	7+4	
4		2009	4	4	4	100	4+0	
5		2008	3	3	2	100	2+1	one female student left
1	Master of Valuation (Plant & Machinery)	2012	5	5	5	100	4+1	
2		2011	2	2	2	100	2+0	
3		2010	4	4	4	100	4+0	
4		2009	12	12	11	100	12+0	one

								student left
5		2008	Nil	Nil	Nil	---	---	

## 27. Diversity of Students

Sr. No	Name of the programme	Academic Year	% of students from the same state	% of students from the other state	% of students from the foreign state
1	Master of Valuation (Real Estate)	2012	64	36	---
2		2011	73	20	7
3		2010	91	9	---
4		2009	100	---	---
5		2008	67	33	---
1	Master of Valuation (Plant & Machinery)	2012	60	40	---
2		2011	50	50	---
3		2010	100	---	---
4		2009	75	25	
5		2008	---	---	---

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Nil

## 29. Student progression:

100% students are either employed or self employed

## 30. Details of Infrastructural facilities

### • Library Books Available

Sr. No.	No of titles	No. of Volumes	No. of Journals	No. of E-Journals
1.	144	233	1	---

- Internet facilities for Staff & Students:
  - 10 MBPS bandwidth Centralized Computer centre along with departmental Computer.
  - Each faculty is provided with Laptop/Desktop with WiFi Connected Campus
- Class rooms with ICT facility --- 01 with WiFi and LCD Projectors

## 31. Number of students receiving financial assistance from college, university, government or other agencies:

Nil

## 32. Details on student enrichment programmes (special lectures /workshops / seminar)

**with external experts:**

Nil

**33. Teaching methods adopted to improve student learning**

- Arranging field visits, industrial visits
- Arranging group discussions, seminar presentations etc.
- ICT enabled teaching
- Discussion of case studies and Project Report of past students

**34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

- Blood donation camps

**35. SWOC analysis of the department and Future plans**

**Strengths**

- The department was started by a team of experts and therefore has a strong foundation, some of the pioneer faculties are:
  - i. Mr. Kirit Budhbhatti, (founder Hon. Advisor) – Former President, Institution of Surveyors (India), author of three books on valuation;
  - ii. Mr. D.N.Banerjee – former Chairman, Central Valuation Board, West Bengal, Author of one book on valuation;
  - iii. Dr. Ashok Nain – Former President, Institution of Surveyors (India), Author of one book on valuation;
  - iv. Mr. R.K.Gandhi – Civil Engineer and Valuer from Mumbai with more than 45 years of experience; former editor, ‘Indian Valuer’ – the technical journal of Institution of Valuers (India)
- Experienced guest Faculty with relevant professional experience are regularly invited
- Good Infrastructure
- Good rapport is maintained between students and staff
- Active support from alumni
- Active support from Director and CVM management
- Good quality professionals are prepared as compared to distance education mode
- Being a residential programme, full syllabus is covered in class room studies and complete guidance is provided for Project Work.( mostly such programmes are conducted under distance education)
- Most suitable programmes for starting own professional practice .After completing

this course, only two years experience is required for Registration as professional Valuer (under the Wealth Tax Act) as compared to Ten years for engineering graduates.

### **Weaknesses**

- Only one permanent faculty for coordination of both the programmes
- Plant & Machinery programme is conducted by guest faculty

### **Opportunities**

- Consultancy services
- Foreign students can be attracted

### **Challenges**

- Many Universities are offering same programmes on distance learning mode with lesser fees and therefore sustaining intake is a daunting task.
- Students' profile is very much diversified and therefore content preparation, delivery system and project planning requires great efforts.

### **Future Plans**

- Starting consultancy services
- Expand the research activities in new areas
- Organize workshops/seminars
- Upgrade syllabus and include infrastructure component.

**Evaluative Report of the Departments  
(Polymer Science & Technology)**

**1. Name of the department:**

Polymer Science & Technology.

**2. Year of Establishment:**

1993 at V.P & R.P.T.P. Science college and transferred to ISTAR in 1999

**3. Name of Programmes / Courses offered (UG, PG, M.Phil, Integrated Masters, and Ph.D etc.**

Name of the PG Program	Year of Establishment
Polymer Science & Technology	1993

**4. Names of Interdisciplinary courses and the departments/units involved: Following Interdisciplinary courses are involved in curriculum of programs:**

Sr. No	Name of Interdisciplinary course	Department
1	Industrial Chemistry - I	Industrial Chemistry, ISTAR
2	Industrial Chemistry - II	Industrial Chemistry, ISTAR
3	Industrial Analysis	Industrial Chemistry, ISTAR
4	Organic & Polymer Chemistry	Industrial Chemistry, ISTAR
5	Sophisticated Instrumental Analysis	Industrial Chemistry, ISTAR
6	Industrial Management & Psychology	Industrial Chemistry, ISTAR

**5. Annual/ semester/choice based credit system (programme wise):**

Semester with Choice Based Credit System (CBCS).

**6. Participation of the department in the courses offered by other departments:**

Sr. No	Name of course	Department
1	Organic & Polymer Chemistry	Industrial Chemistry
2	Polymer Technology	Industrial Chemistry
3	Composites, Blends & Adhesive	Industrial Chemistry
4	Polymer Characterisation	Industrial Chemistry

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.:**

Nil

**8. Details of courses/programmes discontinued (if any) with reasons:**

Nil

**9. Number of teaching posts:**

Post	Sanctioned	Filled
Associate Professor	1	0
Assistant Professor	2	2

**10. Faculty profile with name, qualification, designation, specialization, (M.Sc. / Ph.D. / M. Phil. etc.,)**

Sr. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1.	Dr. M. M. Raj	M.Sc., Ph.D	Assistant Professor	Polymer Chemistry	16	NIL
2.	Dr. A.D. Thummar	M.Sc., Ph.D	Assistant Professor	Polymer Chemistry	02	NIL

**11. List of senior visiting faculty:**

Sr. No.	Name of the Person	Organization
1.	Dr. A. D. Patel	Professor, BVM Engineering College, V. V. Nagar
2.	Dr. P. M. George	Professor, BVM Engineering College, V. V. Nagar

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**

Nil

**13. Student-Teacher Ratio (programme wise): 24:1**

No. of Students	No. of Faculty
48	2

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Type of Staff	Sanctioned	Filled
Laboratory Assistant	1	1
Hamal	1	1

Hamal (Machine Maintenance /Operator)	1	1
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**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.:**

Sr. No.	Name of the Faculty	Qualification
1	Dr. M. M. Raj	M.Sc.,Ph.D (Polymer Chemistry/Chemistry)
2	Dr. A. D. Thummar	M.Sc.,Ph.D (Polymer Chemistry/Chemistry)

**16. Number of faculty with on-going projects from a)National b) International funding agencies and grants received:**

Sr. No.	Name of PI & Co PI	Title of Project (Consultancy Work)	Funding by Industry	Amount of funding	Status of project
1.	Dr. M. M. RAJ (PI) Dr. A. D. Thummar (Co PI)	Dispersion and Characterization of fillers in some thermoplastics polymers.	Shree Ram Minerals, Ltd., Bhuj	80000=00	Started in 2013

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. And total grants received:**

Nil

**18. Research Centre /facility recognized by the University:**

No

**19. Publications**

Number of papers published in peer reviewed journals (national / international) by faculty and students	04
Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	NIL
Monographs:	NIL
Chapter in Books:	NIL
Books Edited :	NIL
Books with ISBN/ISSN numbers with details of publishers	NIL
Citation Index :	NIL
SNIP:	NIL
SJR:	NIL
h-index:	NIL

**20. Areas of consultancy and income generated:**

Name of the Area	Income generated
Filler dispersion	80000=00
Polymer Testing	600=00

**21. Faculty as members in**

- National committees
- International Committees
- Editorial Boards....

Sr. No.	Professional Body/ Society	Name of Faculty Members	Membership no.
1.	Indian Plastics Institute	Dr. M. M. RAJ	AHM-787-ORD

**22. Student projects**

Year	No. of students on roll	No. of students doing in- house projects.	%
2010-2011	04	04	100
2011-2012	11	11	100
2012-2013	28	28	100
2013-2014	20	20	100

**23. Percentage of students placed for projects in organizations outside the institution  
i.e.in Research laboratories/Industry/other agencies:**

Nil

**24. Awards/ Recognitions received by faculty and students:**

Name of Students/Faculty	Event
Department of Polymer Science & technology obtained Best Educational Institution Award contributing Plastics during February 2009.	
Nishant Kaputhara & Ravi Savaliya	Second Prize in Poster Competition at National level Symposium on Carbon foot print at G. H. Patel College Engineering & Technology (GCET).

**25. List of eminent academicians and scientists/ visitors to the department:**

Eminent Academician	Scientists/ visitors
Dr. P. M. Bahadur, Prof & Head Veer Narmad South Gujarat University	Dr. A. B. Mathur, Vice President, Reliance Industries Ltd.
Dr. J. S. Parmar, Retired Prof & Head Department of Chemistry, Sardar patel University	Dr. Pradeep Patel, Sr. Manager, Reliance Industries Ltd

Dr. C. N. Murty, Head Applied Chemistry Department, M. S. University of Baroda, Vadodara	Mr. K. N. Aras, CEO, Admark Polycoat Ltd., Vadodara
Dr. Pragnesh Dave, Prof & Head, K. S. K. V. Kachchh University, Bhuj.	Dr. Atul Raja, Corporat Manager, Ester Industries Ltd., Kathima, Uttarakhand

**26. Seminars/ Conferences/Workshops organized & the source of funding:**

Nil

**27. Student profile programme/course wise:**

Sr. No	Program	Year	Applications received	Student Admitted	Pass percentage
1	Polymer Science & Technology	2009-10	04	02(Male) 02(Female)	100
2		2010-11	11	09(Male) 02(Female)	100
3		2011-12	28	27(Male) 01(Female)	100
4		2012-13	20	20(Male)	100

**28. Diversity of Students**

Sr. No	Program	Year	% of student from same state	% of student from other state	% of student from Abroad state
1	2009-10	2009-10	NIL	100	NIL
2	2010-11	2010-11	45	55	NIL
3	2011-12	2011-12	65	35	NIL
4	2012-13	2012-13	100	NIL	NIL

**29. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Name of Students	Competitive Examinations
Ragini Kumari	GATE (2009)
Ruchi Pal	GATE (2010)
Sandeep Kumar	GATE (2011)
Sandhya Verma	GATE (2011)

**30. Student progression**

<b>Student progression</b>	<b>Against % enrolled</b>
PG to M. Tech.	5.5
PG to Ph.D	1.8
Ph.D. to Post-Doctoral	NIL
Employed through Campus selection	81
Entrepreneurship/Self-employment	11.7

### 31. Details of Infrastructural facilities

- Library Books Available**

<b>Sr. No.</b>	<b>Number of Titles</b>	<b>Number of Volumes</b>	<b>Number of Journals</b>	<b>Number of ASTM Volumes</b>
1	20		01	05

- Internet facilities for Staff & Students:** Yes
- Class rooms with LCD facility:** 01
- Laboratories:** 02 (For Synthesis and Processing of Polymers)

Sophisticated Instrumental Training with certificate is given by SICART to Students of Polymer Science & Technology.

### 32. Number of students receiving financial assistance from college, University, government or other agencies:

<b>Year</b>	<b>Type of assistance</b>	<b>No. of students</b>
2007-08	NIL	NIL
2008-09	NIL	NIL
2009-10	NIL	NIL
2010-11	Social Minority	02
2011-12	Scheduled Caste	02
2012-13	OBC/SEBC	03

### 33. Details on student enrichment programmes (special lectures/workshops / Seminar) with external experts:

<b>Particular</b>	<b>Name of Expert</b>	<b>Subject</b>	<b>Date</b>
IPI Lecture Series	Mr. Sanjeev Parikh, Senior Manager Prashad Group Of Industries	Economy Through Automation By Auxillary Equipment Through Blown Film	04/09/2012
IPI Lecture Series	Mr. Pramthesh Pandya, Head Unit And Business Development, Parikh	Flexible Packaging Processing	04/09/2012

	Packaging Pvt. Ltd.		
IPI Lecture Series	Ms. Khushbu Doshi, Director Raju Engineering Ltd.	Blown Film Extrusion – Cost Effective Technology.	04/09/2012
IPI Lecture Series	Mr. Dhanjay Sahu, Manager IOCL Ltd.	Engineering Trends – New Application In Flexible Packaging.	04/09/2012
IPI Student Development Programme	Mr. Pradeep Vaswani, Ferromatik Milacron India Ltd.	Injection Moulding machine for PVC pipe fitting.	22/08/2011
IPI Student Development Programme	Mr. Chintan Mehta, Neoplast Engineering Pvt, Ltd.	PVC Compounding	22/08/2011
IPI Student Development Programme	Mr. Viral Joshi, Reliance Industries Ltd.	Polyvinylchloride – Manufacturing and Processing Techniques	22/08/2011
Training & Visit at PDC, RIL	Mr. N. N. Chavda, General Manager, Plasticure Development Centre, Reliance Industries Ltd.	Applications of Polymers in Agriculture and water management	27/09/2011
Expert Talk	Dr. C. N. Murthy, Professor, Applied Chemistry Department, M. S. University of Baroda	Recent Development in Polymer Research	22/01/2009

#### **34. Teaching methods adopted to improve student learning:**

- Effective Black Board teaching
- Experts Seminars on important topic
- Subject based Tutorial sessions
- Active and collaborative teaching
- Use of LCD
- Power point/Educational Animations presentation
- NPTEL e-learning Material for teaching
- Audio-video lectures
- Student's seminar through power point presentation
- Arrangements of Industrial visit for practical understanding of students.
- Sophisticated Instrumental Training by SICART for all Students of Polymer Science & Technology and certificate provided by SICART

#### **35. Participation in Institutional Social Responsibility (ISR) and Extension activities:**

- Blood Donation Camp

#### **36. SWOT analysis of the department and Future plans**

##### **Strength:**

- Dedicated, young and dynamic faculty with wide range of specializations
- Departmental facilities are adequate for taking up research work
- Establishment of Research Centre
- Department received research funding for characterization of polymers
- Department got Industrial research & characterization analysis
- Active support from Principal and CVM Management

**Weaknesses:**

- Department has to enhance the facilities for preparing students for Competitive examination.

**Opportunities:**

- Scope for obtaining more industry sponsored projects
- More interaction with departments and research centres are possible
- There is job opportunity across the country and needs to be utilized for placement of students
- Add on certificate course in CNC can be conducted for all students of M.Sc. Programme.

**Challenges:**

- As the technology has been developing rapidly, there is need to update the skill set ,knowledge of the faculty and laboratory facilities
- Identification and development of state of art research facilities.

**Future Plan:**

- To upgrade processing & testing equipment's.
- To make strong alumina of Polymer Science & Technology Departments
- To arrange interaction between industrialist and students
- Organize entrepreneur workshop for students

## Evaluative Report of the Departments

### (Surface Coating Technology)

**1. Name of the department:**

Surface Coating Technology

**2. Year:**

1999

**3. Names of Programmes / Courses offered : PG and Ph.D**

Name of the Program	Year of Establishment
Surface Coating Technology	1999

**4. Names of Interdisciplinary courses and the departments/ units involved:**

Following interdisciplinary courses are involved in curriculum of programs:

Sr. No	Name of Interdisciplinary Course	Department.
1	Industrial Chemistry	Industrial Chemistry Department, ISTAR, VVNagar
2	Polymer Science & Technology	Industrial Chemistry Department, ISTAR, VVNagar
3	Oils, Fats & Waxes	Industrial Chemistry Department, ISTAR, VVNagar
4	Mechanical & Chemical Engineering	Mechanical and Chemical Department, GCET, VVNagar
5	Management	SEMCOM, VVNagar
6	Environmental Science & Technology	Environmental Science & Technology Department, ISTAR, VVNagar

**5. Annual / Semester / Choice Based Credit System (Programme Wise):**

Semester (CBCS)

**6. Participation of the department in the courses offered by other departments: Nil**

**7. Courses in collaboration with other universities, industries, foreign institutions etc.:**

- Pushkar Paints, Lucknow, India
- PACT, HBTI, Kanpur.

**8. Details of courses/programmes discontinued (if any) with reasons:**

Nil

**9. Number of Teaching Post:**

Post	Sanctioned	Filled
Professor	1	1
Associate Professor	1	----
Assistant Professor	2	2
Adhyapak Sahayak	1	1

**10. Faculty profile with name, qualification, designation, specialization:**

Sr No	Name	Qualification	Designation	Specialization	No of Years of Experience	No of Ph.D Student guided for last 5 years
1	Dr Ashokkumar Dighe	B.Sc, B.Tech., M.Tech., Ph.D	Head & Professor	Paint Technology	39 (12+27)	2
2	Dr Kalpesh Patel	Ph.D	Assistant Professor	Surface Coating Technology	14	1 (Pursuing)
3	Dr Mayank Patel	Ph.D	Assistant Professor	Industrial Chemistry	15	NIL
4	Mr. Vikash Mishra	M.Sc (Ph.D Pursuing)	Adhyapak Sahayak	Surface Coating Technology	1	NIL
5	Dr Chintan J Patel	Ph.D	Assistant Professor	Surface Coating Technology	8	NIL  (Resigned on 3/4/2013)

**11. List of Senior Visiting Faculty:**

Sr. No	Name	Qualification	Designation	Organization
--------	------	---------------	-------------	--------------

1	Dr. Mukesh Bulsara	Ph.D., M.E. (Machine Design)	Professor	GCET, VVNagar
2	Dr. Harish Dave	M.E(Chemical)	Asst Professor	GCET, VVNagar

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**

Sr. No	Name	Academic Year	%age
1	Mr. Vikash Mishra	2012-2013	Lectures: 31.25%, Practical:25.00%

**13. Student Teacher Ratio (Programme wise):**

Academic Year	ST Ratio
2012-2013	28:1

**14. Number of Academic Support staff (technical) and Administrative staff: Sanctioned and Filled:**

Type of Staff	Sanctioned	Filled
Laboratory Assistant	1	1
Hamal	2	2

**15. Qualification of Teaching faculty with :**

Degree	No of Faculty
PhD	3
PhD Pursuing	1
Post Graduate (PG)	---
PG Pursuing	---

**16. Number of faculty with ongoing projects from**

- **National:** Nil
- **International funding agencies and grants received:** Nil

**17. Department projects funded by DST-FIST: UGC,DBT,ICSSR etc and total grants**

received:

Nil

**18. Research Centre / Facility recognized by university:**

Nil

**19. Publications:**

Number of Papers published in peer reviewed journals (National / International) by faculty and Students.	15
Number of Publications listed in International database	Nil
Monographs	Nil
Chapter in books	Nil
Book edited	Nil
Books with ISBN/ISSN number with details of publisher	Nil
Citation Index	Nil
SNIP	Nil
SJR	Nil
Impact Factor	Nil
h-index	Nil

**20. Area of Consultancy and income generated: ( for the last 5 years)**

<b>Consultancy</b>	<b>Agency</b>	<b>Income Generated</b>
Development of Inorganic Silicate Based Paint.	Ricasil Industries, Vithal Udyognagar	50,000/-
Evaluation of Suitability of Guar Gum derivative in Paints	Hindustan Gum & Chemicals Ltd., Haryana.	50,000/-
Formulating Water based Ink	Aromax Corporation, Ahmedabad	20,000/-
Replacement of Rutile TiO <sub>2</sub> pigment in water based emulsion coatings with synthetic silicates	J.M Huber India Ltd., Mumbai	50,000/-
Saturated polyester resin for coil coating	Jesons Industries Ltd., Sarigam	60,000/-
Water Based Paint	Pranav Corporation, Mumbai	10,000/-
Acrylic latex for Paints.	Jesons Industries, Daman	15,000/-
	<b>Total</b>	<b>2,55,000/-</b>

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	Total
Analysis of different Paints, Coating and Allied samples as a Third Party Analyst	3,99,950/-	3,63,298/-	4,27,720/-	6,75,895/-	5,31,170/-	23,98,033/-

## 21. Faculty as members in :

- National Committee
- International Committee
- Editorial Boards

Sr. No	Professional Body / Society	Name of Faculty Member	Membership No:
1	Board of Studies, Paint Technology, HBTI, Kanpur	Dr Ashok Dighe	9/7/2009
	Board of Studies, Industrial Chemistry, SP University, VVNagar		Ex-Chairman and Ex-Member
	Editorial Board Member, P & C News		2009-to 2010
	Paint and Coating Technologist Association (PACT)		L/ 50/VVN
	Colour Society		From 1990
	Central Executive Committee, PACT		1/3/2013
2	Board of Studies, Industrial Chemistry, SP University, VVNagar	Dr Kalpesh Patel	Member
	Paint and Coating Technologist		L/ 130/VVN

	Association (PACT)		
	Editorial Board Member, P & C News		2009-to 2010
3	Board of Studies, Industrial Chemistry, SP University, VVNagar	Dr Mayank Patel	Member

## 22. Students projects:

- Percentage of Students who have done in-house projects including inter departmental / programme

Year	No. of Students on roll	No. of Students doing in-house projects	%
2008-2009	32	32	100
2009-2010	24	24	100
2010-2011	12	12	100
2011-2012	53	53	100
2012-2013	65	65	100

- Percentage of students placed for projects in organizations outside the institution i.e Research laboratories / Industry / Other Agencies:  
Nil

## 23. Awards / Recognitions received by faculty and students:

### Recognitions:

#### Dr Ashok Dighe:

- Central Executive Committee, Paint and Coating Technologist Association (PACT), Kanpur.
- Member of Board of Studies, Paint Technology, HBTI, Kanpur.

#### Dr. Mayank Patel:

- Ph.D External Supervisor in SVNIT, Surat.

**24. List of Eminent Academicians and Scientists / Visitors to the department:**

<b>Eminent Academicians</b>	<b>Scientists / Visitors</b>
Dr V M Mannari, Eastern Michigan Univ., College of Technology, USA	Dr Johan Bieleman, Patcham, UAE
Dr Kurtkotti, Consultant, Vithal Udyognagar	Dr Randhirsinh J Parmar, Senior Manager- Technology, Asian Paints Ltd., Turbhe, Mumbai
Dr A J Singh, Head of Dept., Paint Technology, JRVGTI, Pune	Mr Hem Tiwari, GIDC, Vithal Udyognagar
	Dr. Ashish N Patel, Champion Industries, VUNagar
	Amol Mulajkar, Soujanya Enterprises,
	Rajesh Sharma, Area Sales Manager, PPG, Mumbai
	B S Kesavaram, Executive Director, Saboo Coatings, Chandigarh
	Trinath Panigrahi, Group VP-HR, Supernova Engg. Ltd., Gujarat
	Mamta KApadiya, Technical Director, EOC Tailormade Polymers India
	Sandeep Wadadekar, Asst. Manager, Sudarshan Chemical Industries
	Sanjeev Singh, General Manager Manufacturing, General Motors
	Ashvin Joshi, RAE Enterprises, Vadodara
	Kapildev Pandya, Technology Manager,

**25. Seminars / Conferences / Workshop organized and Source of Funding:**

<b>Seminars / Conferences / Workshop</b>	<b>Funding</b>	<b>Date</b>
“SPECCOAT 2012”	Paragaon Paints, VUNagar	29 <sup>th</sup> October, 2012

**26. Student Profile Programme / Course wise:**

<b>Sr.</b>	<b>Program</b>	<b>Year</b>	<b>Applications</b>	<b>Selected</b>	<b>Enrolled</b>	<b>Pass</b>
------------	----------------	-------------	---------------------	-----------------	-----------------	-------------

No			Received		Male	Female	Percentage
1	Surface Coating Technology	2012-2013	48	48	47	1	100 %
2		2011-2012	65	65	64	1	98.46 %
3		2010-2011	53	53	52	1	100 %
4		2009-2010	12	12	12	0	100 %

### 27. Diversity of Students:

Sr. No.	Program	Year	%age of Student from Same state	%age of Student from other state	%age of Student from abroad
1	Surface Coating Technology	2012-2013	90	<b>10</b>	NIL
2		2011-2012	89	<b>11</b>	NIL
3		2010-2011	96	<b>4</b>	NIL
4		2009-2010	85	<b>15</b>	NIL

### 28. How many students have cleared National and State Competitive examinations such as NET, SLET, GATE, CIVIL SERVICES, DEFENCE SERVICES, etc?

Nil

Following students have cleared National Association of Corrosion Engineers (NACE) Certified course

Name of the Students	Competitive Examinations (NACE Certified course)
1. Gaurang Zaveri ( <b>Level 1</b> ) 2. Hitesh Mackwana ( <b>Level 1</b> ) 3. Sugnesh Patel ( <b>Level 1</b> )	Coating Inspector Training and Certification Program Level 1 and Level 2. People get absorbed in sectors like Shipbuilding, Petroleum Refineries and Chemical Plants.

4. Tanmay Gor ( <b>Level 1</b> )	
5. Dharmesh Patel ( <b>Level 1</b> )	

### 29. Students Progression:

Students Progression	Against % Enrolled
PG to Ph.D	3
Ph.D to Post Doctoral	1
Employed	
• Campus Selection	85
• Other than Campus	10
Entrepreneurship / Self	5

### 30. Details of Infrastructural Facilities

- Library Books Available:

Sr No	Number of	Number of	Number of	Number of
1	114		2	NIL

- Internet Facility for staff and students:**
  - Wi-Fi Campus
  - Departmental Desktop with Internet Facility
- Classrooms with ICT Facility:** 2
- Laboratories:** 4 including instrumental Analysis facility at SICART, Vallabh Vidyanagar

### 31. Number of Students receiving financial Assistance from College, University, Govt. or other agencies:

Year	Type of Assistance	No of Students
2012-2013	1. ASIAN PAINTS CHARITABLE TRUST Scholarship, MUMBAI	(6)
	2. Shree Umesh Pathak, Scholarship,	(4)

	Singapore	
<b>2011-2012</b>	1. ASIAN PAINTS CHARITABLE	(5)
<b>2010-2011</b>	1. Shree Umesh Pathak, Scholarship,	(4)
<b>2009-2010</b>	1. Shree Umesh Pathak, Scholarship,	(4)
<b>2008-2009</b>	1. Shree Umesh Pathak, Scholarship,	(4)

**32. Details of Students enrichment programme (Special Lectures / Workshops / Seminar) with external experts.**

<b>Particular</b>	<b>Name of Experts</b>	<b>Subject</b>	<b>Date</b>
Expert Lecture	Mr. Pranav Purani from Berry Plastic Pvt. Ltd., Baroda	External and Internal Coatings of Pipelines	2/8/2008
Expert Lecture	Mr P K Gangiyan, GM-Technical , Micro Inks Ltd., Vapi	Flexographic Printing Process	22/8/2008
Expert Lecture	Dr. Hitesh Hirani, Managing Director, M/s Neatkote Speciality Coatings Pvt. Ltd., Rajkot	Scope of Powder Coatings	13/9/2008
Expert Lecture	Mr. Manoj Soni, Technical Director, M/s Mirka India, Ahmedabad	Surface Preparation in Automotive Painting	27/9/2008
Expert Lecture	Shushil Naidu, DuPont., Baroda	Coatings for Plastic components in automobile industry	1/8/2009
Expert Lecture	Mr Meghan Manjrekar, NIT, Pune	Recent trends in Paint Application Equipments	8/8/2009
Expert Lecture	Mr. Ganesh Mendhe, DIC, Ahmedabad	Flexographic Printing Process	22/8/2009
Expert Lecture	Mr. Shrikant Joshi, Consultant, Mumbai	Acrylic & Amino resins	29/8/2009
Expert Lecture	Mr. Ramesh Patel Vallabh Vidyanagar	Entrepreneur Acumanship for Surface Coating Technocrats”	August 5th 2010
Expert Lecture	Mr. Shushil Naidu, Dubai.	Road Marking Paint	September 11th 2010
Expert Lecture	Mr B I Bhatt,	Azeotropes &	October

	Avishkar Consultancy, Ahmedabad	Azeotropic Distillation	4th 2010
Expert Lecture	Dr Krishna Kurtkoti Consultant, Vallabh Vidyanagar	Recent Trends in Organic Pigment	October 11th 2010
Expert Lecture	Mrs. Chitra Ramesh, Asst Director, CDC, Vallabh Vidyanagar	Problems related to workman handling”	October 19th2010
Expert Lecture	Mr Nishith Patel,Patchem, Dubai,	Recent Advances in Coating Additives	December 22nd 2010
Expert Lecture	Mr Vishal Khosla, CETR, California, USA,	Mechanical & Tribological Analysis in surface engineering	12 <sup>th</sup> March, 2011
Expert Lecture	Dr Vijay Mannari, Eastern Michigan University, USA	Sustainable technologies in Coating Industry	30 <sup>th</sup> June 2011
Expert Lecture	Mr. Pramod Gangiyan, Technical Director, Nano Coatings and Ink, Vapi.	Printing and Packaging Inks.	(December 31 <sup>st</sup> 2011, January 20 <sup>th</sup> 2012)
Expert Lecture	Mr. Johan Bieleman, Tech. Consultant, PATCHEM (FZC). Sharjah, UAE,	Additives for Coatings.	29 <sup>th</sup> December, 2011
Expert Lecture	Dr. Vinayak Bhanu,General Manager, (R & D) Elantas Beck India Ltd.,Pune	Electrical Insulating Varnish and Epoxy Encapsulating	6 <sup>th</sup> August 2012

### 33. Teaching method adopted to improve student learning:

- Effective Black Board teaching
- Expert’s Seminar on important topic
- Surprise Quiz and Test
- Subject based Tutorial session
- Active and collaborative teaching
- Use of LCD projector
- Power point/Educational Animations presentation

- Audio-video lectures
- Six Weeks In-plant Training in different Coating and Allied Industries.
- A week training at SICART on Instruments like FTIR, DSC /TGA and GPC

#### **34. Participation in Institutional Social Responsibility (ISR) and extension activities:**

- Aids Awareness Programme
- Thalesemia Awareness Programme
- Blood Donation Camp
- Safety and Fire Extinguisher Program
- Tree Plantation
- Nature Serpent Demonstration

#### **35. SWOT analysis of the department and Future Plans.**

##### **Strength:**

- Only course available for Science graduates in Gujarat in the field of Surface Coating Technology. (This course is Unique in India).
- The course content of Paint Technology Syllabi is at par with that of B.Tech Paint course of HBTI, Kanpur.
- The trained professional prepared by the department are in demand by industries and their expertise in Surface Coating technology helps in minimizing the national assets loss due to corrosion. (Country losses Rupees 25,000 crores due to Corrosion)
- The Surface Coating Technology is synthesized from Chemistry, Mechanical and Chemical Engineering, Polymer Technology, Coating Technology and the faculty working in this discipline are experts in their respective fields. Thus this course is providing exposure to broader areas of Science, Engineering and Technology.
- The department provides facilities for Ph.D Program in following significant areas like Copolymer based Antifouling paint, Cathodic Electro deposition, Polyurethane Dispersions, Use of Novel Micronized Extenders in Replacement of TiO<sub>2</sub> Pigment, Waterborne and solvent based Coating System, Radiation Curable Coatings and Micro-Void Technology.
- Many Paint, Printing Inks and Allied Industries are situated in the state of Gujarat

thus the Surface Coating Technology Department has excellent Industry-Academic Interaction.

- Department is recognized as Third Party Analyst for Analysis of different Paints, Coating and Allied samples.
- Department also cater to Industrial projects.
- The Department has strong relationship with different Paint & Allied Industries related Association of the Country.
- Department receives donation in form of Books, Chemicals and Instruments from various Paint and Allied Industries.
- 100% Job placement trough campus.
- The alumni motivate the admission seeking students to take admission in M.Sc (SCT) because the alumni are handsomely placed
- Active support from Principal and CVM Management

**Weaknesses:**

- Department need to work for National Accreditation Board for Testing and Calibration Laboratories (NABL ) certification so that more testing work and industrial consultancy.

**Opportunities:**

- Department can enhance teaching learning and research by tie-ups with institution of National Reputation like HBTI (Kanpur), UICT (Mumbai) and Industry people.
- B.Tech in Paint Technologist with more than Ten years practical experience can be considered for Ph.D program. The relevant approval from Sardar Patel University will provide ample opportunity for Department Research Work.

**Challenges:**

- Technology is growing by leaps and bounds and keeping pace with changing technology and research scenario is a daunting task.
- Students should be prepared for technology trends in the industry and should be acquainted with all the Paint, Ink and Coating Standards of BIS,ASTM, DIN etc.

**Future Plan:**

- Organizing National and International Conferences.
- Organizing Workshop for Personnel working in Coating Industry who do not have qualification in Paint Technology.
- Onsite and in-house corporate training program for working professional of Paint Manufacturing and application Industries.

## **ANNEXURES**

**Annexure 1:** S.P.Universiy Affiliation

**Annexure 2 :** AICTE recognition for MCA course

**Annexure 3:** UGC recognition (2f and 12 b)

**Annexure 4:** list of organisations imparting training to students

**Annexure 5:** Research papers published in the last 5 years

**Annexure 6:** Seminars/ workshops/conferences attended by faculty in the last 5 years

**Annexure 7:** Master plans

**7a:** second floor (main building)

**7b:** third floor (main building)

**7c:** fourth floor (main building)

**7d:** ground floor (Industrial Chemistry building)

**7e:** first floor (Industrial Chemistry building)

**7f:** second floor (Industrial Chemistry building)

**7g:** third floor (Industrial Chemistry building)

**7h:** ground floor & first floor (PST building)

**Annexure 8:** Student Feedback form

**Annexure 9:** counseling form

**Annexure 10:** Industries recruiting students through campus interview

**Annexure 11:** Audited Balance sheet for the last four years

**11a- 11 d** – Balance sheet for all courses except MCA

**11 e- 11h** – Balance sheet of MCA

## ANNEXURE 1 : SPU AFFILIATION

GRAM UNIVERSITY



Phone: (02892) 226819

**Sardar Patel University**  
University Road,  
Vallabh Vidyanagar (Gujarat)

### TO WHOM IT MAY CONCERN

This is to certify that Institute of Science & Technology for Advanced Studies & Research (ISTAR), Vallabh Vidyanagar is affiliated to the Sardar Patel University, Vallabh Vidyanagar on Permanent basis for teaching following courses from Academic year June-2009 on self financed basis.

Sr. No.	Discipline	Course
1.	Science	1. M.Sc. Industrial Chemistry
		2. M.Sc. Polymer Science & Technology
		3. M.Sc. Oil, Fats & Waxes
		4. M.Sc. Surface Coating Technology
		5. M.Sc. Environmental Science & Technology
		6. M.Sc. Information Technology
		7. M.Sc. Instrumentation
2.	Inter Disciplinary	8. Master of Industrial Hygiene & Safety
		9. Master of Valuation (Real Estate)
		10. Master of Valuation (Plant & Machinery)

Furthermore, the following additional course has also been started at ISTAR, Vallabh Vidyanagar (as per details given below). New Affiliation is already granted by this University from Academic year 2010-11 on self-financed basis.

Sr. No.	Discipline	Course
1.	Science	1. M.Sc. Organic Chemistry

  
I/c. Registrar

Vallabh Vidyanagar  
Date: 9-4-2013

## ANNEXURE 2 : AICTE Permission for MCA



*All India Council for Technical Education*  
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 [www.aicte-india.org](http://www.aicte-india.org)

F.No. Central/1-1351393075/2013/EOA

Date: 19-Mar-2013

To,  
The Principal Secretary Deptt.  
Of Higher & Tech. Education,  
Govt. of Gujarat, New Sachivalaya B, No. 5,  
7th Floor Gandhi Nagar-382010

Sub: Extension of approval for the academic year 2013-14

Ref: Application of the Institution for Extension of approval for the academic year 2013-14

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No. 37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	Central	Application Id	1-1351393075
		Permanent Id	1-25854653
Name of the Institute	INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH (ISTAR)	Institute Address	POST BOX NO. -13 VALLABH VIDYANAGAR DIST - ANAND GUJARAT, VALLABH VIDYANAGAR, ANAND, Gujarat, 388120
Name of the Society/Trust	CHARUTAR VIDYA MANDAL	Society/Trust Address	POST BOX NO. 22, V. V. NAGAR, ANAND, Gujarat, 388120
Institute Type	Unaided - Private		

Opted for change from Women to Co-ed	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

to conduct following courses with the intake indicated below for the academic year 2013-14

Application Number: 1-1351393075\*

Page 1 of 3

Note: This is a Computer generated Extension of Approval Letter. No signature is required.

Letter Printed On 20 March 2013.

Printed By : ws24761701

### ANNEXURE 3 : UGC recognition ( 2f & 12 b)

Ph. 23236351, 23232701, 23237721  
23234116, 23235733, 23232117  
23236735, 23239417, 23239627

Extension No. 413 (CPP-I Colleges)  
UGC Website: [www.ugc.ac.in](http://www.ugc.ac.in)  
F. No. 8-747/2011 (CPP-I/C)



विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग  
नई दिल्ली-110 002  
UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110 002

May, 2012

The Registrar,  
Sardar Patel University,  
Vallabh Vidyanagar- 388 120,  
**Gujarat.**

9 MAY 2012

**Sub:** Recognition of College under Section 2 (f) & 12 (B) of the UGC Act, 1956.

Sir,

I am directed to refer to the letter dated 23.01.2012 received from the Principal, Institute of Science & Technology for Advanced Studies & Research (ISTAR), Vallabh Vidyanagar-388 120, Dist. Anand, (Gujarat) on the above subject and to say that it is noted that the following college is **un-aided/self financed** and **permanently** affiliated to **Sardar Patel University**. I am further to say that the name of the following college has been included in the list of colleges prepared under Section 2 (f) & 12 (B) of the UGC Act, 1956 under the head **'Non-Government, self financed** Colleges teaching upto **Master's Degree'** to make it eligible to receive Central assistance from sources other than UGC:-

Name of the College	Year of Establishment	Remarks
Institute of Science & Technology for Advanced Studies & Research (ISTAR), Vallabh Vidyanagar- 388 120, Dist. Anand, (Gujarat)	1999	As the College is charging fee as per State/University norms and a certificate in this regard has been received in UGC. The College would also be eligible to get grant for all UGC schemes related to teachers and students only as per the decision of the Commission dated 8 <sup>th</sup> July 2011.

The Indemnity Bond and the other supporting documents submitted in respect of the above College have been accepted by the University Grants Commission.

Yours faithfully,

(A.K. Dogra)  
Joint Secretary

Copy to:-

1. The Principal, Institute of Science & Technology for Advanced Studies & Research (ISTAR), Vallabh Vidyanagar- 388 120, Dist. Anand, (Gujarat)
2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Secondary & Higher Education, Shastri Bhawan, New Delhi - 110 001.
3. The Principal Secretary, Deptt. of Higher & Technical Education, Government of Gujarat, New Sachivalaya, B. No. 5, 7<sup>th</sup> Floor, Gandhi Nagar - 382 010, (Gujarat).
4. The Deputy Secretary, UGC, Western Regional Office (WRO), Ganeshkhind, Poona - 411 007, (Maharashtra).
5. Publication Officer (UGC-Website), New Delhi.
6. Section Officer (FD-III Section), UGC, New Delhi.
7. Guard file.

(Sunita Gulati)  
Section Officer

#### **Annexure 4 : List of Industries helping in training of students**

1. Aakar Paints,Ahmedabad
2. ABG,Surat
3. Adar Chemicals Pvt.Ltd.,Vadodara
4. Advance Paints Ltd.,Ankleshwar
5. Akshar Softwares, Ahmadabad
6. Akzo Noble,Banglore
7. AmulDairy,Anand
8. Anand Constancy Ahmadabad
9. Anupam Industries Limited, Vithal Udhoynagar
10. Arcoy Industries.Ahm'd
11. Arvind mill santej Ahmadabad
12. Asian Paints Industrial Coatings Limited, Mumbai
13. Asian Paints Ltd.Ankleshwar
14. Asian Paints Ltd.Kasna
15. Asian Paints Ltd.Sarigam
16. Atul Ltd.,Atul.Gujarat
17. Bayer Material Science Pvt. Ltd., Noida, UP
18. BeePee Coatings Pvt. Ltd.,Vithal Udyognagar
19. Best Value Chem Pvt Ltd.,Bhadarava Road,Savli,Gujarta
20. BGP International,Malosan,Vijapur,Mehsana
21. Bhansali-ABS Ltd., Abu Road, Rajasthan
22. Cadila Healthcare Ltd.,Ankleshwar G.I.D.C.,Gujarat
23. CETP ,Nandesari
24. CETP,Vapi
25. Crest Composites Ltd., Ahmedabad
26. Cygnet Infotech Pvt.Ltd.
27. Daystar Envirotech Conculency
28. Detox, Surat
29. DuPont Industries Ltd., Vadodara
30. E I Dupont,Savli,Vadodara
31. EICL., Vadodara.
32. Enisafe Envi. Consultancy, Ahmedabad
33. Envision Knowledge solution Pvt.Ltd.
34. Esdee Paints,Vatva
35. ESSAR Steel private limited (Hazira).
36. ESSAR Vadinar oil terminal Limited., Jamnagar
37. e-Tech,Gandhinagar
38. ETP plant, Baroda Dairy
39. Excel Crop Care Ltd.,Bhavnagar
40. GCPC, Gandhinagar
41. GFL Rangitnagar
42. GNFC
43. GPCB,Vadodara
44. Grand Polycoat Co.,Padra,Vadodara
45. Green Enviorecare ,Vatva

46. GUJARAT ALKALIES AND CHEMICALS LIMITED. (GACL), Vadodara
47. Gujarat Narmada Vally Fertilizers Company Ltd. (G.N.F.C. Ltd.) , Bharuch
48. Gujarat state Fertilizers & Chemical Limited. (G.S.F.C.), Vadodara
49. Gujarta Alkalies & Chemicals Ltd., Vadodara,Gujarat
50. HCL Infosystem Ltd
51. HECON (ABB – Ahmadabad).
52. Icubes Technologies
53. IDMC,Viththal Udhyoganagar
54. INDIAN FERTILIZER OF FARMER CO-OPERATION. (IFFCO), Kalol
55. Indian oil corporation Gujarat Refinery, Vadodara
56. Indian Oil Corporation Limited,Vadodara,Gujarat
57. Indian Rayon,Veraval,Gujarat
58. Infinity Infoway Private Limited
59. Inox India limited (Baroda).
60. INTAS Pharmaceutical, Ahmedabad
61. Jubilant industries Ltd., Noida, UP
62. Jubilant Industries,Savli,Gujarat
63. Jyoti om chemical,Ankleshwer
64. Kaira Dist Co-Op.Milk Pro.Uni.Ltd
65. Kansai Nerolac paints Ltd.Bawal
66. Kansai Nerolac paints Ltd.Hosur
67. Kansai Nerolac paints Ltd.R & D Mumbai
68. L and T , S & L ,knowledge city. (Broda)
69. Lanxess ABS Ltd., Nandesari, Vadodara
70. LEAD importer LLP
71. LIQUID INFOTECH
72. Logic Works Incorporations
73. Lupin , ankleshwar
74. Lupin Ltd., Ankleshwar
75. Lupin Ltd.,Dabhasa
76. Lupin Ltd.,Mandideep
77. Marigold Paints,Viththal Udhyoganagar
78. Marudhar Paints,Jodhpur
79. Mediwine Pharmaceutical PVT LTD., Ahmedabad
80. Meghmani Dyes & Intermediated Ltd., Vatva,Gujarat
81. Neo Paints,Vapi
82. Net Xpert Web Solution
83. NIS Academy
84. Odishman privet Limited.,
85. Oil and Natural Gas Commission. (ONGC - Mehsana asset)
86. Om Infosolutions
87. Orphic Pharma Ltd.,Munjmahuda,Vadodara
88. Osaka Pharmaceuticals Ltd.,Sankarda,Vadodara,Gujarat
89. Oswal Machinery Ltd., Vithal Udhoyanagar
90. Pidilite Industries Ltd.,Mumbai
91. Piramal Glass,Kosmaba

92. PolymerApplication&ResearchCentre,Reliance Industries Ltd., Mumbai
93. Polyplast India Ltd.,Rajasthan
94. Precitech laboratories, Vapi
95. Pushkar Paints,Lucknow
96. R RKabel Industries Ltd., Silvassa
97. Rajit Paints,Ludhiana
98. Rajshree polifeel .co.LTD, Vaodadra
99. Ravi Pharmaceuticals Ltd.,Kansari,Khambat,Gujarat
100. RDSO,Lucknow
101. RIGEL networks
102. Saboo CoatingChadigarh
103. Saurabh Web Solution
104. Saurashtra Chemicals Ltd.,Porbandar,Gujarat
105. Seneswel, Vadodara
106. Shalimar Paints,Nashik
107. Shree Rama MultiTech Ltd., Kalol, Ahmedabad
108. Shreeji Info Soft.
109. Simplycity Software
110. Skylead Chemicals Ltd.,Navagam,Vartej,Gujarat
111. Soorya Chemicals Ltd.,G.I.D.C. V.U.Nagar,Gujarat
112. Spectrum Chemical Industries,G.I.D.C. Visnagar,Gujarat
113. Sterion Polymers Ltd., Nandesari, Vadodara
114. STP plant.Vadodara
115. Suzlon Industries Ltd.,Bhuj
116. Synergy Chlorination Ltd.,Nandesari G.I.D.C.Gujarat
117. TATA Chemicals limited., Mithapur
118. TCS
119. TML Industries Ltd.,Piludra,Vadodara
120. United Phosphorous Ltd.,Ankleshwar G.I.D.C.Gujarat
121. Vimal Dairy Ltd.,Mehsana
122. Vimal Microns,Mehsana
123. Vin Industries Ltd., Delhi
124. Vision Industries,Padra,Vadodara
125. Vitronics Controls., Pune
126. VWEMCL, Vapi
127. Welspun steel limited (Anjar).
128. White Pearl IT Solution Pvt.Ltd.
129. Wockhardt Ltd.,G.I.D.C.,Ankleshwar

### Appendix 5: Research paper published by the faculty in the last 5 years

Sr. No.	Name of the faculty	Title of the paper & Year of the Publication	Name of the journals
1	Dr. Nirmal Kumar	Temporal and spatial variations in hydro- chemical properties of a sewage-fed wetland, Khodiyar, Gujarat,2008	An International Biannual Journal of Environmental Science 2(2): 195-201. ISSN: 0974-0376.
2.		Short term assessment of influence of hydro-geo chemistry on methane emission from two contrasting tropical wetlands of central Gujarat, 2008	J. Nature Environment and Pollution Technology. Vol.7: 15-20ISSN: 0972 6268.
3		An Assessment of impact of Anthropogenic discharges in Mahim Creek and adjoining coastal waters, Maharashtra,2008	International J. Bioscience Reporter. 6: 33-42.
4		Evaluation of Biomonitoring approach to Study lake Contamination by Accumulation of Trace Elements in Selected Aquatic Macrophytes: A case Study Of Kanewal CommunityReserve, Gujarat, India.2008	Applied Ecology and Environmental Research. (Hungery), 6(1), pp 65-76. ISSN Number:Printed:1589-1623, Online: 1785-0037.IF:0.546
5		Macrophytes in Phytoremediation of Heavy Metal contaminated Water and sediments in Pariyej Community Reserve, Gujarat, India.2008	Turkish Journal of Fisheries and Aquatic Sciences 8(2): 193-200 ( Received Dr.C.K Shah award) . ISSN: 1303-2712.
6		Biomonitoring of Trace elements in some selected aquatic Macrophytes with reference to lake contamination: A case study of Pariyej community reserve, Gujarat, 2008	Asian Jr. of Microbiol. Biotech. Env. Sc. Vol.10(4): 803-810
7		Assessing Heavy metal hyperaccumulation and mobility selected vegetable crops: A case study of Organic Farm.2008	J. Nature Environment and Pollution Technology 7: 203-210. ISSN: 0972-6268.
8		Biochemical Constitutes under different light intensities in Andrographis paniculata.2008	Ind. J. Plant Physiology. 13(2): 208-210. ISSN Numbers: Printed: 0019-5502.
9		Metabolic response and nutrient removal by Tolypothrix tenuis from fertilizer industrial effluent 2008	.International Journal of Industrial Pollution and Control. 24: 1-6. ISSN: 0970-2083.

10	Quantification of nutrient content in the above-ground biomass of teak plantation in tropical dry deciduous forest of Udaipur, Rajasthan, 2009	Journal of Forest Science Vol. 55 (6): 251-256 (Cezrepublic). ISSNNumbers: Printed: 2070-2620, Online: 2070-2639.
11	An assesment of Indian fuel wood with regards to properties and environmental impact 2009	Asian Journal on Energy and Environment, 10 (2): 99-107 (Thailand). ISSN: 1513-4121.
12	Tree species diversity and soil nutrient status in three sites of tropical dry deciduous forest of western India 2009	Tropical Ecology. 51(2): 273-279. ISSN: 0564-3295
13	Bioprospecting in a Tropical dry deciduous Forest of Western Rajasthan, India. 2009	International Journal of "Bioscience Reporter" , 7(1), pp. 105-109. ISSN- 2277-9493.
14	Assessment of spatial and temporal fluctuations in water quality of a tropical permanent Estuarine system - Tapi, west coast India. 2009	Applied Ecology and Environmental Research 7(3):267-276.(Hungary).ISSN Number:Printed:1589 1623, Online: 1784-0037.IF: 0.547
15	Influence of Limiting Factors on Phytoplankton and Coliform Population in an Inundated, Isolated Wetland. 2009	Journal of Wetlands Ecology, 3: 43-56. ISSN: 2091-0363.
16	Biosorption of Heavy Metals from Aqueous Solution by Green Marine Macroalgae from Okha Port, Gulf of Kutch, India. 2009	American-Eurasian Journal of Agricultural & Environmental Science 6(3): 317-323. ISSN: 1818-6769.IF: 0.54
17	An assesment of Heavy metals distribution at lower reaches of three permentant tropical estuaries of Gulf of Khambhat, India. 2009	International Journal of Pollution Research. Vol 28 (4): 597-601. ISSN: 0257-8050.
18	Variations in Hydro-chemical Characters of Two Distinct Wetlands of Central Gujarat, India. 2009	International Journal of Nature and Environment Pollution Technology. 8(2): 269-277. ISSN: 0972-6268.
19	Heavy Metal and Coliform Contamination in the Ground Waters of Nandesari Industrial Area, Gujarat, India. 2009	International Journal of Bioscience Reporter, 7 (1). 75-78.
20	Short term diurnal and Temporal measurement of Methane emission in relation to organic carbon , sulphate, phosphate contents of two rice	Paddy and Water Environment (Springers) Vol .7 pp .11-16 (IF: 1.23)ISSN Number: Printed: 1611-2490, Online: 1611-2504.

		fields of central Gujarat, India,2009	
21		Hyper accumulation and mobility of heavy Metals in Vegetable crops in India,2009	The Journal of Agriculture and Environment Vol 10:29-38.
22		Nutrient composition and Calorific value of some Seaweeds from Bet Dwarka, West coast of Gujarat, 2009	Our Nature, 7: 18-25. ISSN: 1991-2951.
23		Removal of cadmium, mercury and lead from aqueous solution using marine macroalgae as low cost adsorbents.2009	Journal of Pure and Applied Sciences. 17: 28-32, ISSN: 0975-2595
24		An evaluation of Pigment Composition in eighteen marine Macroalgae from Okha Coast, Gulf of Kutch, India,2009	Our Nature, 7; 48-55.ISSN: 1991-2951.
25		The physiological action of 2, 4 Dichlorophenoxyacetic acid on the growth of <i>Eichhornia crassipes</i> "2009	Journal of Pure and Applied Sciences, Vol 17, pp.51-54. ISSN: 0975-2595.
26		Chronic Toxicity of Chlorophenoxy Herbicide on growth, Metabolites and enzymatic activities of <i>Anabaena fertilissima</i> Rao.2009	Asian Journal of Environmental Science, 4(2): 197-202.ISSN Numbers: Printed: 0973-4759, Online 0976-8947.
27		Effect of light stress on peroxidase, succinate dehydrogenase and total chlorophyll content in <i>Andrographis paniculata</i> .2009	Asian Journal of Environmental Science 4(1):34-38.ISSN Numbers: Printed: 0973 4759, Online: 0976-8947
28		Biochemical assessment of nitrogen fixing Cyanobacteria- <i>Stigonema ocellatum</i> dillw. to acute toxicity of CdNO <sub>3</sub> ,2009	Indian Journal of Environmental Sciences. Vol (13) 157-160. ISBN:0971-8958.
29	Dr. Nirmal Kumar	Toxicity of lead on biochemical changes of nitrogen fixing Cyanobacteria – <i>Alusira fertilissima</i> Ghose.2009	International Journal of Nature Environment and Pollution Technology. 8(1): 179-186. ISSN: 0972-6268.
30		Differential effect of Phenoxy Substituted Herbicide 2, 4-D on Pigments, Metabolites, and Enzyme Activities of Three Species of Cyanobacteria.2009	International Journal of Biosciences & Technology. 2 (7); 87-95. ISSN: 0974-3987
31		Photosynthetic, biochemical and enzymatic investigation of <i>Anabaena fertilissima</i> in response to an insecticide-hexachloro-hexahydro-methano-benzodioxathiepine-oxide,2009	Journal of Stress Physiology and Biochemistry 5(3): 4-12.ISSN: 1997-0838.

32	Dr. Nirmal	An evaluation of fuelwood properties of some Aravally mountain tree and shrub species of Western India.2010	Biomass and Bioenergy 35: 411-414 (Elsevier, 4.624 IF) ISSN: 0961-9534
33		An assessment of carbon stock for various land use system in Aravally mountains, Western India.2010	Mitigation and Adaption Strategies for Global Change DOI: 10.1007/s11027-010-9240-3, (2010) 15:811–824 (Springer) (IF: 1.234) ISSN Numbers: Printed: 1381-2386, Online: 1573-1596.
34		An assessment of the accumulation potential of three heavy metals (Pb, Zn and Cd) by <i>Avicennia marina</i> (Forssk.) Vierh. near in Vamleshwar Narmada Estuary, West Coast of Gujarat, India,2010	Notulae Scientia Biologicae. 3: 36-40. ISSN Numbers: Printed: 2067-3205, Online: 2067-3264.
35		Wood and Leaf Litter Decomposition and Nutrient Release from <i>Tectona grandis</i> Linn. f. in a Tropical Dry Deciduous Forest of Rajasthan, Western India.2010	Journal of Forest Science 26 (1): 17-23. (Korea). ISSN Numbers: Printed: 2070-2620, Online: 2070-2639.
36		Bioprospecting in a Tropical Dry Deciduous Forest of Western Rajasthan, India.2010	Journal of Forest Science 26 (1): 25-30 (Korea). ISSN Numbers: Printed: 2070-2620
37		Seasonal changes of bioelements in litter and their potential return to green leaves in five species of tropical dry deciduous forest, western India,2010	Journal of Forestry Research. 21(1):33-38. (Springer)(IF.0.79). ISSN Numbers: Printed: 1007-662X, Online: 1993-0607.
38		Consequence of <i>Butea monosperma</i> plantation on the nutrient cycling in a semiarid grazingland, Rajasthan, 2010	International Journal of Plant Sciences 5(1):16-23. ISSN: 0973-1547.
39		An assessment of Water Quality Index and Hydrobiological parameters of Sabarmati river and Kharicut canal at Ahmedabad, Gujarat.2010	Global Journal of Environmental Research. 4 (3): 183-191.
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179		"A Study of Secure Routing Protocol in Mobile Ad hoc Networks"2008	National Conference on Advancement in Wireless Technology and Applications(AWTA-2008) 18-19 December 2008, , Proc. AWTA-08 ISBN 81-907196-9-6 Excel India, Page No. 33 -38, held at SVNIT, Surat, Gujarat, India
180	Mr. Nirbhay Chaubey	"A Survey of Intrusion Detection in Mobile Ad hoc Networks" 2009	National Conference on Intelligent System & Communications (NCISC-2009) Conference Proceedings ISBN 978-81-908497-4-6, Ikon Books, Page No. 186-195, held at Sri Padmavati Womens University, Tirupati, Andhra Pradesh, India
181		"Key Management Considerations in MANETs" 2009	National Conference on Cryptography & Network Security (NCCNS- 2009) 18-19 February 2009, Conference Proc. NCCNS-09 Page No.142-147, held at VIT University, Vellore, Tamilnadu, India
182		"A Survey of Intrusion Detection in Mobile Ad hoc Networks" 2009	National Conference on Intelligent System & Communications (NCISC-2009) Conference Proceedings

			ISBN 978-81-908497-4-6, Ikon Books, Page No. 186-195, held at Sri Padmavati Womens University, Tirupati, , India
183		"Key Management Considerations in MANETs" 2009	National Conference on Cryptography & Network Security (NCCNS- 2009) 18-19 February 2009, Conference Proc. NCCNS-09,142-147, held at VIT University, Vellore, India
184		"Performance Evaluation of DSR, OLSR and ZRP Protocols in MANETs"2012	2nd IEEE International Conference on Computer Communication and Informatics (ICCCI-2012), 10-12, January, 2012 Available in IEEE Explore
185		"Scenario-based Performance Comparison of Reactive, Proactive & Hybrid Protocols in MANET",2012	2nd IEEE International Conference on Computer Communication and Informatics (ICCCI-2012), 10-12,
186		"AODVSEC: A Novel Approach to Secure Ad Hoc on-Demand Distance Vector (AODV) Routing Protocol from Insider Attacks in MANETs"2012	International Journal of Computer Networks & Communications (IJCNC)ISSN : 0974 – 9322 [Online] ; 0975 – 2293,Vol.4, No.4, 191-210
187		NDTAODV: Neighbor Defense Technique for Ad hoc On-Demand Distance Vector (AODV) to Mitigate Flood Attack in MANETs 2013	Proceedings International Conference of Networks and Communications (NECO 2013, Advances in Intelligent and Soft Computing.
188		A Simulation Study of Malicious Activities under Various Scenarios in Mobile Ad hoc Networks (MANETs),2013	IEEE International Multi-Conference on Automation, Computing, Communicatin, Control and Compressed Sensing (iMACs), IEEE Catalog No. CFP1341U-ISBN NO. 978—1-4773-5088-4
189		Effect of non-electrolyte additives on micellization and clouding behavior of silicone surfactant in aqueous solutions. 2011	Colloids and Surfaces A: Physicochem. Eng. Aspects 377 205–211
190		Effect of Surfactants on Association Characteristics of Di- and Triblock Copolymers of Oxyethylene and Oxybutylene in Aqueous Solutions: Dilute Solution Phase Diagrams, SANS, and Viscosity Measurements at Different Temperatures,2011	International Journal of Polymer Science Volume 2011, Article ID 570149, 13 pages
191	Dr.Sanjay Panjabi	Small Angle Neutron Scattering and Viscosity Measurements on Silicone, Ionic, and Nonionic Surfactant Mixed Systems in Aqueous Solutions,2012	Journal of Dispersion Science and Technology,33 245–253
192		Effect of t-octylphenoxy polyethoxyethanol	Journal of Molecular Liquids, 177, 215-224

		(TX-100) on the dilute aqueous solution phase diagrams, surface activity and micellization behavior of non-ionic silicone surfactants (SS) in aqueous media,2013	
193	Dr Kalpesh Patel	“Ambient Cured Polyurethane modified epoxy-coatings synthesized from renewable resources”-2009	(Int Journal of Plastic Technology), 13 (2):112-122., 28.
194		UV-curable Polyurethane Coating Derived from Cellulose” 2009	(Iranian Polymer Journal) 18 (11), ,903-915.
195		Study of copolymer latexes with biomodal particle size distribution to improve stain resistance:2009	(Paintindia), 95-100 Vol. LIX, No. 5
196		Heavy Duty Protective Polyurethane Coatings derived from Hyperbranched Oleochemical Polyols,2008	European Coating Journal (6)
197		Renewable Resistance: Oleochemical Polyols formulated for use in Heavy Duty Protective Coatings.2008	European Coatings Journal, Pp 35-42, Vincentz Publisher
198		Mr Mayank R Patel	Chemical Recycling of PET. A review,2008
199	Studies on effect of various solvents on extraction of cashew nut shell liquid (CNSL) and isolation of major phenolic constituents from extracted CNSL. 2012		J. Nat. Prod. Plant Resour., 2 (1):135-142. ISSN: 2231 – 3184.
200	Microbial Production of Lactic Acid by Using Crude Glycerol from Biodiesel. 2012		J. Microbiol. Biotech. Res.,2 (1): 90-93. ISSN: 2231 –3168.
201	Synthesis and characterization of polylactic acid (PLA) using a solid acid catalyst system in the polycondensation method.2012		Research on Chemical Intermediates, Springer. Vol, 36(6), 2012 ISSN: 0922-6168
202	Synthesis and characterization of different types of epoxide-based Mannich polyols from low-cost cashew nut shell liquid. 2013		Research on Chemical Intermediates.
203	Dr. M. M. Raj	Chelating polymers derived from modified epoxy resin and 8-hydroxyquinoline.2008	International Journal of Plastics Technology, 12, 853 - 862
204		Synthesis, Characterization of Mannich Base Oligomers used with Epoxy Resin for Glass Fiber Reinforced Laminates.2010	J. of Thermal Ana. &Calorimetry, 101, 1003 – 1009

205		Interpenetrating polymer network of epoxy resin based polyhydroxy ester and poly(methyl methacrylate).2010	J. of Applied Chem. Res., 10
206		Glass-reinforced composites based on (epoxy-phenols-urea) resin blends.2012	Journal of Saudi Chemical Society, 16,241-246
207	Dr. P. M. Udani	VRC – in pursuit of social empowerment and providing space technology enabled services to the villages.2009	IEEE Conference on Technologies for Humanitarian Challenges, August New Delhi
208		Development of mobile GPS-GIS data processing software,2010	, Journal of Geomatics,.
209		Technological Trends in Geoinformatics2010	ISG News Letter
210		, Mobile GIS for Assessment of Disaster,2011	ISG News Letter
211		Mobile GIS Application in Planning and Monitoring of MGNREGA Works2012	ISG Journal
212		Rural Empowerment through Gujarat Village Resource Centre Network2012	IN PRESS
213		Dr.S.O.Khanna	Mobile Computing with Scripting Language,2008
214	Email Scripting Language 2008		The 2008 international conference on Internet Computing (ICOMP 2008) I/2008/117/ISBN:1-60132-073-6
215	New Data Type Intcbi 2008		The 2008 international conference on Internet Computing (ICOMP 2008) I/2008/236/ISBN:1-60132-073-6
216	Data Security & Optimization of Database,2009		The 2009 international conference on Internet Computing (ICOMP 2009) I/2009/55/ISBN:1-60132-110-4
217	Dynamically Discovery WCF Service 2009		The 2009 international conference on Internet Computing (ICOMP 2009) I/2009/89/ISBN:1-60132-110-4
218	Dynamically Send Database Without Web Space 2009		The 2009 international conference on Internet Computing (ICOMP 2009) I/2009/89/ISBN:1-60132-110-4
219	Implementation of Mobile based Hospital System Using Web Services 2011		The 2011 international conference on Internet Computing (ICOMP 2011)
220	Web Hosting Service For Uvn Hostname 2011		International Journal of Information and Computing Technology ISSN-0976-5999
221	Concept Of Universal Web Browser For Uvn Host		International Journal of Advanced Engineering Technology

		2011	ISSN-0976-3945
222	Dr.S.O.Khanna	Email Scripting Language With Mail Merge 2011	International Journal of Engineering Research and Studies ISSN-0976-7916
223		Concept Of New Fully Qualified Domain Name 2011	International Journal of Advanced Engineering Technology ISSN-0976-3945
224		Concept Of Message Merge Using Database For Sending 2011	International Journal of Advanced Engineering Technology ISSN 0976-3945
225		Concept Of Web Services In Universal Domain Name System 2011	International Journal of Advanced Engineering Technology ISSN 0976 - 3945
226		Wireless Home Security System With Mobile 2011	International Journal of Advanced Engineering Technology ISSN 0976 - 3945
227		Universal Email Software With # Notation 2011	International Journal of Advanced Engineering Technology ISSN 0976 - 3945
228		CONCEPT OF Sending Message From The Database As Output By Assigning Receiving message as input parameter 2011	International Journal of Advanced Engineering Technology ISSN 0976 - 3945
229		A Solution For Preventing Sql Injection In Web Based Application 2011	International Journal of Information and Computing Technology ISSN – 0976 – 5999
230		Android Mobile Security An Issue Of Future 2011	International Journal of Advanced Research in Computer Science ISSN No. 0976-5697
231		Smart Embedded Real-time System Applications using Optimized EDF Scheduling Algorithm 2011	International Journal of Information and Computing Technology ISSN – 0976 – 5999
232		A NOVEL IMAGE REGISTRATION TECHNIQUE USING LOCAL PHASE INFORMATION 2011	International Journal of Information and Computing Technology ISSN – 0976 – 5999
233		Integrated Short Messaging Services into the Institute based System 2011	National Journal of engineering Science and Management ISSN 2249-0264 ISSN 2249-0264
234		Title: Impact of Web Services in Web Domains 2011	The 2011 International Conference on Internet Computing (ICOMP'11: July 18-21, 2011, USA)
235		Implementation of Mobile Based Hospital System Using Web Services 2011	The 2011 International Conference on Internet Computing (ICOMP'11: July 18-21, 2011, USA)
236		Concept of Search Engine Optimization in Web Search	International Journal of Advanced Engineering Technology

	Dr.S.O.Khanna	Engine 2012	ISSN 2249-8974
237		Impact of AJAX in Web Applications 2012	International Journal of Advanced Engineering Technology ISSN 0976 3945
238		Significance of Web Services in Web Applications 2012	International Journal of Advanced Engineering Technology ISSN 0976-3945
239		Concept of taking input from email address & sends output to mobile & email address by using centralized web server 2011	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
240		Concept of Web based SMS MESSAGING SERVER WITH MOBILE 2012	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
241		Controlling the electronic weapons from the remote place using mobile for defense. 2011	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
242		Concept of adding USB 3G Dongle to Router for making mobile Router to control its functions from remote place 2011	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
243		Concept of Mail Merge using RDBMS 2011	International Journal of Advanced Engineering Technology ISSN 2249-8974
244		Importance of WCF in Web Applications for product searching 2011	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
245		Importance of WCF in Web Applications 2011	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
246		Security Camera can be access into mobile with internet from remote place 2012	International Journal of Engineering Research and Applications ISSN 2248-9622
247		Controlling and accessing vehicle functions by mobile from remote place by sending GPS Co-ordinates to the Web server 2012	International Journal of Engineering Research and Applications ISSN 2248-9622
248		Controlling the Web traffic and eCommerce portal by using the concept of accessing data Information form client side to the server for a particular web site having internet traffic 2012	International Journal of Engineering Research and Applications ISSN 2248-9622
249		APPLICATION OFGOOGLE	International Journal of Advanced

	Dr.S.O.Khanna	API AND KML TO DRAW PATH FROM SOURCE TO DESTINATION ON ANDROID PHONE 2012	Engineering Technology ISSN 0976 – 3945
250		Concept of Independent Installer 2012	International Journal of Advanced Engineering Technology ISSN 0976 – 3945
251		Accessing information on Mobile Client from Mobile & Web Server with Internet from remote place 2012	International Journal of Advanced Engineering Technology ISSN 0976 - 3945
252		Impact of Silver light in Web Applications 2011	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
253		Impact of JQuery in Web domain 2011	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
254		Concept of Remote controlling PC with Smartphone Inputs from remote place with internet 2012	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
255		Information Management System using LINQ over ADO.Net 2012	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
256		Student Monitoring System Using WPF and Web Services 2012	International Journal of Advanced Research in Computer Science & Software Engineering ISSN 2277-128X
257		Information in Mobile can be send conditionally using database in the form of SMS,2012	International Journal of Advanced Research in Computer Science & Software Engineering
258		H. N. Kapse	Potentiometric biosensor for Urea determination in milk, 2009
259	Amperometric Glucose Biosensor based on immobilization of Glucose Oxidase in Polyethylenimine and Poly(carbamolysuphonate) polymer matrix,2010		Sensors & Transducers Vol.119, Issue 8, (129 -141)
260	A.D.Thummar	Aqueous Block Copolymer - Surfactant Mixtures - Surface Tension, DLS and Viscosity Measurements and Their Utility in Solubilization of Hydrophobic Drug and Its Controlled	Colloid and Surfaces A: 2011, 386, 54-64

		Release	
		2011	

Annexure 6 :Seminars/workshops attended by faculty since the last 5 years

Sr.No.	Name of Faculty	Seminars/ workshops/conferences	Date/month/year
1	Dr.Nirmal Kumar	Technology Solutions for Environmental Up gradation, MahatmaMandhir, Gandhinagar	7 July,2012
2	Dr.Nirmal Kumar	National Seminar on Air pollution management in changing Global Environmental Scenario,M.S.U.,Baroda	7 Feb,2010
3	Dr.Nirmal Kumar	National Symposium on Biotechnology led Paradigm shift-2010 in ARIBAS,New Vidyanagar	24 Jan,2010
4	Dr.Nirmal Kumar	National Symposium on New Frontoers in Life Science,NVPAS, Vallabh Vidyanagar	19 Dec,2009
5	Dr.Nirmal Kumar	International Symposium on Env. pollution,Ecology and Human Health,S.V.University,Tirupati,Andhra Pradesh	25-27 July,2009
6	Dr.Nirmal Kumar	Seminar on Env.Science & Technology for sustainable development,IQAC,GOVT college for women, Srikakulam,A.P	18-20 Jan,2009
7	Dr.Hiren Soni	National Symposium on Prosopis juliflora: Ecological, Significance and Management Challenges, Organized by Gujarat Institute of Desert Ecology (GUIDE), Bhuj (Kachchh), Gujarat,	20-21 Feb,2009
8	Dr.Hiren Soni	State Level Workshop on Right To Information (RTI) As A Tool in Wildlife Conservation, Organized by Bird Conservation Society (BCSG) and Center for Ecological Action Front (CEAF) Ahmedabad, Gujarat, India	23 Aug,2009
9	Dr.Hiren Soni	National Seminar on Importance of Trees in Conservation of Avian Diversity (ITCAD), Organized by Department of Zoology, Faculty of Science, The Maharaja Sayajirao University of Baroda and Bird Conservation Society of Gujarat (BCSG), Gujarat, India	13 Sep,2009
10	Dr.Hiren Soni	National Workshop on Invertebrate Taxonomy, Organized by Department of Zoology, Faculty of Science, The Maharaja Sayajirao University of Baroda (MSU) of Baroda, Vadodara.	18-19 Nov,2009
11	Dr.Hiren Soni	National Seminar on New Frontiers in Life Sciences, Organized by Department of Biological and Environmental Science, N.V. Patel College of Pure and Applied Sciences (NVPAS), V.V. Nagar, at B.V.M. College of Engineering, Vallabh Vidyanagar.	19 Dec,2009
12	Dr.Hiren Soni	National Symposium on Biotechnology Led Paradigm Shift – 2010, Organized by (ARIBAS), New Vidyanagar, Gujarat, India	24 Jan,2010
13	Dr.Hiren Soni	National Workshop on Environmental Conservation and Sustainable Development, Organized by Gujarat Ecology Commission (GEC), Gandhinagar	24 March,2010
14	Dr.Hiren Soni	Workshop on Counseling for Career Opportunities (Education Fair - 2010), Organized by Charutar Vidya Mandal (CVM), Vallabh Vidyanagar, Gujarat, India	1 May,2010
15	Dr.Hiren Soni	Seminar on State of Environment and Climate Change in	24 Sep,2010

		Gujarat on the auspicious occasion of Swarnim Gujarat, at K.S.K.V. Kachchh University, Bhuj (Kachchh), Gujarat, India	
16	Dr.Hiren Soni	12 <sup>th</sup> National Conference on Inter-disciplinary Approaches in Environmental Sciences, Organized by Society of Science and Environment, at Department of Zoology, MSU of Baroda.	9-10 Oct,2010
17	Dr. Hiren Soni	National Symposium on Sustainable Development: Issues and Concerns, Organized by Department of Biological and Environmental Science, N.V. Patel College of Pure and Applied Sciences (NVPAS), , Vallabh Vidyanagar, Gujarat,	22 Jan,2011
18	Dr. Hiren Soni	National Symposium on Exploring the Horizons of IPR, Organized by s (ARIBAS), New Vidyanagar, Gujarat, India	26 Feb,2011
19	Dr. Hiren Soni	National Symposium on Status, Challenges and Opportunities in Life Sciences, Organized by ARIBAS, Gujarat, India	10 Sep 2011
20	Dr. Hiren Soni	National Conference on Wetland Conservation and Sustainable Development, Organized by Gujarat Institute of Desert Ecology (GUIDE), Bhuj (Kachchh), Gujarat, India	17-18 Feb,2012
21	Dr. Hiren Soni	National Seminar on Bird Habitats & Their Conservation, Organized by Department of Life Sciences, Hemchandracharya North Gujarat University (HNGU - Patan) and Bird Conservation Society of Gujarat (BCSG)	16 Feb,2013
22	Dr. Pankaj Kumar	AGU fall meeting, San Francisco, California	5-9 Dec,2011
23	Dr. Pankaj Kumar	International symposium for Environmental Isotopes, Kyoto	29-30 Sept,2011
24	Dr. Pankaj Kumar	Asian Conference on Remote Sensing (ACRS),Beijing, China	18-23 Oct,2009
25	Dr. Pankaj Kumar	GSA Annual Meeting, Portland, USA	18-21Oct, 2009
26	Dr. Pankaj Kumar	GSA Annual Meeting, Denver, USA	31Oct-3Nov, 2010
27	Ms. Dhruvi Patel	National Seminar held at N.V.Patel Pure and Applied Science college on the topic of To carry Out the Treatability Studies by newly Developed Biomass for CETP	7 July,2012
28	Dr. Merlin Thomas	National Symposium on membrane separation in Chemical & Allied process Industries, organized by IICHe & ISTE, GCET, Vallabh Vidyanagar	12 Oct, 2012
29	Dr. Merlin Thomas	National Symposium on Green Chemistry & Technology for Sustainable Development, organized by IICHe & ISTE, GCET, Vallabh Vidyanagar	24-25 Feb,2012
30	Dr. Merlin Thomas	National Seminar on ICH Guidelines organized by MISA, Rotary Community Center, Anand	18 Sep,2011
31	Dr. Merlin Thomas	Colloquium on Empowerment of Post Modern women, organized by Rotary Club & Inner wheel club at NVPAS, Vallabh Vidyanagar, Gujarat	8 March,2011
32	Dr. Merlin Thomas	Challenges and problems in implementing CBCS , organized by IQAC, S. P. University	24 March,2011
33	Dr. Merlin Thomas	National Symposium on Advances in Separation and Purification Science & Technology, organized by IICHE & ISTE, GCET, Vallabh Vidyanagar	4-5 Feb,2011
34	Dr. Jigar Patel	National Symposium on membrane separation in Chemical & Allied process Industries organized by IICHe & ISTE, GCET, Vallabh Vidyanagar	12 Oct 2012
35	Dr. Jigar Patel	National Seminar on ICH Guidelines, organized by MISA, Rotary Community Center, Anand	18 Sep,2011
36	Dr. Rohit Dave	Recent Advances in Analytical Techniques for Pharmaceuticals”, Department of Pharmaceutical Science, Sardar Patel University, Anand, Gujarat.	18-19 March,2011
37	Dr. Rohit Dave	National Seminar on ICH Guidelines organized by MISA, Rotary Community Center, Anand	18 Sep,2011

38	Dr. Nirmal Patel	State level seminar on current trends in environmental science” Organized by Natubahi V. Patel college of pure and applied science, V. V. Nagar, S.P. University, Gujarat	8-9 Nov,2008
39	Dr. Nirmal Patel	National level seminar on Research in chemistry at the crossing edge of other sciences (RC2EOS – 09)” Organized by Chemical science department, Natubahi V. Patel college of pure and applied science, S.P. University, Gujarat	20 Sep,2008
40	Dr. Nirmal Patel	“Nano- technology workshop” organized by Material science department, S. P. University, V. V. Nagar, Gujarat	21-22 Jan,2010
41	Dr. Nirmal Patel	National workshop on frontiers in chemistry” organized by department of chemistry, Sardar Patel University, V. V. Nagar	2-4 Feb,2012
42	Dr. Nirmal Patel	Workshop on NPTEL organized by IIT madras at Christ college, Rajkot	19 May,2012
43	Dr. A. K. Dighe	ISSPA, Maharashtra Technological Advancement in Small Scale Industries, Mumbai	Sep,2011
44	Dr. A. K. Dighe	PAINTINDIA OUTREACH 2012,Ahmedabad Management Association	24 Aug, 2012
45	Dr. A. K. Dighe	Paintindia Exhibition ,Mumbai	23-25 Feb, 2012
46	Dr. A. K. Dighe	5 <sup>th</sup> PACT conference, India Habitat Centre, New Delhi,	29 Feb-1Mar, 2008
47	Dr. A. K. Dighe	Paint India Exhibition, Mumbai	19-21Sept, 2008
48	Dr. Kalpesh Patel	Going Green: Environmental Perspective of Coatings Radhkrishna Hall, Anand Agricultural Uni., Anand	9 March, 2013
49	Dr. Kalpesh Patel	Paintindia Exhibition , Mumbai	23-25 Feb, 2012
50	Dr. Kalpesh Patel	PAINTINDIA OUTREACH 2012, Coatings: Revisit the Fundamentals, Ahmadabad	24Aug, 2012.
51	Dr. Kalpesh Patel	Seminar on “Nanotechnology and its perspectives in Coating Technology”, Radhkrishna Hall, Anand Agricultural Univ.	3 Jan, 2010
52	Dr. Kalpesh Patel	“Research in Chemistry at the crossing Edge of other Science” (Conference), BVM Auditorium, V.V. Nagar	8-9 Nov,2009
53	Dr. Kalpesh Patel	SURFACECOAT-2008,(Conference), New Delhi	29 Feb-1Mar, 2008
54	Dr. Kalpesh Patel	Particle Size Analyzer (Workshop), Sicart Building, VVNagar	28 Aug, 2008
55	Dr. Kalpesh Patel	“Latest Trends & Innovations in Surface Coating Technologies – Global & Indian Perspective” organized by CII (Conference), Indian Habitat Centre, New Delhi.	20-21 Nov, 2008
56	Dr. Mayank Patel	State Level Seminar on ‘Current Trends in Environmental Sciences’. N. V. Patel Science College, Sardar Patel University.	20 Nov,2008
57	Dr. Mayank Patel	XXII Carbohydrate Conference, Department of Chemistry, Bhavnagar University	22-24 Jan,2009
58	Dr. Mayank Patel	National Seminar in ICH Guidelines, Anand, Gujarat, India	18 Sep,2011
59	Dr. Mayank Patel	National Workshop on Frontiers in Chemistry, Department of Chemistry, Vallabh Vidyanagar.	2-4 Feb,2012
60	Mr. Vikas Mishra	Going Green: Environmental Perspective of Coatings, One day Lecture cum Get together, organized by Association of Coating Technologist-Gujarat (ACT-G),	9 March, 2013
61	Mr. Vikas Mishra	26 <sup>th</sup> IPA Conference, Coatings 2020: Future Redefined, Hotel Grand Hyatt, Mumbai	19 -20 Jan, 2013
62	Mr. Vikas Mishra	PAINTINDIA OUTREACH 2012, Coatings: Revisit the Fundamentals, Ahmedabad Management Association, Ahmedabad	24 Aug, 2012
63	Mr. Vikas Mishra	ISSPA Conference, Vithal Udyognagar	17 July, 2010
64	Dr. M. M. Raj	22 <sup>nd</sup> Gujarat Science Congress, Gujarat University	9 March,2008
65	Dr. M. M. Raj	State Level Seminar on Current Trends in Environmental Sciences, NVPAS, V V Nagar	20 Sep,2008
66	Dr. M. M. Raj	National Seminar on Emerging Trends in Chemical Science	20-21 Jan,2009

		Research Department of Chemistry, SPU	
67	Dr. M. M. Raj	Biotechnology Led Paradigm Shift-2010, ARIBAS, New V V Nagar	20 Jan,2010
68	Dr. M. M. Raj	Nanotechnology- Today and Tomorrow, Nirma University	10 Feb,2010
69	Dr.Amit Thummar	National Seminar on Emerging Trends in Chemical Science Research (NSETCSR-2009) at Department of Chemistry, Sardar Patel University, Gujarat	20 – 21 <sup>th</sup> January 2009
70	Dr.Amit Thummar	National Conference on “Thermodynamics of Chemical and Biological Systems at Nagpur University, <b>Nagpur</b>	16 <sup>th</sup> – 17 <sup>th</sup> October 2008
71	Dr. Priya Swaminarayan	4th Short term UGC Sponsored course for PhD Scholars organized by Academic Staff College, Sardar Patel University	1-3 March 2011
72	Dr. Priya Swaminarayan	Two days workshop on “Advanced .Net Technology” hosted by IEEE ISTAR Student Branch	28-29 Aug,2009
73	Dr. Priya Swaminarayan	workshop on ‘LaTeX : A Smart Way of Preparing Research Papers and Thesis”, jointly organized by Department of Computer Engineering and Department of Information Technology, ADIT, V V Nagar	27 Aug,2009
74	Dr. Priya Swaminarayan	State Level Workshop entitled “Advanced DBMS” at SVIT, Vasad	2-3 Jan, 2009
75	Dr. Priya Swaminarayan	National Level Seminar on “Current Trends in ICT” organized by G.H.Patel Post Graduate Department of Computer Science & Technology, Sardar Patel University association with the Computer Society of India, V V Nagar Chapter	14 Feb, 2009
76	Dr. Priya Swaminarayan	One day Symposium on “Net Beans” organized by the IEEE ISTAR Student Branch and Sun Microsystems	17 Sep,2008
77	Dr. Kamlesh Vaishnav	Short Term UGC Sponsored Course for Ph.D. Scholars Academic Staff College, S. P. University	1-3 March, 2011
78	Dr. Kamlesh Vaishnav	Research Scholar Meet ,S. P. University	8-9 Jan, 2012
79	Dr. Kamlesh Vaishnav	National Workshop on Advanced NET, C. U. Shah College of Communication and technology, Wadhwan	25-26 April,2009
80	Dr. Kamlesh Vaishnav	State level Workshop on Advanced Developer Technologies Microsoft Corporation and Gujarat Informatics Limited, Ahmedabad	17 April,2009
81	Dr.Kamlesh Vaishnav	State level workshop on “Advanced DBMS” SVIT (Sardar Vallabhbhai Patel Institute of Technology), Vasad	2-3 Jan,2009
82	Mr.Nirbhay Choubey	International Experience Program (IEP) held at Laurentian University, Sudbury, Canada	18 June -29July 2012
83	Mr.Nirbhay Choubey	workshop: "Professional and Ethical dimensions of emerging trends in IT: held at the BCS, Davidson Building, Southampton Street, London, U.K. organized by British Computer Society, U.K.	16 Feb, 2007
84	Mr.Nirbhay Choubey	“Workshop on National e-Governance Plan (NeGP)” sponsored by the Ministry of Communications & Information Technology, Govt. of India, at Department of Computer Science, Gujarat University, Ahmedabad, India	31 March,2012
85	Mr.Nirbhay Choubey	Tutorial on Simulation of Wired and Wireless Networking using NS2 Simulator” a joint event of IEEE Gujarat Section and IEEE Computer Society Chapter, India Council held at AMA, Ahmedabad, Gujarat, India	12 July,2011
86	Mr.Nirbhay Choubey	AICTE/MHRD, New Delhi Sponsored Short Term Training Program on “Simulation of Wireless Networks (SWN-2011)” held at NIT, Karnatka, Surathkal, Mangalore, India	20-24 June, 2011
87	Mr.Nirbhay Choubey	“National Workshop on Simulation of Networks using NS2 Simulator [NWSN-2010]” a joint event of IEEE Computer	24-25 Sep,2011

		Society Chapter, India Council, IEEE Gujarat Section and IEEE ISTAR Student Branch at ISTAR	
88	Mr.Nirbhay Choubey	Seminar on “Java Programming” a joint event of Pearson Education and Department Of Computer Science, Gujarat University, A’bad	13Sep, 2010

**Annexure 7a: Plan of second floor, Main ISTAR building**



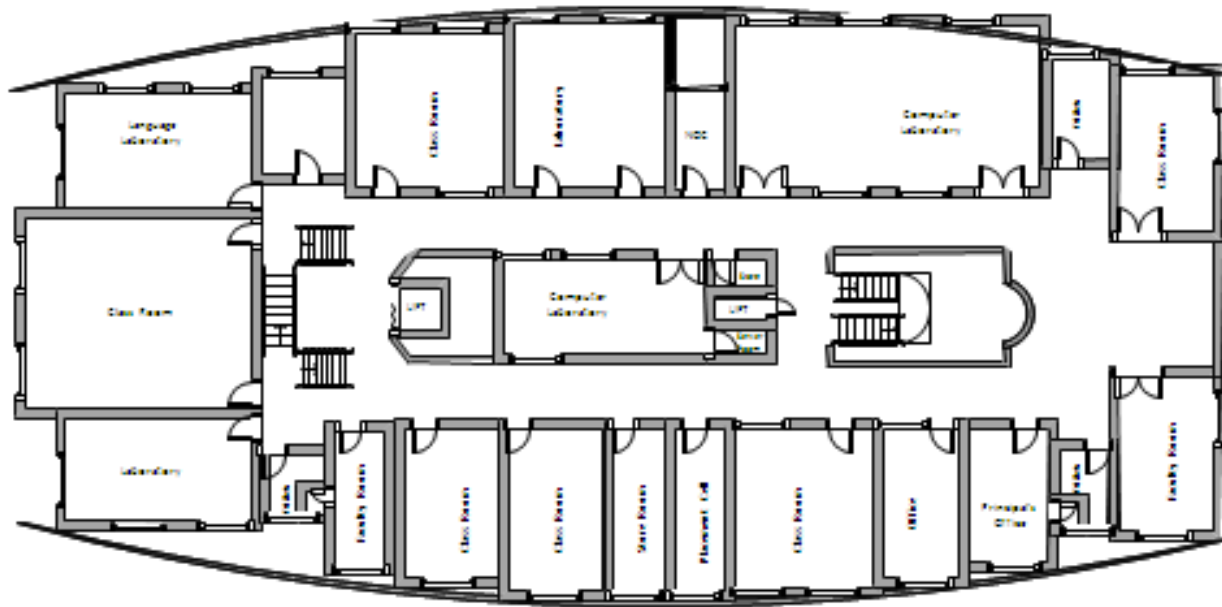
Floor 2

**Annexure 7b: Plan of third floor, Main ISTAR building**

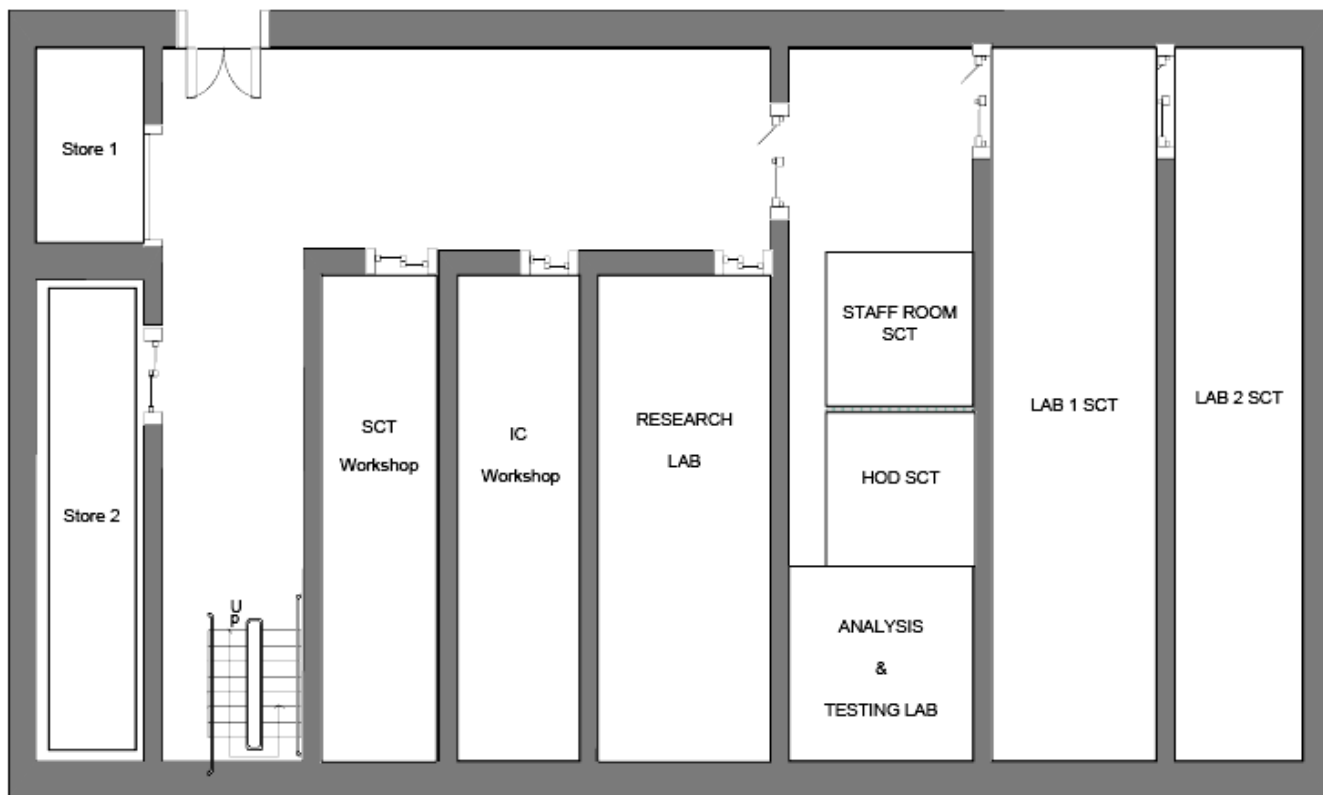


Floor 3

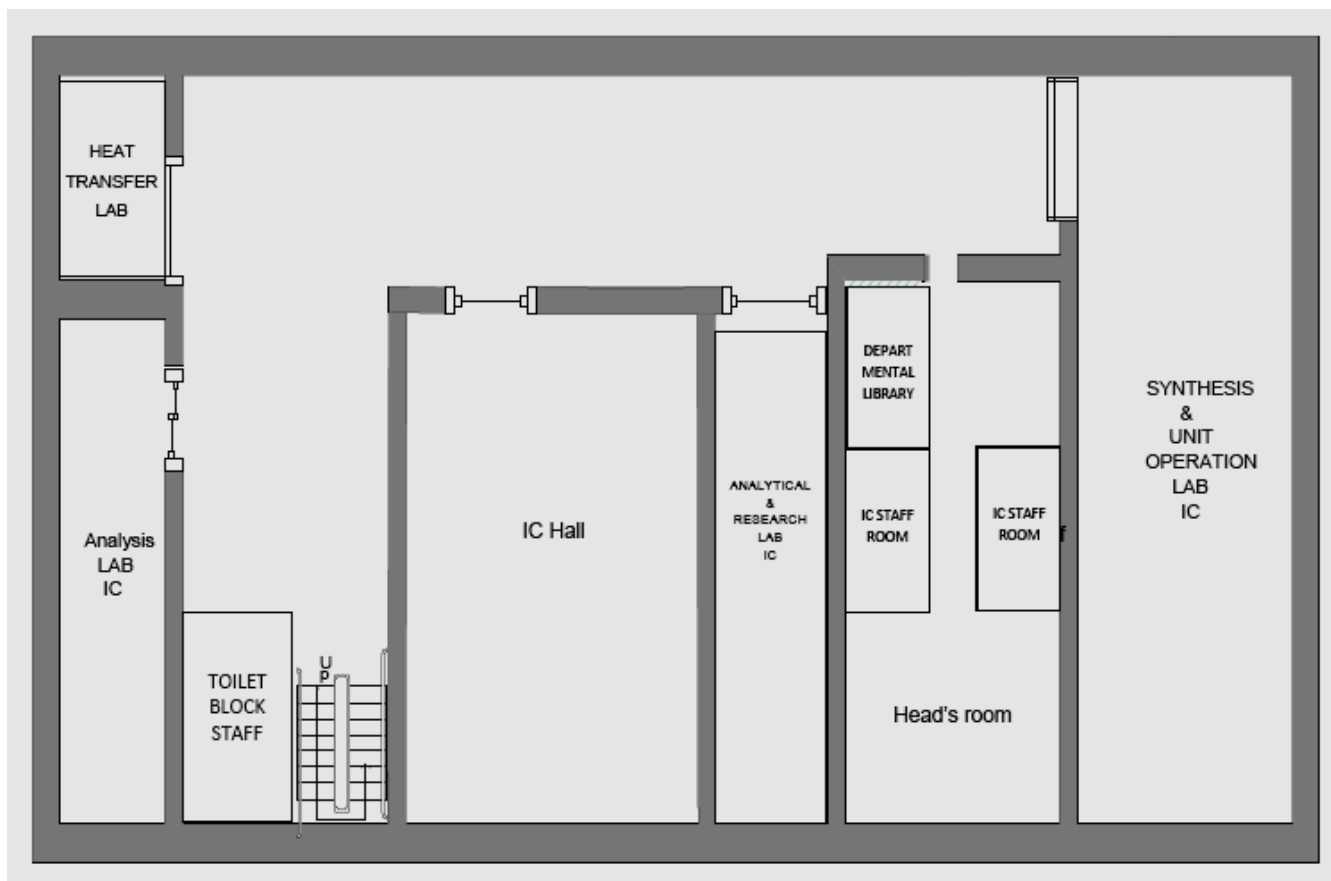
**Annexure 7c: Plan of fourth floor, Main ISTAR building**



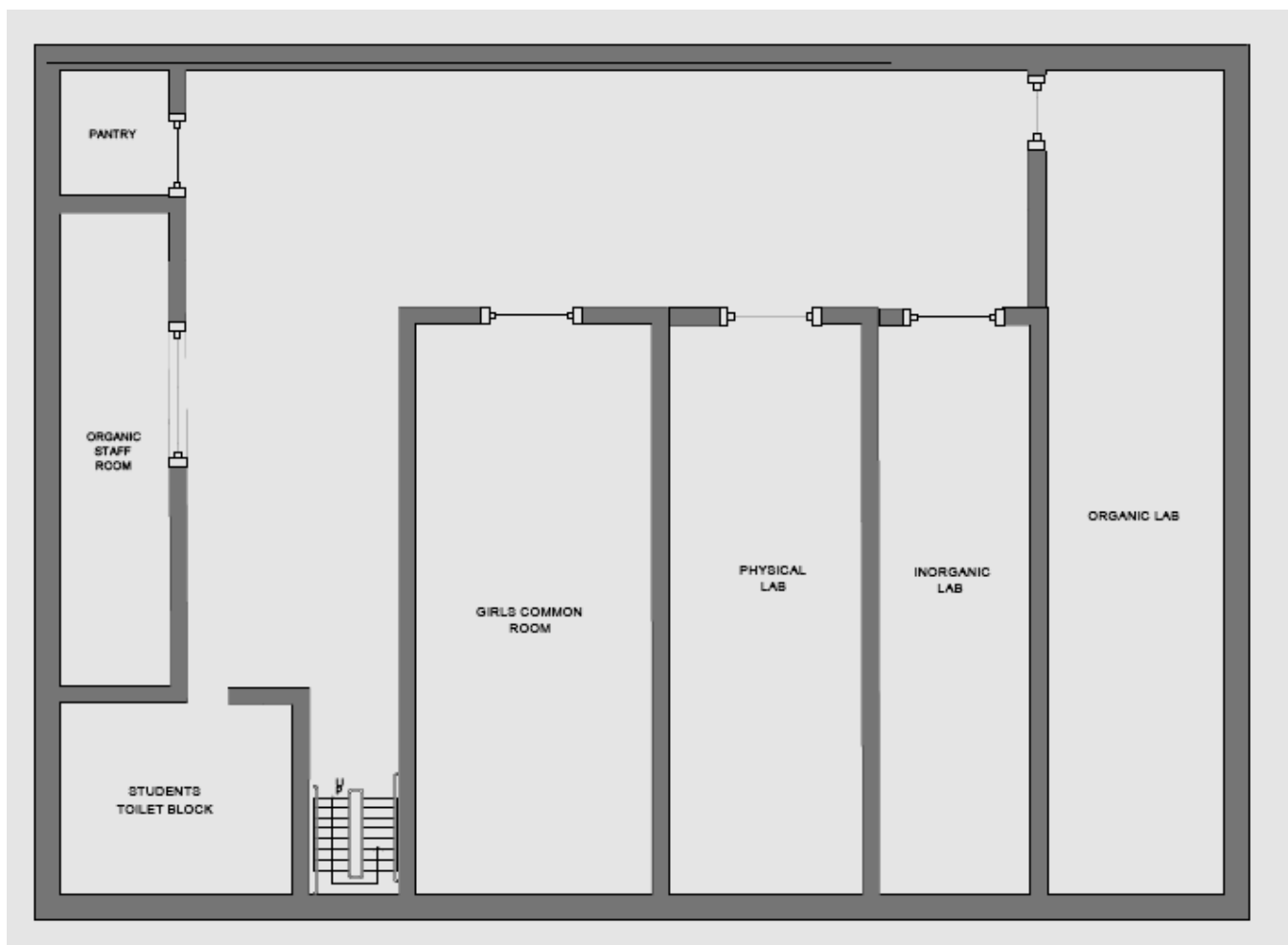
**Annexure 7d: GROUND FLOOR INDUSTRIAL CHEMISTRY BUILDING**



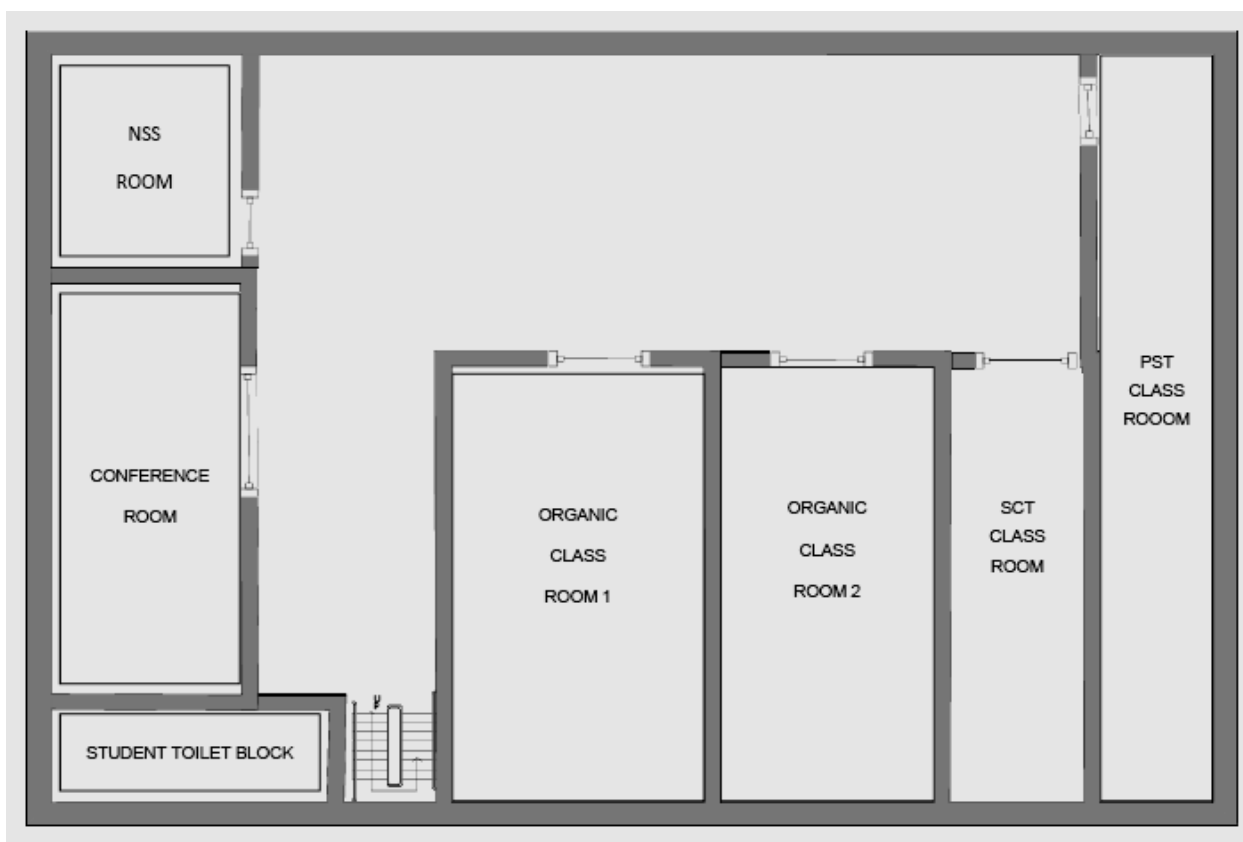
## Annexure 7e: Plan of first floor, Industrial Chemistry building



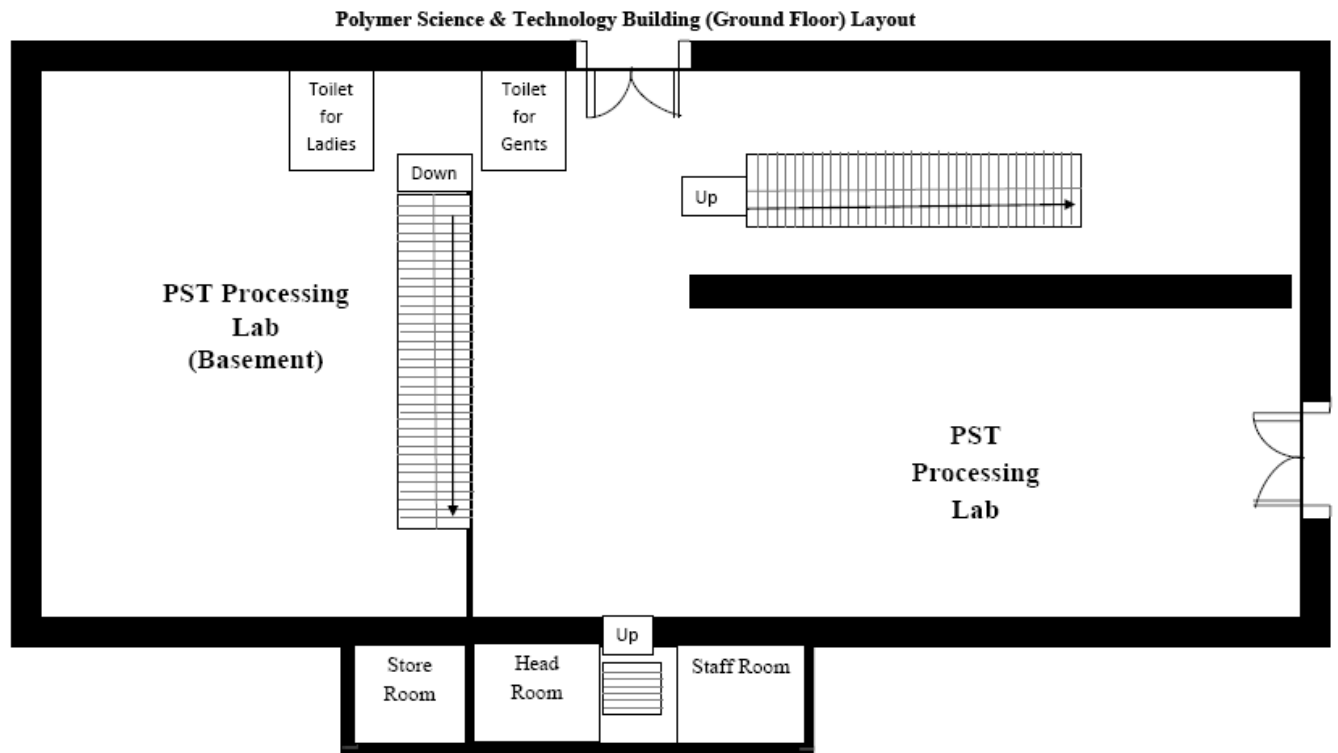
**Annexure 7f: Plan of second floor, Industrial Chemistry building**



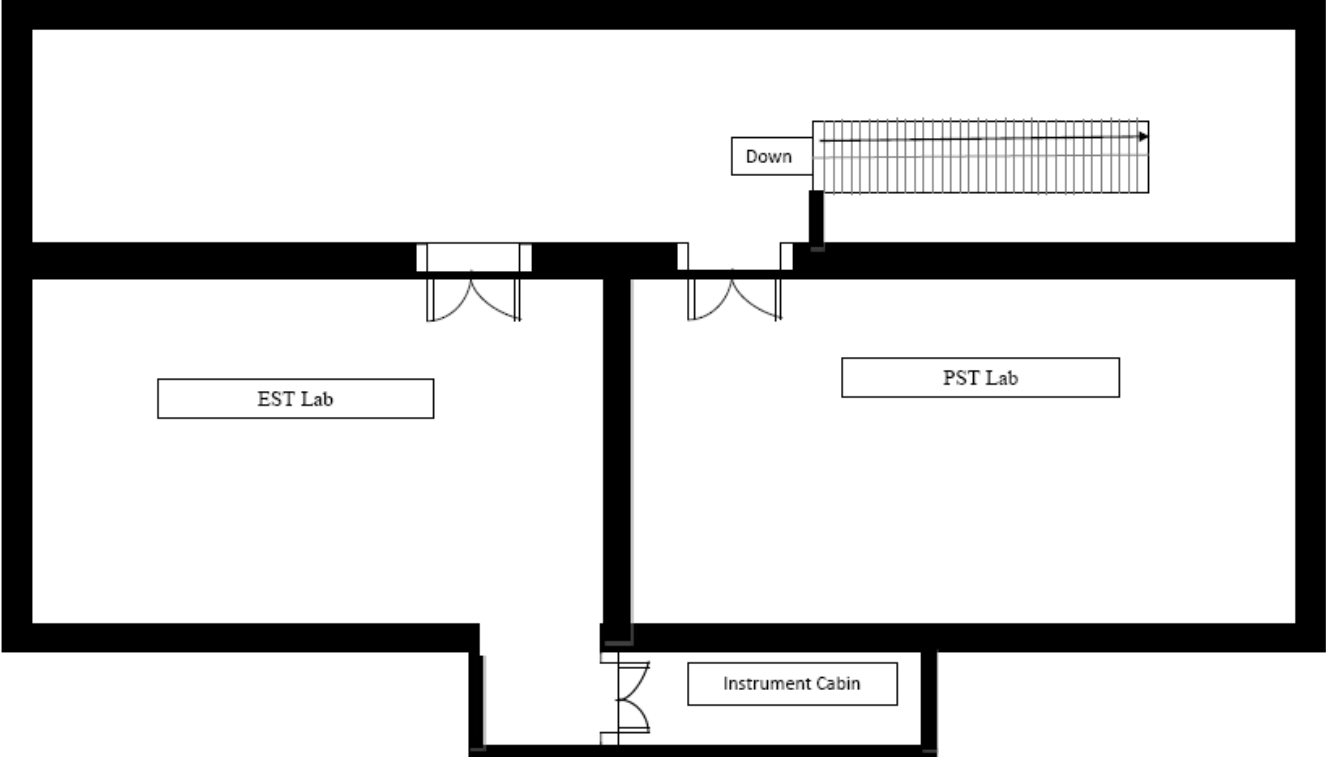
**Annexure 7g: Plan of third floor, Industrial Chemistry building**



## Annexure 7h: Plan of ground floor, PST building



**Annexure 7i: Plan of first floor, PST building**



## ANNEXURE 8 : STUDENT FEED BACK FORM



INSTITUTE OF SCIENCE & TECHNOLOGY  
FOR ADVANCED STUDIES & RESEARCH (ISTAR)  
Vallabh Vidyanagar-388 120

### STUDENT FEEDBACK FORM FOR TEACHERS

Name of the Teacher :

Department :

Academic Year :

Semester :

Subject taught	Knowledge Base of the Teacher	Communication Skills	Commitment of the Teacher	Accessibility of the Teacher (Availability of the teacher for discussion & motivation inside & outside the class)

Please rate the teacher based on the following scale :

Very Good : A

Good : B

Satisfactory : C

Unsatisfactory : D

## ANNEXURE 9 : COUNSELING FORM



Institute of Science & Technology for Advanced  
Studies & Research (ISTAR)

STUDENTS' COUNSELLING SERVICE

### *Counselling Form*

Year : \_\_\_\_\_

Student's Name : \_\_\_\_\_

Class : \_\_\_\_\_ Division : \_\_\_\_\_ ID No. : \_\_\_\_\_

**CONTACT DETAILS :**

Local Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Permanent Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Paste your  
passport size  
photo here

Phone (LL) \_\_\_\_\_  
(M) \_\_\_\_\_

Phone (LL) \_\_\_\_\_  
(M) \_\_\_\_\_

Father's/Guardian's Name : \_\_\_\_\_

Occupation : \_\_\_\_\_ Contact No. : \_\_\_\_\_

**PERSONAL DETAILS :**

Date of Birth : \_\_\_\_\_ Mother Tongue : \_\_\_\_\_

Blood Group : \_\_\_\_\_ E-mail address : \_\_\_\_\_

Committee/Team Member \_\_\_\_\_  
\_\_\_\_\_

Allergy to any Medicine : \_\_\_\_\_ (Yes/No)

Give details : \_\_\_\_\_

Loan/Scholarship Details : \_\_\_\_\_

Academic backlog if any : \_\_\_\_\_

Student's Signature \_\_\_\_\_

**ACADEMIC DETAILS :**

**Semester 1/3**

Course	Quiz 1	Quiz 2	Quiz 3	Seminar	Internal

**Attendance**

Jul.	Aug.	Sep.	Oct.	Nov.
/	/	/	/	/
/	/	/	/	/
/	/	/	/	/
/	/	/	/	/
/	/	/	/	/

**Semester 2/4**

Course	Quiz 1	Quiz 2	Quiz 3	Seminar	Internal

**Attendance**

Dec.	Jan.	Feb.	Mar.	Apr.
/	/	/	/	/
/	/	/	/	/
/	/	/	/	/
/	/	/	/	/
/	/	/	/	/

**Counsellor's Comments :**

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## **Annexure 10 : Industries who conducted campus interview in the last 5 years**

1. Aakar Paints, Ahmedabad
2. Aarush Infoweb, Ahmdavad.
3. ABG Shipyard, Surat
4. Advance Paints, Ankleshwar
5. Amul , Anand
6. Anchor Electrical Ltd.
7. Arcoy Industires, Ahm'd
8. Asian Paints (I) Ltd, Kasna,UP
9. Asian Paints, Ankleshwar
10. Asian PPG,Saregam
11. Atul Ltd.,Atul
12. Beach Cherry, Baroda
13. Berger Paints, Kolkata
14. Biocrop Pesticides
15. Bonrix Software System as Software Engineer
16. CEMA tubes, Limbasi
17. Chamak Paints, Ahmedabad
18. Chembond, Dhudhwada
19. Crescent Tech, Baroda.
20. Darshan Paints, Udhana
21. DAYSTAR
22. Decocem Paints, Mumbai

23. Detox Surat
24. DHANSHREE INCORPORATION,(RAJKOT)
25. DINNACLE TECHNOSYS (BARODA)
26. Dupont (I) Pvt LTd., Savli
27. E-clinical Works, Ahmedabad
28. Electric Manufacturing Company (Vrindi)
29. Empro Consultancy
30. Enviro infra structure co ltd, vadodra
31. EPOS london UK pvt. Ltd, Ahmedabad
32. e-Procurement Technologies Ltd. A'bad
33. Esdee Paints, Vatva
34. Essar Power
35. Essco Paints, Ahmedabad
36. Evolutionary Systems (Evosys), Ahmedabad
37. Furaat Rainwater
38. GCPC, Gandhinagar,
39. GEER foundation.
40. Genpact ,Jaipur
41. GEPIL, Surat.
42. Gharda Chemicals,Panoli
43. GHCL, Rajkot
44. GIPL (Jay infotech)

45. GLOBAL ENVIRONMENT SURAT
46. GMM Coating, Kadi
47. Grand Polycoat Co Pvt Ltd., Padra
48. Green Enviro Vatva
49. Green Environment Services Cooper.Soc.Ltd, Ahmadabad.
50. Gujarat Insecticides Ltd.,Panoli
51. Hari Orgochem,Nandesari
52. HCL, Baroda
53. Heliflex Hydraulics, Baroda
54. Hemendra Raval & Associates
55. Heubach pvt Ltd,Ankleshwar
56. IBM PUNE
57. Icubes Consultancy, Nadiad.
58. IDEA Plus tech. Services ltd, Bharuch.
59. IHS, Baroda
60. Indl.Solvents & Chemicals,Ankleshwar
61. Infinity Infoway Pvt. Ltd.,, Ahmedabad
62. INFINITY INFOWAY,(AHMEDABAD)
63. INOES ABS
64. IPCA Labs,Ankleshwar
65. ITI Shihori Government , Shihori.
66. JAMNAGAR GROUP OF INDUSTRIES
67. jJaypee Group
68. JK Security, Anand.

69. John Energy
70. Jotun Paints (I) Ltd.,Surat
71. Jubilant Organosis Ltd.,Savli, Vadodara
72. Jubliant Infrastructure Ltd
73. Jyoti Om Chemical Research Center.Baroda
74. Jyoti om, GIDC,Ankleshwar
75. Kadam consultant,vadodra
76. Karox Technologies, Surat.
77. KGN Industries, Kheda
78. Khamir Industries, Umargam
79. L &T , Surat
80. L & T, Modular Fabrication Facility, Hazira.
81. Lambda Therapeutics Ltd., Ahmedabad
82. Linde Engg
83. Loxim Industries Ltd,Dabhasa
84. Lupin Ltd.,Ankleshwar
85. Lupin Ltd.,Dabasa
86. Lupin Ltd.,Mandideep
87. Marigold Paints, V U Nagar
88. Maruti Tech, A'bad
89. Meghmani ,Dahej& vatva plant
90. Nivida web ltd, Baroda.

91. NRP Infotech
92. Nutan Vidhalaya
93. Odysious solutions, Baroda
94. Pakme Industries, V U Nagar
95. Paramount , Baroda
96. Patel filters Infrastructure VVNagar.
97. Pesicides India,Panoli
98. Phonon, Baroda
99. Piramal Glass, Kosamba
100. Poll.Cont, Ankleshwar
101. Polycoates Engineering, Baroda
102. PRECITECH ANKLESHWAR
103. Precitech Laboratories, Vapi.
104. Qmc Valsad
105. Rallis Ltd.,Ankleshwar
106. Ramdev Resins Pvt Ltd.,Ahmedabad
107. Ranbaxy ,Dewas
108. Redix Soft.Pvt ltd, Ahmedabad.
109. Reliance , Surat
110. Reliance,Jamnagar
111. Roots consultancy,baroda
112. Royal COUNSULTANCY RAJKOT
113. S.G.S Ahmedabad
114. Sabic, Saudi Arabia

115. SANSUN VISION SOLUTION (V.V.NAGAR)
116. SGS India PVT Ltd. Ahmedabad.
117. SGS India PVT Ltd. , Vadodara
118. Shah-Schulman Center for Surface Science & Nanotechnology
119. Shalimar Paints, Nashik
120. SIDDHI CONSULTANT
121. SKYNET INFOTECH,(RAJKOT)
122. Skywebtech, Rajkot
123. SNDT GIRLS COLLEGE (BARODA)
124. Solvay Specialities Ltd., Panoli
125. Spectrum Industries, Dubai
126. Sud Chemie Pvt. Ltd, Baroda
127. Supernova Engineers, Ahmedabad
128. Supreet Group Industries, Vapi
129. T.R. Associates,Ahmadabad,
130. Tashavi softcom & dev company
131. TCS (BARODA)
132. Tirth infotech, Nadiad
133. Tonira Pharma,Savli
134. Torrent Pharma,Indrad
135. Uni Chem ,Indore
136. Universal, A'bad

137. UPL Ltd., Bharuch
138. UPL Ltd., Ankleshwar
139. Vapi Enviro Tech Ltd
140. VEDLOGIC SOLUTION (AHMEDABAD)
141. Vision Industries, Padra
142. VR Software Systems Pvt. Ltd.
143. Vrindi, Anand
144. VSTree, A'bad
145. Weblina India, A'bad
146. XPLETUS (BARODA)
147. Zydus Cadila, Ankleshwar

Annexure 11 a :Balance sheet for all courses except MCA (2009-10)

INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH  
(ISTAR)

CHARUTAR VIDYA MANDAL

INCOME AND EXPENDITURE STATEMENT FOR THE YEAR 2009 – 2010

INCOME	RS.	EXPENDITURE	RS.
Fee Income	52,993,189.00	Salary to Teaching Staff ( ISTAR)	7465178.00
		Salary to Non Teaching Staff	4108075.00
		ADM Charges Exp (P.F.)	96,761.00
		Advertisement Exp	291,772.00
		Affiliation Fee Exp	65,000.00
		Audit Fees Exp	46,880.00
		Bank Charges Exp.	8,780.00
		Bonus Salary Exp	37,005.00
		Bldg. Infra. & Maintenance	36,826.00
		Building Rent	12,390,966.00
		Director's Resi. Tele. Rent Exp.	3,014.00
		Depreciation Exp	777,260.00
		Electricity Exp.	74,737.00
		Empoleey's Insurance Exp.	32,000.00
		Garden Maintenance Exp.	175,000.00
		Group Gratuity Exp	500,055.00
		Gymkhana exp	145,153.00
		Hostel Students Subsidy Exp	315,000.00
		I Card Exp	6,720.00
		Inst Contri.To P.F.Exp (Teaching Staff-ISTAR)	472,681.00
		Inst ContriTo P.F.Exp (Non Teaching. ISTAR)	334,329.00
		Insurance Premium Exp	27,616.00
		Laboratory Exp (M Pharm)	2,784.00
		Library Contingency	1,625.00
		Library Periodicals Exp.	179,234.00
		MIHS Dept. Cosumables Exp.	27,370.00
		MIHS Workshop Proj Exp	30,823.00
		Misc. Contingency Exp.	3,162.00
		Miscellaneous Exp.	30,817.00
		Mpharm Cosumables Exp.	444,509.00
		Mpharm Testing Charges Exp.	303,701.00
		MSc E.S. Consumables exp.	142,961.00
<b>Total C/F</b>	<b>52,993,189.00</b>	<b>Total C/F</b>	<b>28,577,794.00</b>



**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH  
(ISTAR)**

**CHARUTAR VIDYA MANDAL**

**INCOME AND EXPENDITURE STATEMENT FOR THE YEAR 2009 – 2010**

<b>INCOME</b>	<b>RS.</b>	<b>EXPENDITURE</b>	<b>RS.</b>
<b>Total B/F</b>	<b>52,993,189.00</b>	<b>Total B/F</b>	<b>28,577,794.00</b>
		MSc I/C Cosumables Exp.	220,603.00
		MSc O.F.W. Consumables Exp.	6,401.00
		M Sc Organic Chem. Consumable Exp	79,579.00
		Msc Plt/Tech. Cosumables Exp.	72,944.00
		MSc P/V Consumables Exp.	237,968.00
		Municiple Taxes Exp.	41,596.00
		Peon Dress Exp	10,935.00
		Postage Exp.	6,626.00
		Printing & Stationary Exp.	195,293.00
		Qualis Diesel Exp.	35,314.00
		Qualis Repairing & Maintenance exp.	8,155.00
		Registration Fee Exp.	33,600.00
		Repairing Dead Stock Exp	13,791.00
		Revenue Stamps Exp.	1,654.00
		Scholarship Exp.	44,618.00
		Security Service Exp	150,000.00
		Sicart Contribution A/c	21,000,000.00
		Software Upgradation Exp.	4,338.00
		Staff Quarter Subsidy Exp	82,273.00
		Swarnim Gujarat Saptdhara Exp	423,657.00
		T.A. D.A. To Visiting Faculty Exp.	45,922.00
		Telephone Exp.	23,745.00
		Tour Conf. & Seminar Exp.	5,298.00
		Travelling Exp.	16,249.00
		Visiting Faculty Exp.	488,109.00
		Visiting Faculty Exp.(M.E.)	903,162.00
		Visiting Faculty Exp. (MIHS)	87,762.00
		Visiting Faculty Exp. (M.Pharm)	734,521.00
		Visiting Faculty Exp. (M.Sc)	130,900.00
		Visiting Faculty Exp. (M.Tech)	114,625.00
		Visiting Faculty Exp. (Valuation)	100,840.00
		Visiting Faculty Exp. (M.E.Commu. Engg)	92,940.00
		Web Hosting Project Exp	156,669.00
		Water Charges Exp.	16,450.00
		Water Sanitation Exp.	4,724.00
Excess expenses over income	1,187,283.00	Webkhoj Exp	11,417.00
<b>Total</b>	<b>54,180,472.00</b>	<b>Total</b>	<b>54,180,472.00</b>

Date:- 26 MAY 2010

  
**DIRECTOR**  
**ISTAR**

  
**CHARTERED ACCOUNTANTS**  
**APAJI AMIN & CO**  
**AHMEDABAD**



INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH  
(ISTAR)  
CHARUTAR VIDYA MANDAL  
BALANCE SHEET AS ON 31ST MARCH 2010  
Charutar Vidya Mandal

LIABILITY	RS.	RS.	ASSET	RS.	RS.
Computer Hardware Fund Add. During the year	3,302,795.00 37,500.00	3,340,295.00	Computer Hardware Equip. Add. During the year	3,302,795.00 37,500.00	3,340,295.00
Computer Software Fund Add. During the year	228,075.00 -	228,075.00	Computer Software Equip. Add. During the year	228,075.00 -	228,075.00
Furniture & Equip. Fund Add. During the year	2,927,023.00 56,480.00	2,983,503.00	Furniture & Equip. Add. During the year	2,927,023.00 56,480.00	2,983,503.00
Library Book Fund Add. During the year	2,900,821.45 141,079.00	3,041,900.45	Library Books Add. During the year	2,900,821.45 141,079.00	3,041,900.45
M.H.S. Dept. Equipment Fund Add. During the year	496,375.00 -	496,375.00	M.H.S. Dept. Equipment Add. During the year	496,375.00 -	496,375.00
M.Pharm Equipment Fund Add. During the year	991,891.00 248,850.00	1,240,741.00	M.Pharm Equipment Add. During the year	991,891.00 248,850.00	1,240,741.00
M.Sc E.S. Equipment Fund Add. During the year	2,153,455.00 240,030.00	2,393,485.00	M.Sc ES Equipment Add. During the year	2,153,455.00 240,030.00	2,393,485.00
M.Sc IC Equipment Fund Add. During the year	922,985.00 683.00	923,668.00	M.Sc IC Equipment Add. During the year	922,985.00 683.00	923,668.00
M.Sc IN Equipment Fund Add. During the year	328,352.00 -	328,352.00	M.Sc IN Equipment Add. During the year	328,352.00 -	328,352.00
M.Sc OFW Equipment Fund Add. During the year	239,167.00 -	239,167.00	M.Sc OFW Equipment Add. During the year	239,167.00 -	239,167.00
M.Sc PT Equipment Fund Add. During the year	941,249.00 -	941,249.00	M.Sc PT Equipment Add. During the year	941,249.00 -	941,249.00
M.Sc PV Equipment Fund Add. During the year	638,208.00 23,940.00	662,148.00	M.Sc PV Equipment Add. During the year	638,208.00 23,940.00	662,148.00
Vehicle (Qualis) Fund Add. During the year	668,300.00 -	668,300.00	Vehicles (Qualis) Add. During the year	668,300.00 -	668,300.00
ME. Commu.Engg. Eqpt Fund Add. During the year	725,706.00 -	725,706.00	ME. Commu.Engg. Equipment Add. During the year	725,706.00 -	725,706.00
Software Fund Add. During the year	1,872.00 -	1,872.00	Software A/C Add. During the year	1,872.00 -	1,872.00
M.Sc IT Equip. Fund		9,500.00	M.Sc IT Equip.		9,500.00
College C.M.D. 907000.00 Add. During the Year 87500.00	994,500.00		Deposits	2,000.00	
Un Paid Salary	20,933.00		O.B.C. Bank, V.V.Nagar	840,324.45	
Earned Money Deposit	66,168.00		Central Bank, V.V.Nagar	296,381.00	
Grat Of Khamhat Project	140,002.00		Gas Cylinder Deposit	23,500.00	
Leave Encashment Provision	1,375,000.00		Project Advance	7,000.00	
Misc. Deposit, S.P.U.	14,831.00		Cash-in-hand	6,892.00	
Narmada-Tapi Project	181,965.00		CVM Advance A/C	6,626,327.55	
Provision for 6th Pay Arrears	6,659,066.00		Equipment Advance	2,389,747.00	
Soil Nutrient Dynamics Project	67,488.00		Grant Advance	22,500.00	11,124,672.00
S.P.U. Exam Fee	173,750.00				
Welfare Project	93,857.00				
Tender Deposit	2,000.00				
Depreciation Fund	1,235,052.00	11,124,672.00			
Charutar Vidyamandal Current A/C		1,187,283.00	Income & Exp. A/c Op. Bal	282,909.30	
			Less: Transferred to CVM	282,909.30	
			Add. Current Period Loss	1,187,283.00	1,187,283.00
<b>Total</b>		<b>30,536,291.45</b>	<b>Total</b>		<b>30,536,291.45</b>

Auditor's Report:- We have examined the above Balance Sheet as on 31st March 2010 and the annexure income and expenditure accounts for the year ending on 31st March 2010 of Institute Of Science & Technology for Advance Studies & Research, V.V. Nagar with books accounts and vouchers relating thereto and report that we have obtained all the information and explanation by us. In our opinion the said balance sheet exhibit true and correct state of affairs of the institution according to the best of our information and explanations given to us.

DATE: 26 MAY 2010

DIRECTOR  
ISTAR

CHARTERED ACCOUNTANTS  
APAJI AMIN & CO  
AHMEDABAD



**Annexure 11b :Balance sheet for all courses except MCA (2010-11)**

**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH  
(ISTAR)  
CHARUTAR VIDYA MANDAL  
INCOME AND EXPENDITURE STATEMENT FOR THE YEAR 2010 – 2011**

INCOME	RS.	EXPENDITURE	RS.
Fee Income	74,068,975.00	Salary to Teaching Staff ( ISTAR)	9664467.00
		Salary to Non Teaching Staff	5834942.00
		ADM Charges Exp (P.F.)	57,409.00
		Advertisement Exp	634,358.00
		Affiliation Fee Exp	705,100.00
		Annua/day Exp	99,643.00
		ARCP Internet Exp	68,303.00
		ARCP M.Pharm Consumable Exp	506,968.00
		ARCP M.Pharm Testing Chg, Exp	175,038.00
		Audit Fees Exp	36,598.00
		Bank Charges Exp.	9,496.00
		Bonus Salary Exp	39,472.00
		Bldg. Infra. & Maintenance Exp	107,113.00
		Building Rent Exp	15,390,966.00
		BVM Bldg, Infra. & Maintenance Exp	17,553.00
		Depreciation Exp	2,092,377.00
		Development Exp	17,000,000.00
		Electricity Exp.	78,951.00
		Empolyee's Insurance Exp.	52,000.00
		Equipment Repairing Exp	4,000.00
		Tra. to Equipment Funds Exp	5,600,000.00
		Furniture & Dead Stock Repairing Exp	17,488.00
		Group Gratuity Exp	1,674,752.00
		Gymkhana Exp	66,904.00
		Honourarium Exp	2,000.00
		Hostel Students Subsidy Exp	417,000.00
		I Card Exp	8,793.00
		IICP Chemicals Exp	4,453.00
		IICP Consumables Exp	20,468.00
		IICP Glassware Exp	25,006.00
		Infrastructure Overhead Exp.	8,450,000.00
		Inspection Fee Exp	75,000.00
		Inst Contri. To P.F. Exp (Teaching Staff-ISTAR)	155,690.00
		Inst Contri To P.F. Exp (Non Teaching, ISTAR)	322,140.00
		Insurance Premium Exp	27,459.00
		Internet Exp	843,000.00
		Library Contingency Exp	3,465.00
		Library Periodicals Exp.	167,338.00
		BVM ME Consumable Exp	590,911.00
		Membership Fee Exp	7,500.00
		MIHS Dept. Cosumables Exp.	28,575.00
		MIHS Workshop Proj Exp	11,703.00
		Miscellaneous Exp.	43,908.00
		M.Sc. E.S. Consumables exp.	323,467.00
<b>Total C/F</b>	<b>74,068,975.00</b>	<b>Total C/F</b>	<b>71,461,774.00</b>




**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH  
(ISTAR)  
CHARUTAR VIDYA MANDAL  
INCOME AND EXPENDITURE STATEMENT FOR THE YEAR 2010-11**

INCOME	RS.	EXPENDITURE	RS.
Total B/F	74,068,975.00	Total B/F	71,461,774.00
		M.Sc. I/C Consumables Exp.	338,254.00
		M.Sc. IT Consumable Exp	8,018.00
		M.Sc. IN, Consumable Exp	5,634.00
		M. Sc. Organic Chem. Consumable Exp	343,220.00
		M.Sc. P.T. Cosumables Exp.	246,485.00
		M.Sc. P/V Consumables Exp.	291,363.00
		Municipal Taxes Exp.	23,004.00
		Penalty For Late Enrolment Exp	25,030.00
		Processing Fee Exp	50,000.00
		Postage Exp.	16,049.00
		Printing & Stationary Exp.	147,596.00
		Qualis Diesel Exp.	40,002.00
		Qualis Repairing & Maintenance exp.	34,550.00
		Qualis Insurance exp.	7,050.00
		Registration Fee Exp.	64,200.00
		Revenue Stamps Exp.	1,670.00
		Scholarship Exp.	43,500.00
		Software Upgradation Exp.	4,959.00
		Staff Quarter Subsidy Exp	97,493.00
		Students Various Activity Exp	6,000.00
		T.A. D.A. To Visiting Faculty Exp.	59,180.00
		Telephone Exp.	30,285.00
		Tour Conf. & Seminar Exp.	19,056.00
		Travelling Exp.	21,824.00
		Visiting Faculty Exp.	831,925.00
		Visiting Faculty Exp.(M.E.)	1,577,482.00
		Visiting Faculty Exp. (MIHS)	115,400.00
		Visiting Faculty Exp. (ARCP-M.Pharm)	965,608.00
		Visiting Faculty Exp. (IICP-M.Pharm)	206,740.00
		Visiting Faculty Exp. (M.Sc)	603,105.00
		Visiting Faculty Exp. (M.Tech)	111,410.00
		Visiting Faculty Exp. (Valuation)	152,529.00
		Visiting Faculty Exp. (M.E.Commu. Enngg)	263,240.00
		Web Hosting Project Exp	205,084.00
		Water Charges Exp.	42,150.00
Excess expenses over income	4,397,621.00	Water Sanitation Exp.	5,727.00
<b>Total</b>	<b>78,466,596.00</b>	<b>Total</b>	<b>78,466,596.00</b>

Date:- 22 JUL 2011

  
DIRECTOR  
ISTAR

  
CHARTERED ACCOUNTANTS  
APAJI AMIN & CO  
AHMEDABAD



**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH (ISTAR)  
VALLABH VIDYANAGAR  
CHARUTAR VIDYA MANDAL  
BALANCE SHEET AS ON 31ST MARCH 2011**

<u>LIABILITY</u>	<u>RS.</u>	<u>RS.</u>	<u>ASSET</u>	<u>RS.</u>	<u>RS.</u>
ISTAR College Fixed Asset Fund -Annexure-1		13576808.45	ISTAR College Fixed Asset -Annexure-1		13576808.45
BVM College Fixed Assets Fund-Annexure-2		6568795.00	BVM College Fixed Assets -Annexure-2		6568795.00
ARCP College Fixed Assis Fund-Annexure-3		8950533.00	ARCP College Fixed Assis -Annexure-3		3350533.00
GCET College Fixed Assis Fund -Annexure-4		1307332.00	GCET College Fixed Assis -Annexure-4		1307332.00
IICP Colleg Fixed Assis Fund -Annexure-5		1672582.00	IICP Colleg Fixed Assis- Annexure-5		1672582.00
Enrollment Fee	600.00				
College C.M.D.	994500				
Add-During the Year	209000				
<b>Sundry Creditors</b>			Deposits	2,000.00	
Supplier Deposit	2,309,172.00		Arrears Fee	1,480,000.00	
Advance Fee	2,000.00		MISC Deposit SPU	2,547.00	
Earnest Money Deposit	101,000.00		O.B.C Bank. V.V.Nagar	233,482.45	
Gulf Of Khambhat Project	66,168.00		Central Bank. V.V.Nagar	132,740.00	
Leave Encashment Provision	105,035.00		Gas Cylinder Deposit	23,500.00	
Narmada-Tapi Project	1,375,000.00		Project Advance	7,000.00	
Provisin for 6th Pay Arrears	170,733.00		Cash-in-Hand	49,151.00	
Soil Nutrient Dynamics Project	6,659,066.00		CVM Advance A/C	7,547,178.55	
Wetland Project	3,054.00		Equipment Advance	11,641,461.00	21,119,060.00
SPU Exam Fee	31,653.00				
Depreciation Fund	64,650.00	15,519,060.00	Income & Exp. A/c Cp. Bal	1,187,283.00	
	3,427,429.00		Less. Transferred to CVM	1,187,283.00	
Charutar Vidyamandal Current A/C		4,397,621.00	Add. Current Period Loss	4,397,621.00	4,397,621.00
<b>Total</b>		<b>51,992,731.45</b>	<b>Total</b>		<b>51,992,731.45</b>

Auditor's Report:- We have examined the above Balance Sheet as on 31st March 2011 and the annexure income and expenditure accounts for the year ending on 31st March 2011 of Institute Of Science & Technology for Advance Studies & Research, V.V. Nagar with books accounts and vouchers relating thereto and report that we have obtained all the information and explanation by us. In our opinion the said balance sheet exhibit true and correct state of affairs of the institution according to the best of our information and explanations given to us

DATE: 22 JUL 2011

  
DIRECTOR  
ISTAR

  
CHARTERED ACCOUNTANTS  
APAJI AMIN & CO  
AHMEDABAD





**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCE STUDIES & RESEARCH (ISTAR)**

VALLABH VIDYANAGAR - 388 120

AS ON 31<sup>st</sup> MARCH 2011

**Calculation of Depreciation for the year 2010-2011 ( SLM Method )**

**Annexure-1**

Particulars	Dep. Rate %	As on 01-04-2010	Additional During the Year (2010-11)	Sale During the Year (2010-11)	As on 31/03/11	Depreciation as on 1-4-2010	Depreciation During the Year (2010-11)	Total Depreciation [6+7]	Closing Balance As On 31-03-2011 [5-8]
	2	3	4		5	6	7	8	9
<b>Computer Hardware</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	33	1479986.00	0.00	0.00	1479986.00	0.00	0.00	0.00	0.00
2009-2010	33	20218.00	0.00	0.00	20218.00	13344.00	6672.00	20016.00	202.00
Purchase during the year 10-11	33	13125.00	0.00	0.00	13125.00	4331.00	4331.00	8662.00	4463.00
<b>TOTAL-A</b>		<b>1513329.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1513329.00</b>	<b>17675.00</b>	<b>11003.00</b>	<b>28678.00</b>	<b>4665.00</b>
<b>Computer Software</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	33	104510.00	0.00	0.00	104510.00	0.00	0.00	0.00	0.00
2009-2010	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-B</b>		<b>104510.00</b>	<b>0.00</b>	<b>0.00</b>	<b>104510.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Furniture &amp; Eqpt.</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	1298972.00	0.00	0.00	1298972.00	67975.00	0.00	67975.00	0.00
2009-2010	15	30000.00	0.00	0.00	30000.00	9000.00	4500.00	13500.00	16500.00
Purchase during the year 10-11	15	19768.00	0.00	0.00	19768.00	2965.00	2965.00	5930.00	13838.00
<b>TOTAL-C</b>		<b>1348740.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1506090.00</b>	<b>79940.00</b>	<b>31068.00</b>	<b>111008.00</b>	<b>164085.00</b>
<b>Library Books</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	33	1257718.45	0.00	0.00	1257718.45	0.00	0.00	0.00	0.00
2009-2010	33	58075.00	0.00	0.00	58075.00	57495.00	580.00	58075.00	0.00
Purchase during the year 10-11	33	49377.00	0.00	0.00	49377.00	16294.00	16294.00	32588.00	16789.00
<b>TOTAL-D</b>		<b>1365170.45</b>	<b>0.00</b>	<b>0.00</b>	<b>1487843.45</b>	<b>73789.00</b>	<b>57356.00</b>	<b>131145.00</b>	<b>98980.00</b>
<b>MHS Dept. Eqpt.</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	496375.00	0.00	0.00	496375.00	0.00	0.00	0.00	0.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-E</b>		<b>496375.00</b>	<b>0.00</b>	<b>0.00</b>	<b>496375.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>MSc E / S Eqpt.</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	1976606.00	0.00	0.00	1976606.00	0.00	0.00	0.00	0.00
2009-2010	15	176849.00	0.00	0.00	176849.00	53054.00	36527.00	79581.00	97268.00
Purchase during the year 10-11	15	240030.00	0.00	0.00	240030.00	360005.00	360005.00	72010.00	168020.00
<b>TOTAL-F</b>		<b>2393485.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2625802.00</b>	<b>89059.00</b>	<b>97380.00</b>	<b>186439.00</b>	<b>462757.00</b>
<b>MSc I / C Eqpt.</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	458838.00	0.00	0.00	458838.00	0.00	0.00	0.00	0.00
2009-2010	15	464147.00	0.00	0.00	464147.00	139244.00	69622.00	208866.00	255281.00
Purchase during the year 10-11	15	683.00	0.00	0.00	683.00	102.00	102.00	204.00	479.00
<b>TOTAL-G</b>		<b>923668.00</b>	<b>805966.00</b>	<b>0.00</b>	<b>1729634.00</b>	<b>139346.00</b>	<b>190619.00</b>	<b>329965.00</b>	<b>840831.00</b>



Particulars	Dep. Rate %	As on 01-04-2010	Additional During the Year (2010-11)	Sale During the Year (2010-11)	As on 31/03/11	D epreciation as on 1-4-2010	Depreciation During the Year (2010-11)	Total Depreciation [6-7]	Closing Balance As On 31-03-2011 [5-8]
1	2	3	4	5	6	7	8	9	10
<b>MSc Instru. Eqpt.</b>									
2007-2008		328352.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	328352.00	0.00	0.00	0.00	0.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11		0.00	770254.00	0.00	770254.00	0.00	115538.00	115538.00	654716.00
<b>TOTAL-H</b>		<b>328352.00</b>	<b>770254.00</b>	<b>0.00</b>	<b>1098606.00</b>	<b>0.00</b>	<b>115538.00</b>	<b>115538.00</b>	<b>654716.00</b>
<b>MSc O F W Eqpt.</b>									
2007-2008		137407.00	0.00	0.00	137407.00	0.00	0.00	0.00	0.00
2008-2009	15	101760.00	0.00	0.00	101760.00	30528.00	15264.00	45792.00	55968.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-I</b>		<b>239167.00</b>	<b>0.00</b>	<b>0.00</b>	<b>239167.00</b>	<b>30528.00</b>	<b>15264.00</b>	<b>45792.00</b>	<b>55968.00</b>
<b>MSc Pht/Tech Eqpt</b>									
2007-2008		940085.00	0.00	0.00	940085.00	0.00	0.00	0.00	0.00
2008-2009	15	1164.00	0.00	0.00	1164.00	350.00	175.00	525.00	639.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11		0.00	277725.00	10000.00	267725.00	0.00	41659.00	41659.00	226066.00
<b>TOTAL-J</b>		<b>941249.00</b>	<b>277725.00</b>	<b>10000.00</b>	<b>1208974.00</b>	<b>350.00</b>	<b>41834.00</b>	<b>42184.00</b>	<b>226705.00</b>
<b>MSc Paint/Varnish Eqpt.</b>									
2007-2008		390403.00	0.00	0.00	390403.00	0.00	0.00	0.00	0.00
2008-2009	15	247805.00	0.00	0.00	247805.00	74343.00	3717.00	111514.00	136291.00
2009-2010	15	23940.00	0.00	0.00	23940.00	3591.00	3591.00	7182.00	16758.00
Purchase during the year 10-11		0.00	552799.00	0.00	552799.00	0.00	82920.00	82920.00	469879.00
<b>TOTAL-K</b>		<b>662148.00</b>	<b>552799.00</b>	<b>0.00</b>	<b>1214947.00</b>	<b>77934.00</b>	<b>123682.00</b>	<b>201616.00</b>	<b>622928.00</b>
<b>Vehicle (Qualis)</b>									
2007-2008		303742.00	0.00	0.00	303742.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-L</b>		<b>303742.00</b>	<b>0.00</b>	<b>0.00</b>	<b>303742.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>MSc IT Eqpt.</b>									
2009-2010	15	9500.00	0.00	0.00	9500.00	0.00	1425.00	1425.00	8075.00
Purchase during the year 10-11		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-M</b>		<b>9500.00</b>	<b>0.00</b>	<b>0.00</b>	<b>9500.00</b>	<b>0.00</b>	<b>1425.00</b>	<b>1425.00</b>	<b>8075.00</b>
<b>Msc Organic Chemistry Equip.</b>									
Purchase during the year 10-11		0.00	38289.00	0.00	38289.00	0.00	5743.00	5743.00	32546.00
<b>TOTAL-N</b>		<b>0.00</b>	<b>38289.00</b>	<b>0.00</b>	<b>38289.00</b>	<b>0.00</b>	<b>5743.00</b>	<b>5743.00</b>	<b>32546.00</b>
<b>GRAND TOTAL (A TO N)</b>		<b>10629435.45</b>	<b>2957373.00</b>	<b>10000.00</b>	<b>13576808.45</b>	<b>508621.00</b>	<b>690912.00</b>	<b>1199533.00</b>	<b>3272256.00</b>



**BIP'S A VISHWAKARMA MAHAVIDYALAYA (VVM)**  
VALLABH VIDYANAGAR - 388 120

AS ON 31<sup>st</sup> MARCH 2011

**Annexure-2**  
**Calculation of Depreciation for the year 2010-2011 ( SLM Method )**

Particulars	Dep Rate	As on 01-04-2010	Additional During the Year (2010-11)	Sale During the Year (2010-11)	As on 31/03/11	Depreciation as on 1-4-2010	Depreciation During the Year (2010-11)	Total Depreciation [6+7]	Closing Balance As On 31-03-2011
	2	3	4		5	6	7	8	9
<b>Computer Hardware</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		1035827.00	0.00	0.00	1035827.00	0.00	0.00	0.00	0.00
2008-2009	33	14150.00	0.00	0.00	14150.00	9338.00	4669.00	14007.00	143.00
2009-2010	33	13125.00	0.00	0.00	13125.00	4331.00	4331.00	8662.00	4463.00
Purchase during the year 10-11			900200.00	0.00	900200.00	0.00	297066.00	297066.00	603134.00
<b>TOTAL-A</b>		<b>1063102.00</b>	<b>900200.00</b>	<b>0.00</b>	<b>1963302.00</b>	<b>13669.00</b>	<b>306066.00</b>	<b>319735.00</b>	<b>607740.00</b>
<b>Computer Software</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		73146.00	0.00	0.00	73146.00	0.00	0.00	0.00	0.00
2008-2009	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11			0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-B</b>		<b>73146.00</b>	<b>0.00</b>	<b>0.00</b>	<b>73146.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Furniture &amp; Fixture</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		909137.00	0.00	0.00	909137.00	0.00	0.00	0.00	0.00
2008-2009	15	20997.00	0.00	0.00	20997.00	6300.00	3150.00	9450.00	11547.00
2009-2010	15	19768.00	0.00	0.00	19768.00	2965.00	2965.00	5930.00	13838.00
Purchase during the year 10-11			1671428.00	0.00	1671428.00	0.00	250714.00	250714.00	1420714.00
<b>TOTAL-C</b>		<b>949902.00</b>	<b>1671428.00</b>	<b>0.00</b>	<b>2621330.00</b>	<b>9265.00</b>	<b>256829.00</b>	<b>266094.00</b>	<b>1446099.00</b>
<b>Library Books</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		880264.00	0.00	0.00	880264.00	0.00	0.00	0.00	0.00
2008-2009	33	40644.00	0.00	0.00	40644.00	26876.00	13413.00	40239.00	405.00
2009-2010	33	49378.00	0.00	0.00	49378.00	9781.00	16295.00	26076.00	23302.00
Purchase during the year 10-11			85585.00	0.00	85585.00	0.00	28243.00	28243.00	57342.00
<b>TOTAL-D</b>		<b>970286.00</b>	<b>85585.00</b>	<b>0.00</b>	<b>1055871.00</b>	<b>36607.00</b>	<b>57951.00</b>	<b>94558.00</b>	<b>81049.00</b>
<b>Vehicle (Qualis)</b>									
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		212586.00	0.00	0.00	212586.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11			0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-E</b>		<b>212586.00</b>	<b>0.00</b>	<b>0.00</b>	<b>212586.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Plant &amp; Equipment</b>									
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11			642560.00	0.00	642560.00	0.00	96384.00	96384.00	546176.00
<b>TOTAL-F</b>		<b>0.00</b>	<b>642560.00</b>	<b>0.00</b>	<b>642560.00</b>	<b>0.00</b>	<b>96384.00</b>	<b>96384.00</b>	<b>546176.00</b>
<b>GRAND TOTAL (A TO F)</b>		<b>3269022.00</b>	<b>3299773.00</b>	<b>0.00</b>	<b>6568795.00</b>	<b>59541.00</b>	<b>717230.00</b>	<b>776771.00</b>	<b>2681064.00</b>



Annexure 11c :Balance sheet for all courses except MCA (2011-12)

CHARUTAR VIDYA MANDAL'S

**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**  
BALANCE SHEET AS AT 31ST MARCH, 2012

LIABILITIES	Sch.	Rs. Np.	ASSETS	Sch.	Rs. Np.
Fund Balances	A	15074433.45	Fixed Assets	A	15074433.45
Current Liabilities & Provisions			Current Assets, Loans and Advances		
Depreciation Fund	B	2118893.00	Deposit		2000.00
CVM Advance A/c		1896092.45	Kamlesh i Parmar		7000.00
Caution Money Deposits		481000.00	Equipment Advance		10528428.00
Provision for Six Pay Salary Arrears		6191003.00	Project Advance		7000.00
Scholarship		66700.00	Gas Cylinder Deposit		23500.00
SPU Exam Fee		65560.00	Oriental Bank of Commerce		553458.45
Advance Fee		49500.00	Central Bank Of Commerce		285552.00
Unpaid Salary		9783.00	Cash on hand		13869.00
Enrollment Fee		600.00			
Creditors	G	6850.00			
Projects	H	534826.00			
CVM Current A/c			Excess of Expenses Over Incomes		1192764.00
<b>TOTAL Rs.</b>		<b>27688004.90</b>	<b>TOTAL Rs.</b>		<b>27688004.90</b>

Auditor's Report:- We have examined the above Balance Sheet as on 31st March 2012 and the annexure income and expenditure accounts for the year ending on 31st March 2012 of Institute Of Science & Technology for Advance Studies & Research, V.V. Nagar with books accounts and vouchers relating thereto and report that we have obtained all the information and explanation by us. In our opinion the said balance sheet exhibit true and correct state of affairs of the institution according to the best of our information and explanations given to us



*Handwritten signature*  
DIRECTOR  
ISTAR(MCA)



*Handwritten signature*  
For: APAJI AMIN & CO  
Chartered Accountants

Date: 14 MAY 2012

CHARUTAR VIDYA MANDAL'S  
**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

INCOME & EXPENDITURE A/C. FOR THE YEAR ENDED 31ST MARCH 2012

EXPENDITURE	Sch.	Rs. Np.	INCOME	Sch.	Rs. Np.
To Salaries & Other Benefits to the staff	'C'	22973085.00	By Tuition Fees		61635544.00
" Administrative Exps.	'D'	33762401.00	" Notice Pay		529398.00
" Academic Exps.	'E'	5652014.00			
" Maintenance Exps.	'F'	50846.00			
" Depreciation	'B'	919360.00	" Excess of Exps. Over Incomes carried to B/S		1192764.00
<b>TOTAL Rs.</b>		<b>63357706.00</b>	<b>TOTAL Rs.</b>		<b>63357706.00</b>

Date: 14 MAY 2012

*Apaj Amin*  
 For APAJI AMIN & CO  
 Chartered Accountants

*Heena*  
 DIRECTOR  
 ISTAR(MCA)



CHARUTAR VIDYA MANDAL'S

INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH

Fund Balances		Sch. A				
Sr. No.	Particulars	Ope. Balances as on 1-4-11 Rs.		Addition during the year Rs.	Sales during the year Rs.	Total as on 3/31/2012 Rs.
1	Computer Hardware Fund	1,627,339.00		162,976.00		1,790,315.00
2	Laboratory Equipments Fund	8,651,794.00		663,075.00	-	9,314,869.00
3	Furniture & Equipment Fund	1,506,090.00	-	107,059.00	-	1,613,149.00
4	Library Books Fund	1,487,843.45		199,957.00	-	1,687,800.45
5	Vehicle Fund	668,300.00		-	-	668,300.00
				-	-	-
	<b>TOTAL</b>	13,941,366.45		1,133,067.00	-	15,074,433.45



*Kalal*  
 DIRECTOR  
 ISTAR  
 V. V. NAGAR-388120



**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

**Particulars of Fixed assets**

Sch. B

Sr. No.	Assets	Gross Block			Depreciation			
		Op. Balance as on 1-4-11	Addition during the year	Sales/adj.	Total as on 31-03-2012	Op. Balance as on 1-4-11	Addition during the year	Total as on 31-03-2012
1	Computer Hardware	1,627,339.00	162,976.00		1,790,315.00	30,103.00	61,450.00	91,553.00
2	Laboratory Equipments	8,651,794.00	663,075.00	-	9,314,869.00	927,277.00	688,021.00	1,615,298.00
3	Furniture & Equipment	1,506,090.00	107,059.00	-	1,613,149.00	111,008.00	47,127.00	158,135.00
4	Library Books	1,487,843.45	199,957.00	-	1,687,800.45	131,145.00	122,762.00	253,907.00
5	Vehicle	668,300.00	-	-	668,300.00			-
	<b>TOTAL Rs.</b>	<b>13,941,366.45</b>	<b>1,133,067.00</b>	<b>-</b>	<b>15,074,433.45</b>	<b>1,199,533.00</b>	<b>919,360.00</b>	<b>2,118,893.00</b>



*V. V.*  
**DIRECTOR**  
**ISTAR**  
**V. V. NAGAR-388120**



**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCE STUDIES & RESEARCH (ISTAR)**  
**VALLABH VIDYANAGAR - 388 120**  
**AS ON 31<sup>st</sup> MARCH 2012**

**Annexure-1**  
**Calculation of Depreciation for the year 2011-2012 ( SLM Method )**

Particulars	Dep- Rate %	As on 01-04-2011	Additional During the Year (2011-12)	Sale During the Year (2011-12)	As on 31/03/12	Depreciation as on 1-4-2011	Depreciation During the Year (2011-12) [5*2%]	Total Depreciation [6+7]	Closing Balance As On 31-03-2012 [5-8]
	2	3	4		5	6	7	8	9
<b>Computer Hardware -</b>									
2007-2008		1584496.00	0.00	0.00	1584496.00	0.00	0.00	0.00	0.00
2008-2009	33	20218.00	0.00	0.00	20218.00	20016.00	0.00	20218.00	0.00
2009-2010	33	13125.00	0.00	0.00	13125.00	8662.00	4331.00	12993.00	132.00
2010-2012		9500.00	0.00	0.00	9500.00	1425.00	3135.00	4560.00	4940.00
Purchase during the year 11-12		0.00	162976.00	0.00	162976.00	0.00	53782.00	53782.00	109194.00
<b>TOTAL-A</b>		<b>1627339.00</b>	<b>162976.00</b>	<b>0.00</b>	<b>1790315.00</b>	<b>30103.00</b>	<b>61450.00</b>	<b>91553.00</b>	<b>114266.00</b>
<b>Furniture &amp; Eqpt.</b>									
2007-2008		1298972.00	0.00	0.00	1298972.00	67975.00	0.00	67975.00	0.00
2008-2009	15	30000.00	0.00	0.00	30000.00	13500.00	4500.00	18000.00	12000.00
2009-2010	15	19768.00	0.00	0.00	19768.00	5930.00	2965.00	8895.00	10873.00
2010-2012		157350.00	0.00	0.00	157350.00	23603.00	23603.00	47206.00	110144.00
Purchase during the year 11-12		0.00	107059.00	0.00	107059.00	0.00	16059.00	16059.00	91000.00
<b>TOTAL-C</b>		<b>1506090.00</b>	<b>107059.00</b>	<b>0.00</b>	<b>1613149.00</b>	<b>111008.00</b>	<b>47127.00</b>	<b>158135.00</b>	<b>224017.00</b>
<b>Library Books</b>									
2007-2008		1257718.45	0.00	0.00	1257718.45	0.00	0.00	0.00	0.00
2008-2009	33	58075.00	0.00	0.00	58075.00	58075.00	0.00	58075.00	0.00
2009-2010	33	49377.00	0.00	0.00	49377.00	32588.00	16294.00	48882.00	495.00
2010-2012		122673.00	0.00	0.00	122673.00	40482.00	40482.00	80964.00	41709.00
Purchase during the year 11-12		0.00	199957.00	0.00	199957.00	0.00	65986.00	65986.00	133971.00
<b>TOTAL-D</b>		<b>1487843.45</b>	<b>199957.00</b>	<b>0.00</b>	<b>1687800.45</b>	<b>131145.00</b>	<b>122762.00</b>	<b>253907.00</b>	<b>176175.00</b>
<b>Lab. Equipment.</b>									
2007-2008		4728066.00	0.00	0.00	4728066.00	0.00	0.00	0.00	0.00
2008-2009	15	991725.00	0.00	0.00	991725.00	446278.00	148759.00	595037.00	396688.00
2009-2010	15	264653.00	0.00	0.00	264653.00	79396.00	39698.00	119094.00	145559.00
2010-2012		2667350.00	0.00	0.00	2667350.00	401603.00	400103.00	801706.00	1865644.00
Purchase during the year 11-12		0.00	663075.00	0.00	663075.00	0.00	99461.00	99461.00	563614.00
<b>TOTAL-E</b>		<b>8651794.00</b>	<b>663075.00</b>	<b>0.00</b>	<b>9314869.00</b>	<b>927277.00</b>	<b>688021.00</b>	<b>1615298.00</b>	<b>2971505.00</b>
<b>Vehicle (Qualis)</b>									
2007-2008		668300.00	0.00	0.00	668300.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010-2012		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 11-12		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-L</b>		<b>668300.00</b>	<b>0.00</b>	<b>0.00</b>	<b>668300.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>GRAND TOTAL [A TO N]</b>		<b>13941366.45</b>	<b>1133067.00</b>	<b>0.00</b>	<b>15074433.45</b>	<b>1199533.00</b>	<b>919360.00</b>	<b>2118893.00</b>	<b>3485963.00</b>



*Handwritten Signature*  
**DIRECTOR**  
**ISTAR**  
**V. V. NAGAR-388120**

**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

<u>Salaries &amp; Other Benefits to the S</u>	Sch. C	Amt. Rs.
Salary to Teaching Staff		10373471.00
Salary to Non Teaching Staff		6733240.00
Trainee Staff ( Stipend) Allowance		1984967.00
Institute Contribution to P.F. Exp.		538587.00
Group Gratuity Premium		1747903.00
Employees' Insurance		59500.00
Staff quarters' rent Subsidy		96468.00
Tour & Confer. & Seminar Exp.		316699.00
Visiting Faculty		1122250.00
<b>TOTAL RS.</b>		<b>22973085.00</b>

<u>Administrative Exp.</u>	Sch. D	Amount Rs.
Telephone Expenses		29887.00
Advertisement Expenses		411744.00
Bank Charges		7230.00
Building Rent		12390966.00
Board Of Mgt. Exp.		2493.00
Electricity Charges		90149.00
Insuance Charges		45702.00
Infrasture Overhead Expenses		20439000.00
Miscellaneous Expenses		36054.00
Panchayat Tax		21266.00
Printing & Stationery Expenses		111348.00
Post & Telegramme Expenses		19976.00
Revenue Stamp		2570.00
Cleaning Expenses		2097.00
Traveling Expenses		73227.00
Vehicle Insurance Charges		7236.00
Vehicle Petrol & Diesel Expenses		31906.00
Water Charges		39550.00
<b>Total Rs.</b>		<b>33762401.00</b>



*Koel*  
DIRECTOR  
ISTAR  
V. V. NAGAR-388120

**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

**Salary to Teaching Staff**                      Sch. C-1                      Amt. Rs.

Basic Pay	4871827.00
Grade Pay	1292810.00
Dearness Allowance	3549573.00
House Rent Allowance	608048.00
Medical Allowance	17342.00
Director Special Allowance	33871.00
<b>TOTAL RS.</b>	<b>10373471.00</b>

**Salary to Non Teaching Staff**                      Sch. C-2                      Amt. Rs.

Basic Pay	3132683.00
Grade Pay	831269.00
Dearness Allowance	2293728.00
House Rent Allowance	358042.00
Medical Allowance	43383.00
Bouns	38135.00
Cash Allowance	12000.00
Petrol Allowance	12000.00
Telephone Allowance	12000.00
<b>TOTAL RS.</b>	<b>6733240.00</b>



*Atal*  
**DIRECTOR  
ISTAR  
V. V. NAGAR-388120**

**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

<u>Academic Exps.</u>	Sch. E	Amt. Rs.
Laboratory Consumable		2313753.00
Accreditation Fee Expenses		25850.00
Affiliation Charges		1107500.00
Annual Day Expenses		109501.00
Annual Magazin Galaxy Expenses		32540.00
Hostel Student Subsidy		756000.00
Internet Recuring		791000.00
Instrumentation Seminar Expenses		28045.00
Honorarium Expenses		15000.00
Library Contingency		1050.00
Library Periodical		69454.00
Gymkhana Expenses		161033.00
I Card Expenses		4944.00
Web Hosting Project Expenses		236344.00
<b>TOTAL Rs.</b>		<b>5652014.00</b>

<u>Repairs &amp; Mintanance Exps.</u>	Sch. F	Amount Rs
Building		38231.00
Equipment		1280.00
Vehicles		11335.00
Furnitures		0.00
<b>TOTAL Rs.</b>		<b>50846.00</b>



*V. V. Nagar*  
**DIRECTOR**  
**ISTAR**  
**V. V. NAGAR-368120**

**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

<u>List Of Creditors</u>		Sch. G
No	Particulars	Amt. Rs.
1	Khohinoor Plastic	2750
2	OHM Engineers & Fabricators	3300
3	Nainesh M Prajapati	300
4	Nimesh N Patel	500
<b>Total Rs.</b>		<b>6850</b>

<u>List Of Projects</u>		Sch. H
No	Particulars	Amt. Rs.
1	Gulf of Khambhat Project	26296
2	Indo Russian Project	378281
3	Narmada -Tapi Project	117977
4	Soil Nutrient Dynamics Project	2394
5	Wetland Project	9878
<b>Total Rs.</b>		<b>534826</b>



*V. V. Nagar*  
**DIRECTOR**  
**ISTAR**  
**V. V. NAGAR-388120**



**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

**INCOME & EXPENDITURE A/C. FOR THE YEAR ENDED 31ST MARCH 2013**

EXPENDITURE	Sch.	₹.	No.	INCOME	Sch.	₹.	No.
To Salaries & Other Benefits to the staff	'C'	24997280.00		By Tuition Fees		67238224.00	
* Administrative Exps.	'D'	39255931.73		* Notice Pay		234145.00	
* Academic Exps.	'E'	4626136.21		* Interest Income		70276.00	
* Maintenance Exps.	'F'	123364.10					
* Depreciation	'B'	1849288.00		* Excess of Exps. Over Incomes carried to B/S		3309355.04	
<b>TOTAL Rs.</b>		<b>70852000.04</b>		<b>TOTAL Rs.</b>		<b>70852000.04</b>	

  
**ANAM**  
 DIRECTOR  
 ISTAR



  
**ANAM AMIN & CO.**  
 Chartered Accountants  
 FIRM REGN. NO. 100513W  
 REGISTERED ADDRESS



**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

<b>Fund Balances</b>		<b>Sch. A.</b>					
Sr. No.	Particulars	Ope. Balances as on 1-4-12		Addition during the year		Sales during the Year	Total as on 31/03/2013
		₹.	Np.	₹.	Np.	₹.Np.	₹. Np.
1	Computer Hardware Fund	1,790,315.00		-			1,790,315.00
2	Laboratory Equipments Fund	9,314,869.00		5,732,293.00		-	15,047,162.00
3	Furniture & Equipment Fund	1,613,149.00		324,231.00		-	1,937,380.00
4	Library Books Fund	1,687,800.45		126,210.00		-	1,814,010.45
5	Vehicle Fund	668,300.00		-		-	668,300.00
	<b>TOTAL</b>	<b>15,074,433.45</b>		<b>6,182,734.00</b>		<b>-</b>	<b>21,257,167.45</b>



  
**DIRECTOR**  
**ISTAR**  
**V. V. NAGAR-388128**



**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

**Particulars of Fixed assets**

Sch. B:

Sr. No.	Assets	Gross Block			Depreciation		Total as on 31-03-2013	
		Opn. Balance as on 1-4-12	Addition during the year	Sales/adj.	Total as on 31-03-2013	Opn. Balance as on 1-4-12		Addition during the year
1	Computer Hardware	1,790,315.00	-		1,790,315.00	91,553.00	57,049.00	148,602.00
2	Laboratory Equipments	9,314,869.00	5,732,293.00	-	15,047,162.00	1,867,350.00	1,547,865.00	3,415,215.00
3	Furniture & Equipment	1,613,149.00	324,231.00	-	1,937,380.00	158,135.00	95,762.00	253,897.00
4	Library Books	1,687,800.45	126,210.00	-	1,814,010.45	253,907.00	148,612.00	402,519.00
5	Vehicle	668,300.00	-	-	668,300.00			-
	<b>TOTAL Rs.</b>	15,074,433.45	6,182,734.00	-	21,257,167.45	2,370,945.00	1,849,288.00	4,220,233.00



*V. V. NAGAR*

**DIRECTOR  
ISTAR**

**V. V. NAGAR-388120**

**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

**Salaries & Other Benefits to the Staff**                      Sch. C                      Amount ₹.

Salary to Teaching Staff	14206268.00
Salary to Non Teaching Staff	7033989.00
Trainee Staff ( Stipend) Allowance	2212943.00
Institute Contribution to P.F. Exp.	618363.00
Group Gratuity Premium	105385.00
Employees' Insurance	74000.00
Staff quarters' rent Subsidy	177802.00
Visiting Faculty	568530.00
<b>TOTAL RS.</b>	<b>24997280.00</b>

**Administrative Exp.**    Sch. D    Amount ₹.

Telephone Expenses	35146.00
Advertisement Expenses	420488.00
Audit Fee	17978.00
Bank Charges	3378.00
Building Rent	12390966.00
Board Of Mgt. Exp.	5909.00
Educational Fair	3125.00
Electricity Charges	221114.00
Insurance Charges	130496.00
Infrastrure Overhead Expenses	25590000.00
Naac Committee	13224.00
Miscellaneous Expenses	70930.73
Municipal Tax	23413.00
Printing & Stationery Expenses	161450.00
Post & Telegramme Expenses	18227.00
Revenue Stamp	2378.00
Cleaning Expenses	9295.00
Tea & Refreshment	3950.00
Traveling Expenses	66443.00
Vehicle Insurance Charges	6565.00
Vehicle Petrol & Diesel Expenses	18806.00
Water Charges	42650.00
<b>Total Rs.</b>	<b>39255931.73</b>



*V. V. Nagar*  
**DIRECTOR**  
**ISTAR**  
**V. V. NAGAR-388120**



**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

**Salary to Teaching Staff**                      Sch. C-1                      Amount ₹.

Basic Pay	6329715.00
Grade Pay	1808762.00
Dearness Allowance	5221405.00
House Rent Allowance	813848.00
Medical Allowance	25180.00
Director Special Allowance	7358.00
<b>TOTAL RS.</b>	<b>14206268.00</b>

**Salary to Non Teaching Staff**                      Sch. C-2                      Amount ₹.

Basic Pay	3215850.00
Grade Pay	827655.00
Dearness Allowance	2581704.00
House Rent Allowance	343980.00
Medical Allowance	43800.00
Cash Allowance	12000.00
Petrol Allowance	5000.00
Telephone Allowance	4000.00
<b>TOTAL RS.</b>	<b>7033989.00</b>



  
**DIRECTOR  
ISTAR  
V. V. NAGAR-388120**





**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**

<u>List Of Creditors</u>		Sch. G
No	Particulars	Amount ₹.
1	Khohinoor Plastic	2750
2	OHM Engineers & Fabricators	3300
3	Nainesh M Prajapati	300
4	Nimesh N Patel	500
<b>Total Rs.</b>		<b>6850</b>

<u>List Of Projects</u>		Sch. H
No	Particulars	Amount ₹.
1	Gulf of Khambhat Project	9780
2	Indo Russian Project	154673
3	Narmada -Tapi Project	46599
<b>Total Rs.</b>		<b>211052</b>



*V. V. Nagar*  
**DIRECTOR**  
ISTAR  
V. V. NAGAR-388120




### Annexure 11e :Balance sheet for MCA (2009-10)

INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH  
M.C.A INCOME & EXPENDITURE STATEMENT FOR THE YEAR 2009 - 2010  
01.04.2009 TO 31.03.2010  
Charutar Vidya Mandal

INCOME	RS.	EXPENDITURE	RS.
Tuition Fees	7,314,380.00	Salary to Teaching Staff	4,785,240.00
Interest Income	183.00	Salary to Non -Teaching Staff	237,463.00
		Advertisement Exp	61,125.00
		Affiliation Fees Exp	126,526.00
		Audit Fee	6,618.00
		Bank Charges	2,017.00
		Building & Infra & Maint. Exp	861.00
		Building Rent Exp	1,352,584.00
		Computer Consumable Exp	67,003.00
		Depreciation Exp	131,871.00
		Electricity Exp	333,103.00
		Empoyees Insurance Exp	13,000.00
		Gymkhana Exp	48,567.00
		Hostel Subsidy Exp	57,000.00
		I Card Exp	1,180.00
		Inst. Contri. To P.F.Exp for Teaching Staff	240,190.00
		Inst. Cont. To PF.Exp for Non-Teaching Staff	19,976.00
		Insurance Premium Exp	30,191.00
		Internet Exp.	120,000.00
		Library Periodical Exp.	77,814.00
		Miscellaneous Exp	9,357.00
		Postage Exp	411.00
		Printing & Stationery Exp	6,630.00
		Professional Fee Exp	1,103.00
		Repairing Equipment Exp	23,544.00
		Revenue Stamp Exp	316.00
		Staff Quarter Subsidy Exp	92,843.00
		Telephone Exp	9,036.00
		Tour Confer.& Seminar Exp	19,866.00
		Travelling Exp	3,497.00
		Visiting Faculty Exp	280,000.00
		Water Charges	59,300.00
Excess Exp. Over Income	903,669.00		
<b>TOTAL</b>	<b>8,218,232.00</b>	<b>TOTAL</b>	<b>8,218,232.00</b>

DATE: 26 MAY 2010

  
DIRECTOR  
(STAR(MCA))

  
CHARTERED ACCOUNTANTS  
APAJI AMIN & CO.  
AHMEDABAD





**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**  
**M.C.A BALANCE SHEET AS ON 31st MARCH 2010**  
**Charstar Vidya Mandal**

LIABILITY	RS.	RS.	ASSET	RS.	RS.
Computer Hardware Fund	5,029,125.00		Computer Hardware Equip.	5,029,125.00	
Add. During the year	1,819,450.00	6,848,575.00	Add. During the year	1,819,450.00	6,848,575.00
Computer Software Fund	370,255.00		Computer Software Equip.	370,255.00	
Add. During the year	-	370,255.00	Add. During the year	-	370,255.00
Furniture & Equip. Fund	481,718.00		Furniture & Equip.	481,718.00	
Add. During the year	115,200.00	576,918.00	Add. During the year	115,200.00	576,918.00
Library Book Fund	992,973.00		Library Books	992,973.00	
Add. During the year	170,517.00	1,163,490.00	Add. During the year	170,517.00	1,163,490.00
Development Fee Fund : 1211900.00					
Add. During the year	4,341,800.00				
College Caution Money : 164000.00			GTU Misc Deposit	440.00	
Add. During the year	28200.00	188,600.00	Cash In Hand	916.00	
Depreciation Fund 551512.00			Equipment Advance	2,515,629.00	
Add. During the year	121871	683,383.00	Oriental Bank Of Commerce V.V.N.	413,745.00	
Scholarship	11,400.00	5,224,883.00	Central Bank Of India V.V.N.	30,983.00	
			State Bank Of India Ahmedabad	6,376.14	
			C.V.M. Advance A/c	1,851,795.66	5,224,883.00
			Income & Expenditure A/c Op. Bal.	1,816,887.00	
Charstar Vidya Mandal Current A/c		903,889.00	Less: Transferred To CVM	1,816,887.00	
			Add: Current Period Loss	100,569.00	803,889.00
<b>TOTAL</b>		<b>15,987,790.00</b>	<b>TOTAL</b>		<b>15,987,790.00</b>

Auditor's Report:- We have examined the above Balance Sheet as on 31st March 2010 and the annexure income and expenditure accounts for the year ending on 31st March 2010 of Institute Of Science & Technology for Advance Studies & Research, V.V. Nagar with books of accounts and vouchers relating thereto and report that we have obtained all the information and explanations. In our opinion the said balance sheet exhibit true and correct state of affairs of the institution according to the best of our information and explanations given to us

DATE 26 MAY 2010

  
 DIRECTOR  
 ISTAR(MCA)

  
 CHARTERED ACCOUNTANTS  
 APAJAMN & CO.  
 AHMEDABAD



**Annexure 11f :Balance sheet for MCA (2010-11)**

**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**  
**M.C.A INCOME & EXPENDITURE STATEMENT FOR THE YEAR 2010 - 2011**  
**01.04.2010 TO 31.03.2011**  
**Chanutar Vidya Mandal**

INCOME	RS.	EXPENDITURE	RS.
Tuition Fees	7,182,260.00	Salary to Teaching Staff	6,046,683.00
Interest Income	191.00	Salary to Non -Teaching Staff	506,882.00
		Advertisement Exp	2,376.00
		Annualday Exp	20,330.00
		Affiliation Fees Exp	183,700.00
		Audit Fee	7,721.00
		Bank Charges	2,508.00
		Building Rent Exp	1,352,584.00
		Cleaning Exp	2,912.00
		Computer Consumable Exp	137,263.00
		Depreciation Exp	1,645,081.00
		Electricity Exp	333,568.00
		Empoyees Insurance Exp	23,000.00
		Gymkhana Exp	9,359.00
		Gratuity Exp	881,495.00
		Hostal Subsidy Exp	42,000.00
		I Card Exp	1,568.00
		Inspection Fee Exp	25,000.00
		Inst. Contrib. To P.F. Exp for Teaching Staff	109,980.00
		Inst. Cont. To PF Exp for Non-Teaching Staff	28,080.00
		Insurance Premium Exp	101,060.00
		Internet Exp.	172,000.00
		Library Contergency Exp	6,900.00
		Library Periodical Exp	232,189.00
		Membership Fee Exp	5,000.00
		Miscellaneous Exp	40,272.00
		Ministerial Charges	406,080.00
		Panchayat Tax Exp.	39,639.00
		Postage Exp	953.00
		Printing & Stationery Exp	36,183.00
		Professional Fee Exp	33,090.00
		Repairing Equipment Exp	3,985.00
		Revenue Stamp Exp	300.00
		Staff Quarter Subsidy Exp	129,441.00
		Telephone Exp	10,504.00
		Tour Confer & Seminar Exp	36,314.00
		Travelling Exp	17,434.00
		Visiting Faculty Exp	77,433.00
		Vehicle Diesel Exp	8,876.00
		Vehicle Insurance Exp	30,645.00
		Vehicle Repairing Exp	51,200.00
		Water Charges	58,600.00
Excess Exp. Over income	5,677,717.00		
<b>TOTAL</b>	<b>12,860,168.00</b>	<b>TOTAL</b>	<b>12,860,168.00</b>

DATE: 22 JUL 2011

DIRECTOR  
 ISTAR(MCA)

CHARTERED ACCOUNTANTS  
 APAJI AMIN & CO.  
 AHMEDABAD



**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH**  
**M.C.A BALANCE SHEET AS ON 31st MARCH 2011**  
**Charutar Vidya Mandal**

LIABILITY	RS.	RS.	ASSETS	RS.	RS.
Computer Hardware Fund	6,646,575.00		Computer Hardware	6,646,575.00	
Add. During the year	1,506,319.00	8,367,894.00	Add. During the year	1,509,319.00	8,367,894.00
Computer Software Fund	370,255.00		Computer Software	370,255.00	
Add. During the year	128,370.00	498,625.00	Add. During the year	128,370.00	498,625.00
Lab. Equipment Fund	-		Lab. Equipment	-	
Add. During the year	440,675.00	440,675.00	Add. During the year	440,675.00	440,675.00
Furniture & Equip. Fund	576,918.00		Furniture & Equip.	576,918.00	
Add. During the year	0.00	576,918.00	Add. During the year	-	576,918.00
Library Book Fund	1,163,490.00		Library Books	1,163,490.00	
Add. During the year	282,287.00	1,445,777.00	Add. During the year	282,287.00	1,445,777.00
Vehicle Fund	-		Vehicle	-	
Add. During the year	847,062.00	847,062.00	Add. During the year	847,062.00	847,062.00
Enrollment Fee	1,050.00				
College Caution Money - 168500.00			Equipment Advance	6,123,942.00	
Add. During the year - 17950.00	206,000.00		Oriental Bank Of Commerce V.V.N.	275,362.00	
GTU Misc Deposit	1,461.00		Central Bank Of India, V.V.N.	6,288.00	
Discretion Fund - 833583.00			State Bank Of India Ahmedabad	5,957.14	
Add. During the year - 1095081.00	2,328,464.00		Cash In Hand	10,094.00	6,419,640.14
C.V.M. Advance A/C	3,882,678.14	6,419,642.14			
Charutar Vidya Mandal - Current A/C		5,677,717.00	Income & Expenditure A/c Op. Bal.		5,677,717.00
<b>TOTAL</b>		<b>24,264,311.14</b>	<b>TOTAL</b>		<b>24,264,311.14</b>

Auditor's Report:- We have examined the above Balance Sheet as on 31st March 2011 and the annexure income and expenditure accounts for the year ending on 31st March 2011 of Institute Of Science & Technology for Advance Studies & Research, V.V. Nagar with books accounts and vouchers relating thereto and report that we have obtained all the information and explanation by us. In our opinion the said balance sheet exhibit true and correct state of affairs of the institution according to the best of our information and explanation given to us

DATE 22 JUL 2011

DIRECTOR  
 ISTAR/MCA

CHARTERED ACCOUNTANTS  
 APALJI AMIN & CO.  
 AHMEDABAD



INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCE STUDIES & RESEARCH (MCA)

VALLABH VIDYANAGAR - 388 120

AS ON 31<sup>st</sup> MARCH 2011

Calculation of Depreciation for the year 2010-2011 ( SLM Method )

Particulars	Dep. Rate %	As on 01-04-2010	Additional During the Year (2010-11)	As on 31/03/11	Depreciation as on 1-4-2010	Depreciation During the Year (2010-11)	Total Depreciation [6+7]	Closing Balance As On 31-03-2011 [8-9]
1	2	3	4	5	6	7	8	9
Computer Hardware Eqpt. Opn...		4675010.00	0.00	4675010.00	0.00	0.00	0.00	0.00
2007-2008		36603.00	0.00	36603.00	36603.00	0.00	36603.00	0.00
2008-2009	33	312012.00	0.00	312012.00	225491.00	84021.00	313512.00	0.00
2009-2010	33	1811450.00	0.00	1811450.00	0.00	600419.00	600419.00	1219031.00
Purchase during the year 10-11	33	0.00	1409019.00	1409019.00	0.00	495075.00	495075.00	1011244.00
<b>TOTAL-A</b>		<b>6648575.00</b>	<b>1409019.00</b>	<b>8057594.00</b>	<b>36603.00</b>	<b>1102519.00</b>	<b>1448809.00</b>	<b>2230275.00</b>
Computer Software Eqpt. Opening		370255.00	0.00	370255.00	0.00	0.00	0.00	0.00
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11	33	0.00	120370.00	120370.00	0.00	42302.00	42302.00	60005.00
<b>TOTAL-B</b>		<b>370255.00</b>	<b>120370.00</b>	<b>490625.00</b>	<b>0.00</b>	<b>42302.00</b>	<b>42302.00</b>	<b>66005.00</b>
Furniture & Eqpt. Opening		491718.00	0.00	491718.00	0.00	0.00	0.00	0.00
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	15	115000.00	0.00	115000.00	17260.00	17260.00	34560.00	80440.00
Purchase during the year 10-11	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-C</b>		<b>491718.00</b>	<b>0.00</b>	<b>491718.00</b>	<b>17260.00</b>	<b>17260.00</b>	<b>34560.00</b>	<b>80440.00</b>
Library books Opening		537000.00	0.00	537000.00	0.00	0.00	0.00	0.00
2007-2008		235200.00	0.00	235200.00	0.00	0.00	0.00	0.00
2008-2009	33	225741.00	0.00	225741.00	164903.00	60336.00	285141.00	0.00
2009-2010	33	176057.00	0.00	176057.00	0.00	58271.00	58271.00	114286.00
Purchase during the year 10-11	33	0.00	362287.00	362287.00	0.00	93150.00	93150.00	169132.00
<b>TOTAL-D</b>		<b>1163490.00</b>	<b>362287.00</b>	<b>1445777.00</b>	<b>400059.00</b>	<b>309764.00</b>	<b>609733.00</b>	<b>303376.00</b>
Lab. Equipment.		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 10-11	15	0.00	440075.00	440075.00	0.00	66101.00	66101.00	374574.00
<b>TOTAL-E</b>		<b>0.00</b>	<b>440075.00</b>	<b>440075.00</b>	<b>0.00</b>	<b>66101.00</b>	<b>66101.00</b>	<b>374574.00</b>
Vehicle		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	15	0.00	847062.00	847062.00	0.00	127056.00	127056.00	720003.00
Purchase during the year 10-11	15	0.00	847062.00	847062.00	0.00	127056.00	127056.00	720003.00
<b>TOTAL-F</b>		<b>0.00</b>	<b>847062.00</b>	<b>847062.00</b>	<b>0.00</b>	<b>127056.00</b>	<b>127056.00</b>	<b>720003.00</b>
<b>GRAND TOTAL (A TO F)</b>		<b>8959236.00</b>	<b>3207711.00</b>	<b>12166955.00</b>	<b>663393.00</b>	<b>1845081.00</b>	<b>2328464.00</b>	<b>3794876.00</b>



*(Signature)*  
DIRECTOR, IASR, VVIA

**Annexure 11g :Balance sheet for MCA (2011-12)**

**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)  
BALANCE SHEET AS AT 31ST MARCH, 2012**

LIABILITIES	Sch.	Rs. Np.	ASSETS	Sch.	Rs. Np.
Fund Balances	A	13972783.00	Fixed Assets	A	13972783.00
Current Liabilities & Provisions			Current Assets, Loans and Advances		
Depreciation Fund	B	4431485.00	Equipment Advance		7929174.00
Caution Money Deposits		60000.00	Corporation Bank		1003.00
			Oriental Bank of Commerce		563991.00
			Central Bank Of Commerce		43449.00
			State Bank of India, Ahmedabad		5782.14
CVM Advance A/c		4056180.54	Cash on hand		4266.00
CVM Current A/c			Excess of Expenses Over Incomes		7775899.00
<b>TOTAL Rs.</b>		<b>30296347.14</b>	<b>TOTAL Rs.</b>		<b>30296347.14</b>

Auditor's Report:- We have examined the above Balance Sheet as on 31st March 2012 and the annexe income and expenditure accounts for the year ending on 31st March 2012 of Institute Of Science & Technology for Advance Studies & Research, V.V. Nagar with books accounts and vouchers relating thereto and report that we have obtained all the information and explanation by us. In our opinion the said balance sheet exhibit true and correct state of affairs of the institution according to the best of our information and explanations given to us



*H. K. Amin*  
DIRECTOR  
ISTAR(MCA)



*H. K. Amin*  
For H. K. AMIN & CO  
Chartered Accountants

Date: 14 MAY 2012

**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

**INCOME & EXPENDITURE A/C. FOR THE YEAR ENDED 31ST MARCH 2012**

EXPENDITURE	Sch.	Rs. Np.	INCOME	Sch.	Rs. Np.
To Salaries & Other Benefits to the staff	'L'	10509429.00	By Tuition Fees		8013250.00
* Administrative Exps.	'D'	2367313.00	* Bank interest		540.00
* Academic Exps.	'E'	770498.00			
* Maintenance Exps.	'F'	20428.00			
* Depreciation	'H'	2103021.00	* Excess of Exps. Over Incomes carried to B/S		7775899.00
<b>TOTAL Rs.</b>		<b>15789689.00</b>	<b>TOTAL Rs.</b>		<b>15789689.00</b>

Date: 14 MAY 2012

*For APJ AMIN & CO*

For APJ AMIN & CO  
Chartered Accountants



*For ISTAR*  
DIRECTOR  
ISTAR(MCA)

**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

**Fund Balances**

Sch. A

Sr. No.	Particulars	Ope. Balances as on 1-4-11 Rs.		Addition during the year Rs.	Sales during the year Rs.	Total as on 3/31/2012 Rs.
1	Computer Hardware Fund	8,357,894.00		1,638,458.00	27,500.00	9,968,852.00
2	Computer Software Fund	498,625.00			-	498,625.00
3	Laboratory Equipments Fund	440,675.00	-		-	440,675.00
4	Furniture & Equipment Fund	576,918.00		15,000.00	-	591,918.00
5	Library Books Fund	1,445,777.00		179,874.00	-	1,625,651.00
6	Vehicle Fund	847,062.00		-	-	847,062.00
	<b>TOTAL</b>	<b>12,166,951.00</b>		<b>1,833,332.00</b>	<b>27,500.00</b>	<b>13,972,783.00</b>



*V. V. Nagar*  
**DIRECTOR**  
**ISTAR**  
**V. V. NAGAR-368120**

**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

**Particulars of Fixed assets.**

Sch. B

Sr. No.	Assets	Gross Block			Depreciation		Total as on 31-03-2012	
		Opn. Balance as on 1-4-11	Addition during the year	Sales/sdi.	Total as on 31-03-2012	Opn. Balance as on 1-4-11		Addition during the year
1	Computer Hardware	8,357,894.00	1,638,458.00	27,500.00	9,968,852.00	1,448,609.00	1,639,185.00	3,087,794.00
2	Computer Software	498,625.00	-	-	498,625.00	42,362.00	42,362.00	84,724.00
3	Laboratory Equipments	440,675.00	-	-	440,675.00	66,101.00	66,101.00	132,202.00
4	Furniture & Equipment	576,918.00	15,000.00	-	591,918.00	34,560.00	19,530.00	54,090.00
5	Library Books	1,445,777.00	179,874.00	-	1,625,651.00	609,773.00	208,764.00	818,557.00
6	Vehicle	847,062.00	-	-	847,062.00	127,059.00	127,059.00	254,118.00
	<b>TOTAL, Rs.</b>	<b>12,166,951.00</b>	<b>1,833,332.00</b>	<b>27,500.00</b>	<b>13,972,783.00</b>	<b>2,328,454.00</b>	<b>2,103,021.00</b>	<b>4,431,485.00</b>



*R. K. Reddy*  
**DIRECTOR**  
ISTAR  
V. V. NAGAR-386120

**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCE STUDIES & RESEARCH (MCA)**  
**VALLABH VIDYANAGAR - 388 120**  
**AS ON 31<sup>st</sup> MARCH 2012**

Calculation of Depreciation for the year 2011-2012 ( SLM Method )

Particulars	Dep. Rate %	As on 01-04-2011	Additional During the Year (2011-12)	Sold During the Year (2011-12)	As on 31/03/12	Depreciation as on 1-4-2011	Depreciation During the Year (2011-12)	Total Depreciation (0+7)	Closing Balance As On 31-03-2012 (5-8)
1	2	3	4	5	6	7	8	9	10
<b>Computer Hardware Eqt. Open..</b>		4879012.00	0.00	0.00	4879010.00	0.00	0.00	0.00	0.00
2007-2008		36603.00	0.00	0.00	36603.00	36603.00	0.00	36603.00	0.00
2008-2009	33	313512.00	0.00	0.00	313512.00	313512.00	0.00	313512.00	0.00
2009-2010	33	1919492.00	0.00	0.00	1919490.00	600418.00	600418.00	1200836.00	619912.50
2010-2011	33	1509318.00	0.00	0.00	1509318.00	498075.00	498075.00	996150.00	913165.00
Purchase during the year 11-12		0.00	1538458.00	27500.00	1512958.00	0.00	540591.00	640691.00	1070267.00
<b>TOTAL-A</b>		<b>8357824.00</b>	<b>1638458.00</b>	<b>27500.00</b>	<b>9986372.00</b>	<b>1448695.00</b>	<b>1639182.00</b>	<b>3087794.50</b>	<b>2302048.00</b>
<b>Computer Software Eqt. Opening</b>		370255.00	0.00	0.00	370255.00	0.00	0.00	0.00	0.00
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010-2011	33	128375.00	0.00	0.00	128375.00	42382.00	42382.00	86724.00	43545.00
Purchase during the year 11-12		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-B</b>		<b>498630.00</b>	<b>0.00</b>	<b>0.00</b>	<b>498630.00</b>	<b>42382.00</b>	<b>42382.00</b>	<b>84724.00</b>	<b>43645.00</b>
<b>Furniture &amp; Eqt. Opening</b>		481710.00	0.00	0.00	481710.00	0.00	0.00	0.00	0.00
2007-2008		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	15	111200.00	0.00	0.00	111200.00	34990.00	17480.00	51640.00	63260.00
2010-2011	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase during the year 11-12		0.00	15000.00	0.00	15000.00	0.00	2250.00	2250.00	12750.00
<b>TOTAL-C</b>		<b>673810.00</b>	<b>15000.00</b>	<b>0.00</b>	<b>688810.00</b>	<b>34990.00</b>	<b>19530.00</b>	<b>54090.00</b>	<b>76110.00</b>
<b>Library books Opening</b>		502820.00	0.00	0.00	502820.00	0.00	0.00	0.00	0.00
2007-2008		235020.00	0.00	0.00	235020.00	235020.00	0.00	235020.00	0.00
2008-2009	33	225148.00	0.00	0.00	225148.00	335141.00	0.00	335141.00	0.00
2009-2010	33	179938.00	0.00	0.00	179938.00	90271.00	90271.00	112542.00	97979.00
2010-2011	33	262287.00	0.00	0.00	262287.00	87155.00	87155.00	149310.00	95977.00
Purchase during the year 11-12		0.00	179874.00	0.00	179874.00	0.00	59358.00	59358.00	120516.00
<b>TOTAL-D</b>		<b>1445774.50</b>	<b>179874.00</b>	<b>0.00</b>	<b>1625648.50</b>	<b>609773.00</b>	<b>208784.00</b>	<b>818557.00</b>	<b>274468.50</b>
<b>Lab. Equipment:</b>		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010-2011	15	440675.00	0.00	0.00	440675.00	66101.00	66101.00	132202.00	308473.00
Purchase during the year 11-12		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-E</b>		<b>440675.00</b>	<b>0.00</b>	<b>0.00</b>	<b>440675.00</b>	<b>66101.00</b>	<b>66101.00</b>	<b>132202.00</b>	<b>308473.00</b>
<b>Vehicle</b>		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008-2009	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2009-2010	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010-2011	15	847062.00	0.00	0.00	847062.00	127059.00	127059.00	254118.00	592944.00
Purchase during the year 11-12		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL-F</b>		<b>847062.00</b>	<b>0.00</b>	<b>0.00</b>	<b>847062.00</b>	<b>127059.00</b>	<b>127059.00</b>	<b>254118.00</b>	<b>592944.00</b>
<b>GRAND TOTAL (A TO F)</b>		<b>1214615.50</b>	<b>183332.50</b>	<b>27500.00</b>	<b>1397278.00</b>	<b>232844.00</b>	<b>2103021.00</b>	<b>4431485.00</b>	<b>3497698.00</b>



*Handwritten signature*

**DIRECTOR**  
**ISTAR**

V. V. NAGAR-388120

**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

**Salaries & Other Benefits to the S**      Sch. C      Amt. Rs.

Salary to Teaching Staff	8237756.00
Salary to Non Teaching Staff	1008180.00
Trainee Staff ( Stipend ) Allowance	178032.00
Institute Contribution to P.F. Exp.	149760.00
Group Gratuity Premium	702646.00
Employees' Insurance	22500.00
Staff quarters' rent Subsidy	115055.00
Tour & Confer. & Seminar Exp.	12500.00
Visiting Faculty	82000.00
<b>TOTAL RS.</b>	<b>10508429.00</b>

**Administrative Exp.**      Sch. D      Amount Rs.

Telephone Expenses	10997.00
Advertisement Expenses	4100.00
Auditing Charges	7721.00
Bank Charges	3187.00
Building Rent	1352584.00
Electricity Charges	288968.00
Insurance Charges	104775.00
Inspection Fee	25000.00
Ministerial Expenses	305606.00
Miscellaneous Expenses	22363.00
Panchayat Tax	30568.00
Printing & Stationery Expenses	57122.00
Post & Telegramme Expenses	2784.00
Revenue Stamp	327.00
Cleaning Expenses	5205.00
Traveling Expenses	13893.00
Vehicle Insurance Charges	15128.00
Vehicle Petrol & Diesel Expenses	12468.00
Water Charges	58250.00
<b>Total Rs.</b>	<b>2387313.00</b>



*A. V. Nagar*  
**DIRECTOR**  
**ISTAR**  
**V. V. NAGAR-388120**



**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

Academic Exps.	Sch. E	Amt. Rs.
Laboratory Consumable		69834.00
Affiliation Charges		101522.00
Annual Day Expenses		23868.00
Hostel Student Subsidy		30000.00
Internet Recuring		165000.00
Library Contingency		11000.00
Library Periodical		387153.00
Gytnkhana Expenses		825.00
I Card Expenses		1298.00
<b>TOTAL Rs.</b>		<b>770498.00</b>

Repairs & Mintanance Exps.	Sch. F	Amount Rs
Building		1440.00
Equipment		13012.00
Vehicles		5976.00
Furnitures		0.00
<b>TOTAL Rs.</b>		<b>20428.00</b>



*Rateh*  
**DIRECTOR**  
**ISTAR**  
**V. V. NAGAR-300120**



**Annexure 11h :Balance sheet for MCA (2012-13)**

CHARUVAR VIDYA MANDAL'S

**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A )**  
BALANCE SHEET AS AT 31ST MARCH, 2013

LIABILITIES	Sch.	₹	₹. No.	ASSETS	Sch.	₹	₹. No.
Fund Balances	A	14135932.00		Fixed Assets	A		14135932.00
Current Liabilities & Provisions				Current Assets, Loans and Advances			
Depreciation Fund	B	6533778.00		Equipment Advance		1092323.00	
Caution Money Deposits		60000.00		Corporation Bank		61938.53	
				Oriental Bank of Commerce		49772.00	
				Central Bank Of Commerce		35645.00	
				State Bank of India, Ahmedabad		6016.14	
CYM Advance A/c		1656263.67	8250041.67	Cash on hand		4347.00	8250041.67
CYM Current A/c			4988242.47	Excess of Expenses Over Income			4988242.47
<b>TOTAL RS.</b>			<b>27374236.14</b>	<b>TOTAL RS.</b>			<b>27374236.14</b>

Auditor's Report:- We have examined the above Balance Sheet as on 31st March 2013 and the annexure income and expenditure accounts for the year ending on 31st March 2013 of Institute Of Science & Technology for Advance Studies & Research, V.V. Nagar with books accounts and vouchers relating thereto and report that we have obtained all the information and explanation by us. In our opinion the said balance sheet exhibit true and correct state of affairs of the institution according to the best of our information and explanations given to us

*App. Saha*  
For AP&S ADVY & CO  
Chartered Accountants



*ADGM*  
DIRECTOR  
ISTAR(MCA)



CHARUTAR VIDYA MANDAL'S  
**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

**INCOME & EXPENDITURE A/C. FOR THE YEAR ENDED 31ST MARCH 2013**

EXPENDITURE	Sch.	₹	Rp.	INCOME	Sch.	₹	Rp.
To Salaries & Other Benefits to the staff	'C'	9110781.00		By Tuition Fees		9275120.00	
* Administrative Exps.	'D'	2293800.00		* Bank Interest		17555.00	
* Academic Exps.	'E'	709266.87					
* Maintenance Exps.	'F'	15397.00					
* Depreciation	'B'	2102793.00		* Excess of Exps. Over Incomes carried to B/S		4980262.47	
<b>TOTAL Rs.</b>		<b>14280937.87</b>		<b>TOTAL Rs.</b>		<b>14280937.87</b>	

*[Signature]*

For **M. AMIN & CO**  
 Chartered Accountants



*[Signature]*

DIRECTOR  
 ISTAR(MCA)



**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

**Fund Balances**

Sch. A

Sr. No.	Particulars	Opn. Balances as on 1-4-12		Addition during the year	Sales during the Year	Total as on 31/03/2013
		₹ Np.		₹ Np.	₹ Np.	₹ Np.
1	Computer Hardware Fund	9,968,852.00		68,010.00	-	10,036,862.00
2	Computer Software Fund	498,625.00			-	498,625.00
3	Laboratory Equipments Fund	440,675.00	-		-	440,675.00
4	Furniture & Equipment Fund	591,918.00			-	591,918.00
5	Library Books Fund	1,625,651.00		95,139.00	-	1,720,790.00
6	Vehicle Fund	847,062.00			-	847,062.00
	<b>TOTAL</b>	<b>13,972,783.00</b>		<b>163,149.00</b>	<b>-</b>	<b>14,135,932.00</b>



  
**DIRECTOR**  
 18722  
**V. V. NAGAR-188120**



**CHABUTAR VIDYA MANDAL'S**  
**INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH (M.L.A)**

Sch. II

Particulars of Fixed assets

Sr. No.	Assets	Gross Block			Depreciations			
		Opn. Balance as on 1-4-12	Addition during the year	Sales/adj.	Total as on 31-03-2013	Opn. Balance as on 1-4-12	Addition during the year	Total as on 31-03-2013
1	Computer Hardware	9,968,852.00	68,010.00	-	10,036,862.00	3,007,794.00	1,667,628.00	4,749,422.00
2	Computer Software	498,625.00	-	-	498,625.00	88,724.00	42,362.00	127,086.00
3	Laboratory Equipments	440,675.00	-	-	440,675.00	132,202.00	66,101.00	148,303.00
4	Furniture & Equipment	591,918.00	-	-	591,918.00	54,090.00	19,530.00	73,620.00
5	Library Books	1,625,651.00	95,139.00	-	1,720,790.00	88,857.00	185,613.00	1,004,170.00
6	Vehicle	847,062.00	-	-	847,062.00	254,138.00	127,059.00	381,177.00
	<b>TOTAL Rs.</b>	<b>13,972,781.00</b>	<b>16,149.00</b>	<b>-</b>	<b>14,135,932.00</b>	<b>4,431,485.00</b>	<b>2,102,293.00</b>	<b>6,533,778.00</b>



*M. V. NARAYAN*  
**DIRECTOR**  
- I/P F/AE  
M. V. NARAYAN-980120

**CHARITAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

**Salaries & Other Benefits to the Staff**                      Sch. C                      Amount ₹

Salary to Teaching Staff	7421174.00
Salary to Non Teaching Staff	1284718.00
Trainee Staff ( Stipend) Allowance	68500.00
Institute Contribution to P.F. Exp.	159120.00
Group Gratuity Premium	37976.00
Employees' Insurance	22500.00
Staff quarters' rent Subsidy	72193.00
Visiting Faculty	44000.00
<b>TOTAL RS.</b>	<b>9110181.00</b>

**Administrative Exp.**    Sch. D                      Amount ₹

Telephone Expenses	10811.00
Advertisement Expenses	1400.00
Auditing Charges	8889.00
Bank Charges	2277.00
Building Rent	1352584.00
Electricity Charges	329341.00
Insurance Charges	57252.00
Inspection Fee	50000.00
Ministerial Expenses	322143.00
Miscellaneous Expenses	19168.00
Panchayat Tax	36936.00
Printing & Stationery Expenses	5288.00
Post & Telegramme Expenses	120.00
Revenue Stamp	343.00
Traveling Expenses	5728.00
Vehicle Insurance Charges	13670.00
Vehicle Petrol & Diesel Expenses	1627.00
Water Charges	58300.00
<b>Total Rs.</b>	<b>2283800.00</b>



*K. V. NALIN*  
**DIRECTOR**  
10/10/2023  
K. V. NALIN-207129



**CHARITAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

**Salary to Teaching Staff**                      Sch. C-1    Amount ₹.

Basic Pay	3258120.00
Grade Pay	912000.00
Dearness Allowance	2603837.00
House Rent Allowance	408012.00
Medical Allowance	12600.00
Six Pay Arrears	226605.00
<b>TOTAL RS.</b>	<b>7421174.00</b>

**Salary to Non Teaching Staff**                      Sch. C-2    Amount ₹.

Basic Pay	959830.00
Grade Pay	158400.00
Dearness Allowance	458679.00
House Rent Allowance	71823.00
Medical Allowance	7200.00
Six Pay Arrears	28786.00
<b>TOTAL RS.</b>	<b>1284718.00</b>



*V. V. Nagar*  
**DIRECTOR**  
**ISTAR**  
V. V. NAGAR-560128



**CHARUTAR VIDYA MANDAL'S  
INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH ( M.C.A)**

Academic Exps.	Sch. E	Amount ₹
Laboratory Consumable		24718.00
Affiliation Charges		225022.47
Annual Day Expenses		22954.00
Hostel Student Subsidy		24000.00
Internet Recuring		167000.00
Library Periodical		383837.00
Gymkhana Expenses		835.00
I Card Expenses		1200.00
<b>TOTAL Rs.</b>		<b>769266.47</b>

Repairs & Mintanance Exps.	Sch. F	Amount ₹
Building		150.00
Equipment		8427.00
Vehicle		6820.00
<b>TOTAL Rs.</b>		<b>15397.00</b>



*Asami*  
**DIRECTOR**  
ISTAR  
V. V. NAGAR-583120

