# ANNUAL QUALITY ASSURANCE REPORT (AQAR) 2016-2017

#### Submitted by



Sarvodaya Kelavani Samaj managed

## SHREE MANIBHAI VIRANI AND SMT. NAVALBEN VIRANI SCIENCE COLLEGE (AUTONOMOUS), RAJKOT

Affiliated to Saurashtra University, Rajkot

"Yogidham Gurukul", Kalawad Road, RAJKOT - 360 005 (Gujarat)
Phone: +91-281-2562681

E-mail: principal@vsc.edu.in, admin@vsc.edu.in | Website: www.vsc.edu.in

Track ID: GJCOGN13267 EC/66/RAR/046 dated 21-2-2014

#### **Submitted to**



#### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

(An Autonomous Institution of the University Grants Commission) P.O. Box No. 1075, Nagarbhavi, Bangalore – 560 072, Karnataka

## The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. (Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013)

## Part - A

#### 1. Details of the Institution

1. Details of the Institution					
1.1 Name of the Institution	Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous)				
1.2 Address Line 1	"Yogidham Gurukul",				
Address Line 2	Kalawad Road,				
City/Town	Rajkot				
State	Gujarat				
Pin Code	360005				
Institution e-mail address	principal@vsc.edu.in				
Contact Nos.	09824803333				
Name of the Head of the Institution	on: Dr. K. D. Ladva				
Tel. No. with STD Code:	0281-2562681				
Mobile:	09824803333				

Name of the IQAC Co-ordinator:

Mr. R. S. Tank

Mobile:

0925114015

IQAC e-mail address:

rstank@vsc.edu.in

1.3 NAAC Track ID (For ex. MHCOGN 18879)

**GJCOGN 13267** 

1.4 NAAC Executive Committee No. & Date:

EC/66/RAR/046 dated 21-2-2014

(For Example EC/32/A&A/143 dated 3-5-2004. This EC no. is available in the right corner-bottom of your institution's Accreditation Certificate)

1.5 Website address:

www.vsc.edu.in

Web-link of the AQAR:

http://vsc.edu.in/wp-content/uploads/bsk-pdf-manager/aqar-2016-17 13.pdf

For ex. http://www.ladykeanecollege.edu.in/AQAR2012-13.doc

#### 1.6 Accreditation Details

Sl. No.	Cycle Gra	Crada	CGPA	Year of	Validity							
SI. NO.		Cycle	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	CGPA	Accreditation
1	1 <sup>st</sup> Cycle	'A'	-	2007	2012							
2	2 <sup>nd</sup> Cycle	'A' 3.28		2014	2019							
3	3 <sup>rd</sup> Cycle	Not Applicable										
4	4 <sup>th</sup> Cycle	Not Applicable										

1.7 Date of Establishment of IQAC :DD/MM/YYYY

06/08/2007

1.8 AQAR for the year (for example 2010-11)

2016-17

Accreditation by NAAC (for example	AQAR 2010-11submitted to NAAC on 12-10-2011)
<ul><li>i. AQAR 2013-14 submitted to</li><li>ii. AQAR 2014-15 submitted to</li><li>iii. AQAR 2015-16 submitted to</li></ul>	NAAC on 24/12/2018 NAAC on 27/12/2018
iv. AQAR	NA(DD/MM/YYYY)
1.10 Institutional Status	
University	State Central Deemed Private
Affiliated College	Yes ✓ No
Constituent College	Yes No 🗸
Autonomous college of UGC	Yes 🗸 No
Regulatory Agency approved Institu	ution Yes No 🗸
(eg. AICTE, BCI, MCI, PCI, NCI)	
Type of Institution Co-education	n Men Women
Urban	Rural Tribal
Financial Status Grant-in-a	id UGC 2(f) ✓ UGC 12B ✓
Grant-in-aid	+ Self Financing  Totally Self-financing
1.11 Type of Faculty/Programme	
Arts Science v	Commerce Law PEI (Phys Edu)
TEI (Edu) Engineering	Health Science Management
Others (Specify)	
1.12 Name of the Affiliating University	y (for the Colleges) Saurashtra University, Rajkot

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and

## 1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State / Central Govt. / University	ity 🗸		
University with Potential for Excellence	✓	UGC-CPE	✓
DST Star Scheme	✓	UGC-CE	
UGC-Special Assistance Programme		DST-FIST	
UGC-Innovative PG programmes	✓	Any other (Specify)	
UGC-COP Programmes	✓		
2. IQAC Composition and Activities			
2.1 No. of Teachers	12		
2.2 No. of Administrative/Technical staff	4		
2.3 No. of Students	1		
2.4 No. of Management representatives	1		
2.5 No. of Alumni	1		
2. 6 No. of any other stakeholder and community representatives	1		
2.7 No. of Employers/ Industrialists	2		
2.8 No. of other External Experts	1		
2.9 Total No. of members	23		
2.10 No. of IQAC meetings held	04		

2.11 No. of meetings with various stakeholders: No. 14 Faculty 06
Non-Teaching Staff Students 03 Alumni 01 Others 04
2.12 Has IQAC received any funding from UGC during the year? Yes No V  If yes, mention the amount
2.13 Seminars and Conferences (only quality related)
(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC
Total Nos. 17 International 01 National 01 State 01 Institution Level 14 (ii) Themes
International Level Seminar / Symposium:  Universal Human Values In Higher Education National level Workshop:  Atmiya Scitech Utsav GSBTM Workshop:  GSBTM crash workshop Institute Level FDP/Workshop:  Bulk scale extraction: Challenges for medicinal plants  Chromatographic and spectroscopic analysis  Unit Operation Equipment for Size Reduction  Graphing and plotting techniques & fundamentals of Microsoft Excel  Manav Vyavhar Darshan  Academic Autonomy Institute level SDP/Workshop/Training:  Soil Analysis: Estimation of Macro-nutrients  Chemdrawultra Software  Sophisticated Instrument like UV/IR/Ultrasonicator/Ultra Sonic Interferometer  Wonders of Medicinal Botany  Vermi composting  Bio fertiliser  Mushroom Cultivation Institute Level Exhibition/Fair:  Samarth-2017  Atmiya Science Fair in collaboration with ISRO, Ahmedabad.

- 2.14 Significant Activities and contributions made by IQAC
  - Announcement/launching ceremony of Academic Autonomy in May 2016.
  - Implementation of New curriculum for all UG PG & Integrated programs.
  - Formation & meetings of Statutory and Non Statutory committees as per UGC Guidelines

- Procurement of new Instrument/equipments/Books as per requirement of new curriculum.
- Continuation of consultancy earnings- GPCB Environmental Audit and Soil Health Card program of Gujarat State Government.
- Gujarat State Biotechnology Mission Sponsored capacity building program.
- Enrichment of library resources.
- Coaching & Conduction of exam for Competitive Examinations / Entrance Test.
  - o Coaching for UGC NET/SLET/GATE.
  - Conduction of SUCEAT-2017 exam organised by Career Counselling and Development Centre of Saurashtra University, Rajkot.
- AISHE DCF submission
- NIRF DCS submission The college received 37th Rank in All India by NIRF-2017, MHRD, New Delhi.
- Following manuals/SOPs have been generated by the STAR departments under the scheme.
  - Laboratory Manuals/SOPs generated = 05:
    - a. Industrial Instrumentations
    - b. Renewable & Non-renewable resources
    - c. Surface Chemistry
    - d. Plant Science
    - e. Geogebra
  - Study Material generated = 03:
    - a. Polymer Chemistry & Technology
    - b. Medicinal Botany
    - c. Plant Science
  - o International Book Published = 01: "Industrial Chemistry (Unit Operations)" by Ravi Tank, ISBN-13: 9781522736110, ISBN-10: 1522736115

#### 2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year \*

Plan of Action	Achievements				
NIRF data submission	37th Rank in All India by NIRF-2017, MHRD, New Delhi				
Introduction of new programs	5 year Integrated B.Sc. – M.Sc. Program = 03				
To organise	International level event = 1				
seminar/symposium/	National level event = 1				
workshop/FDP/	State level event =1				
Exhibition/Fair etc.	Institute level event = 14				
CPE & DBT Star activities	Student projects = 90+ Industrial/Educational visits = 10 Invited Guest lecturers = 18 Exhibitions = 01 New practical introduced = 50+				
Implementation of Autonomy	<ul> <li>Conducted workshops /FDP/seminars/expert talks</li> <li>Prepared conceptual framework, regulations, and syllabus for all programs under autonomy.</li> </ul>				
Admission Process	Implementation of Online Admission process for all courses				
Enhancing results  Brainstorming meetings of teachers teaching were organized preparation strategies were drawn for enhancing the results					

Plan of Action	Achievements		
International and national	International publication = 13		
publication	National publication = 09		
Digitization of office records	IQAC proposed digitization of office records and the process is initiated.		
Digitization of office records	Online Admission system is implemented for all the courses.		
Enhancing Value based	Value based education programmes/activities are organized by		
Enhancing Value based	dedicated faculty team members of the campus.		
education programme	Organization of various programs for staff as well as students.		
Improvement in academic	Detailed academic calendar.		
standards	Planned internal exam schedule.		
Standards	Teaching planner & Protocols		
Consultancy generation-	Revenue generation through consultancy –Earn while Learn Scheme:		
GPCB Environmental audit	Soil Health Card program = Rs. 11,00,000/-		
and Soil Health Card	GPCB Environment Audit = Rs. 13,99,655/-		
program of Gujarat state	Research Consultancy extended to the society = Rs. 1,99,059/-		
government.			

The Academic Calendar of Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous), Rajkot please refer **Annexure 1** 

2.15 Whether the AQAR was pla	Yes 🗸	No	-		
Management /	Syndicate	-	Any other body	/ <u>-</u>	

The management of the college appreciated the efforts made by staff members for progressive implementation of academic autonomy.

Provide the details of the action taken

The staff members have initiated parallel preparation for the implementation of second year under academic autonomy.

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#### Part - B

#### Criterion - I

## 1. Curricular Aspects

#### 1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	05		01	
PG	05	02	07	
UG	12	03	07	
PG Diploma				
Advanced Diploma				
Diploma	01		01	01
Certificate	02		02	02
Others				
Total	25	05	18	03
Interdisciplinary				
Innovative	03		03	

#### 1.2 (i) Flexibility of the Curriculum:

The college offers following flexibility under CBCS pattern Choice at entry level:

#### • UG Programs

- o B.Sc. Chemistry
- o B.Sc. Industrial Chemistry
- o B.Sc. Biotechnology
- o B.Sc. Information Technology
- o B.Sc. Mathematics
- o B.Sc. Microbiology
- o B.Sc. Biochemistry
- o B.C.A.
- o B.Voc. Chemical Technology
- o B.Voc. Pharmaceutical Analysis & Quality Assurance

- B.Voc. Medical Laboratory & Molecular Diagnostic Technology
- o B.Voc Applied Computer Technology

#### • PG Programs

- o M.Sc. Pharmaceutical Organic Chemistry
- o M.Sc. Chemistry
- o M.Sc. Industrial Chemistry
- o M.Sc. Biotechnology
- o M.Sc. Information Technology
- o M.Sc. Mathematics
- o M.Sc. Microbiology

#### More number of choice under Choice Based Credit System (CBCS) system in:

- o Discipline specific elective
- o Discipline specific allied
- o Value Added programs
- o Co-curricular courses
- Soft skills and communication skills course
- o Generic elective courses
- o Extra credits course/ earnings through NPTEL

#### (ii) Pattern of programmes:

Pattern	Number of programmes
Semester	25
Trimester	
Annual	

1.3 Feedback from stakeholders* (On all aspects)	Alumni	✓	Parents	✓	Employers	✓	Students	<b>✓</b>	
Mode of feedback :	Online	✓	Manual	✓	Co-operatin	g sch	ools (for P	EI)	

Please refer Annexure 2

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

#### Yes,

The college has plunged into autonomy wholeheartedly from A.Y. 2016-2017 adopting all aspects which would assure the multi-dimensional progress of the youth through

- a satisfactory flexible CBCS
- a Cafeteria approach of choice of study
- compulsory Universal Human Values (UHV) components at UG & PG levels
- compulsory Skill orientation & industry interface

- intensive academics & research scholarship
- focus on Outcome Based Education (OBE)
- varied assessment & evaluation strategies based on expected outcomes

#### Conceptual framework of various UG & PG programmes under CBCS.

#### **Conceptual Frameworks for the Programmes**

The college has developed common Models of Conceptual Frameworks for similar types of Programmes, which would serve as guidelines for each Board to prepare the number of courses under each category of the curriculum in a pre-determined structure.

- **3 Models** of Conceptual Frameworks were developed as indicated here under.
- a. Model I- Conceptual Framework for UG Programmes (other than B.Voc. )
- b. Model II- Conceptual Framework for B. Voc. Programmes
- c. Model III- Conceptual Framework for PG Programmes

#### Awarding of Credits

The credits would be awarded as indicated below for various components.

- Theory --- 1 hour of instruction = 1 credit
   Practical --- 2 3 hours of instruction = 1 credit
- **Tutorial** --- 1 hour of instruction = 1 credit

#### Components of CBCS Framework

#### i. UG Programmes

The components were kept in line with the UGC's Guidelines and categorised as follows:

Part I English Language Courses

Part II Core, DSE and Generic Elective courses

**Part III** Ability Enhancement Courses

#### ii. PG Programmes

The components of the same were decided based on the academic, research, job and life skills expected from a Post graduate as indicated below:

Part I Core and DSE courses

Part II Competency Enhancement courses

Part III Value Education Course

1.5 Any new Department/Centre introduced during the year. If yes, give details.

NA

#### Criterion - II

## 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst.	Associate	Professors	Others
	Professors	Professors		
103	80	23	00	00

2.2 No. of permanent faculty with Ph.D.

38

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

As	sst.	Asso	ciate	Profe	ssors	Oth	ners	То	tal
Profe	essors	Profes	ssors						
R	V	R	V	R	V	R	V	R	V
00	00	00	00	00	00	00	00	00	00

2.4 No. of Guest and Visiting faculty and Temporary faculty

05	00	00
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2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended			
Seminars/	16	35	16
Workshops			
Presented papers	13	9	2
Resource Persons	-	-	14

2.6 Innovative processes adopted by the institution in Teaching and Learning: Following innovative processes were adopted by the institution in Teaching & Learning:

- Academic Calendar in line with affiliating Saurashtra University calendar
- Centralized and online mark entry using in-house indigenous software.
- Implementation of skill based syllabus with more stress on practical aspects of theory learnt.
- Enrichment of library resources (digital as well as print).
- Going beyond Curriculum
- Virtual Laboratory and Computer Simulation Studies
- Concept Mapping and mind chart
- Usage of ICT & Web 2.0 Tools
- Students as peers peer teaching
- Hands on experiential trainings workshops
- Preadmission and Admission Counseling
- Doubt solving session remedial coaching
- Bridge courses at both UG & PG level.

- Tutorials and learning commons.
- 2.7 Total No. of actual teaching days during this academic year

231

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

The college has developed General Regulations of the Autonomous college viz., Regulations & Procedures of Evaluation & Examinations. Following are the reform highlights:

- o Digitalization system for CoE procedures
- o Skill based Assignment
- o Performance attendance in practical
- o Transparency Double valuation
- o Subjective & Objective question paper pattern
- o Computer Based Test for only fundamental core courses
- o Feedback on question paper by faculty handling course & Students.
- o Bar coding and Masking of answer scripts
- Reassessment Process includes:
  - Re-totalling
  - Transparency (photocopy & subject expert meeting)
  - Revaluation
- 2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

Curriculum restructuring/revision/syllabus development	103
Board of Study	94

2.10 Average percentage of attendance of students

93%

2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students		D	ivision			
Trogramme	appeared	Distinction %	Ι%	II %	III %	Pass %	
BSc. IC	92	9.78	21.74	8.70	0.00	1.09	
BSc. BT	80	26.25	40.00	13.75	0.00	0.00	
BCA	98	34.69	22.45	3.06	0.00	0.00	

BSc. IT	97	43.30	32.99	5.15	0.00	0.00
BSc. Chemistry	62	45.16	24.19	0.00	0.00	0.00
BSc.	45					
Mathematics		62.22	24.44	0.00	0.00	0.00
BSc.	57					
Microbiology		24.56	40.35	7.02	0.00	0.00
BSc.	23					
Biochemistry		56.52	30.43	13.04	0.00	0.00
MSc.						
Biotechnology	20	45.00	30.00	20.00	0.00	0.00
MSc. Industrial						
Chemistry	19	47.37	26.32	10.53	0.00	0.00
MSc. IT & CA	57	54.39	15.79	1.75	0.00	0.00
MSc.						
Microbiology	19	15.79	52.63	0.00	0.00	0.00
MSc. POC	29	51.72	27.59	17.24	0.00	0.00

#### 2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

IQAC has implemented realistic and attainable quality benchmarks for each of the academic activities including teaching, learning and evaluation process which is the basis of quality enhancement and sustenance of any institution:

#### **IQAC** planning:

- Strict adherence to the academic calendar of the college
- Lesson plans and teaching diary
- Teacher training and development programs for various components of Autonomy
- Organization of Educational Visits, Seminars, Symposium Workshops
- Expert/Guest Talks
- Scientific Competitions/ Science Creativity
- Minor research projects and publication
- Earn while Learn Scheme through consultancy
- Bridge courses and remedial & special coaching
- Field visit, Industrial training and education tours

#### **Monitoring & Evaluation:**

- Departmental monthly meeting & ATR
- Mentor scheme
- Diagnosis of slow and fast learners
- Result analysis & ATR
- Feedback analysis & ATR
- Internal academic audit

- Need analysis of resources
- Monitoring through various Statutory & non statutory committees

#### 2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	02
UGC – Faculty Improvement Programme	16
HRD programmes	26
Orientation programmes	02
Faculty exchange programme	
Staff training conducted by the university	12
Staff training conducted by other institutions	07
Summer / Winter schools, Workshops, etc.	103
Others a) FDP b) Environmental Auditing c) Consultancy	47 05 20
d) Book Publication	02

#### 2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	17	00	02	00
Technical Staff	20	00	05	00

#### Criterion - III

## 3. Research, Consultancy and Extension

- 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution
  - Proactive Research Promotion Committee.
  - Information literacy programs, e-resources like science direct, N-LIST.
  - Faculty Development Programs & trainings in the use of sophisticated instruments.
  - Seminar/ Workshop on "Research methodology" and "Scientific writing"
  - Introduction of research projects at UG level and Publication.
  - Encouragement to participate in Conference, Seminars, Summer / Winter schools etc.
  - Expert talks & brain storming sessions with Scientists

- Organization of State/National level seminars, symposium and conferences
- Simple Resource procurement policy and Industrial consultancy.
- Transparent IPR policy.
- Best Researcher, Reader awards by the managing trust.

#### 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	01	01		
Outlay in Rs. Lakhs	19.99	26.85		

#### 3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number				
Outlay in Rs. Lakhs				

#### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	24	01	-
Non-Peer Review Journals	-	02	05
e-Journals	-	-	-
Conference proceedings	-	-	-

2 -	D / '1	T . C .	C 1	1
1 7	Defails on	Impact factor	of nub	lications.

Range	0.6 to 7.4	Average	3.58	h-index	03	Nos. in SCOPUS		
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3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration	Name of the	Total grant	Received
Nature of the Project	Year	funding Agency	sanctioned	
Major projects	3 Years (on going)	UGC	37,64,000	26,85,800
Min on Duois etc	(on going)			
Minor Projects				
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the	6 Months	Managing trust	0.00.000	0.00.000
University/ College	– 1Year	of the college	9,00,000	9,00,000
Students research projects (other than compulsory by the University)		DBT (STAR), Managing Trust	2,00,000	2,00,000
(other than computsory by the University)		ivianaging Trust		

Any other(Specify)	 -	-	-
SAPTDHARA Prakalp	 Government of Gujarat	60,000	60,000
UDISHA Prakalp	 Government of Gujarat	5000	5,000
Total		49,29,000	48,69,000

3.7 No. of books published	d i) W	ith ISBN No.	02	Chapters in	Edited	Books			
3.8 No. of University Depa					ST-FIS	т [			
	DPE			D	BT Sch	eme/funds			
3.9 For colleges	Auton		CPE CE	A	ny Othe	Scheme [er (specify)	✓		
Government of Gujarat  3.10 Revenue generated through consultancy Rs. 26,98,714/-									
3.11 No. of conferences		Level Number	International 01	National 01	State	University 02	College 12		
organized by the Institution		Sponsoring agencies	Managing trust of the college	DBT		DBT, Managing trust of the college	DBT, UGC Managing trust of the college		
3.12 No. of faculty served	as expo	erts, chairperso	ons or resource	persons	14				
3.13 No. of collaborations		Internati	ional N	lational (	)4	Any other			
3.14 No. of linkages created during this year 05									
3.15 Total budget for research for current year in lakhs :									
		current year i	in lakhs :						
From Funding agency	arch foi		n lakhs :	ent of Univ	ersity/C	ollege Rs. 9	9.0 Lakhs		

3.16	No.	of p	atents	received	this	year

Type of Patent		Number
National	Applied	
National	Granted	
International	Applied	Nil
International	Granted	INII
Commercialised	Applied	
Commerciansed	Granted	

3.17 No. of research awards/ recognitions received by faculty and research fellows of the institute in the year

Ī	Total	International	National	State	University	Dist	College
	04				01		03

l	04				01		03	_			
	04				01		03				
wh	o are Pl	culty from the I n. D. Guides ts registered und		[	08						
3.19 N	o. of Ph	.D. awarded by	faculty fro	om the I	nstitution	01					
3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)											
	J	JRF 01	SRF	01	Project Fe	llows		Any other	01		
3.21 N	o. of stu	ıdents Participa	ted in NSS	events:	:						
					Universit	y level	04	State level	03		
					National	level		International level			
3.22 N	o. of stu	idents participa	ted in NCC	events	:						
					Universi	ty leve	1	State level	140		
					National	level	18	International level	01		
3.23 N	o. of A	wards won in N	SS:								
					Universit	y level		State level			
					National	level		International level			
3.24 N	o. of A	wards won in N	CC:								
					Universit	y level		State level	04		
					National	level	02	International level			

3.25 No. of Extension activities organized

University forum		College forum	03		
NCC	06	NSS	03	Any other	 ]

- 3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility
  - Awareness activities among staff & students regarding Constitution of India.
  - Organising visit to Vidhansabha at Gandhinagar, Gujarat.
  - Awareness program regarding benefits of Organic farming.
    - Visit to Gau Seva Prakrutik Gram (Cow based products manufacturing unit), Kukma, Kutch, Gujarat
  - Participation in mission for cleanness to raise awareness among the masses by NCC students
  - Sainik | Martyr Welfare fund Highest Contributory Trust
  - Participation of NCC students in the celebration of international Yoga Day.
  - NSS Students Participated in the awareness rally for International AIDS Day.
  - NSS volunteers participated in the Road Security Awareness Fortnight Programme.
  - Science popularisation activity for schools located in rural and urban areas.
  - School teacher training programs.
  - Tree plantation and Blood donation camp.
  - Health and hygiene awareness program at adopted village Vagudad, Dist: Rajkot.
  - Lecture, talk and street plays on environmental issues.
  - Celebration of International yoga day.
  - Each one Teach one program in local slum areas.
  - Free clinical testing camp.
  - NSS units have contributed in voter awareness program.
  - Soil Health Card Program of Gujarat Government.
  - Gender Empowerment Program- Save Girl Child | Educate Girl Child
  - Collaboration with 20+ NGOs & GOs.
  - Fight against blind beliefs | o+ Feticide
  - Conduction of National/State level exams like IIT JEE/NEET/UPSC/GPSC/SLET etc.
  - Awareness/ Participation/ Donation/ Community Development/ Rallies/ Literacy/ Talks/ Lectures/ film Show/Exhibitions/Celebrations of National Festival & Days.

#### Criterion - IV

## 4. Infrastructure and Learning Resources

#### 4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	84455	0		84455
Class rooms	19	0		19
Laboratories	36	0		36
Seminar Halls	06	0		6
No. Of important equipments purchased (≥ 1-0 lakh) during the current year.	95	01	Soil Health Card Program (Govt. of Gujarat)	96
Value of the equipment purchased during the year (Rs. in Lakhs)	192.03	12.30	Soil Health Card Program (Govt. of Gujarat)	204.33
Others			<b>y</b> /	

#### 4.2 Computerization of administration and library

#### **Administration:**

- 1. Digitalised Admission Process
- 2. Student Management (SMS)
  - Online attendance
  - o Time Table
  - o Leave submission
- 3. Digitalization of Feedback Collection and Analysis
- 4. Digitalization of CoE Process (in progress)
- 5. Atmiya Academic Monitoring System (AAMS)
  - o Class, Subject, Division & Batch Management
  - o Subject Selection Procedure
  - o Lecture & Actual Engagement Plan
  - Counselor / Coordinator
  - o Department resource management
  - $\circ \quad Faculty-Course\ Management$
  - o Duty Allocation
- 6. Digital financial account management
- 7. Staff leave management system
- 8. Online indent service
  - o Maintenance
  - Transport
  - o Stationery & teaching aids

#### Auditorium booking

#### Library:

- 1. Fully automated housing New Gen Lib OPAC | Open Access | DDC
- 2. Institutional Repository using D Space | Digital
- 3. N-LIST of UGC: 6000+ e-journals; 97,000+ e-books
- 4. E library-20 systems | Internet | 1000+ CDs and digital material
- 5. Shared e resources Science Direct, ASME /ASTM, JGate, EBSCO, Prowess

#### 4.3 Library services:

	Exi	sting	Newly	added	Total	
	No. Value		No.	Value	No.	Value
Text Books	20352	5830959.09	1242	1292577	21594	7123536.09
Reference Books	2857	4628911.82	166	433270.1	3023	5062181.92
e-Books	97000	5000		5750	97000	10750
Journals	77	176754	77	169284	77	176754
e-Journals	6000	5000		Free	6000	5000
Digital Database	Institutiona	al Repository u reports, Dis	sing DSpacessertations an			ident Project
CD & Video	2874		78		2952	
Others (General Books)	3628	309029	220	30366	3848	339395
Special Collection (Gandian Study)	304	40560	No		304	40560

#### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart- ments	Others
Existing	445	13	50 mbps	13	13	13	75	
Added	10 IMAC+ 20	1	30 mbps	1	1	4 Exam Office	25	
Total	475	14	80 mbps	14	14	17	100	

- 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)
  - 1. Network Switches: Existing: 17 Added: 4 Total: 21
  - 2. Faculty Development Program:
    - o Graphing and plotting techniques & fundamentals of Microsoft Excel
    - o Chromatographic and spectroscopic analysis
    - Bulk scale extraction : Challenges for medicinal plants Unit Operation Equipment for Size Reduction

- 3. Institute level SDP/Workshop/Training:
  - Chemdrawultra Software
  - o Soil Analysis: Estimation of Macro-nutrients
  - o Sophisticated Instrument like UV/IR/Ultrasonicator/Ultra Sonic Interferometer
  - o Wonders of Medicinal Botany
  - o Vermi composting
  - o Bio fertiliser
  - o Mushroom Cultivation
- 4. Institute Level Exhibition/Fair:
  - o Samarth-2017
  - o Atmiya Science Fair in collaboration with ISRO, Ahmedabad.
- 4.6 Amount spent on maintenance in lakhs:

i) ICT	3.09
ii) Campus Infrastructure and facilities	26.20
iii) Equipments	11.79
iv) Others	1127.49
Total:	1168.58

#### Criterion - V

### 5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
  - Mentor scheme
  - Training & Placement cell
  - Departmental forums and committees
  - Library and learning centre Bulletin boards and departmental notice board.
  - College website updates.
  - Alumni association activities.
- 5.2 Efforts made by the institution for tracking the progression
  - Alumni association meet
  - Parent teachers association
  - Blogs and Social media
  - Industry Institute collaboration
- 5.3 (a) Total Number of students

UG	PG	Ph.D.	Others
2413	469	46	0

(b) No. of students outside the state

02

(c) No. of international students

-

	No	%
Men	1520	52.74

Women

No	%	
1362	47.26	

Last Year				This Year							
General	SC	ST		Physically Challenged		General	SC	ST		Physically Challenged	
2074	62	16	509	0	2661	2125	69	23	665	0	2882

Demand ratio 1: 7

Dropout % Less than 0.5%

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

#### **UG Students:**

- Coaching program for KVPY
- SCOPE English proficiency certificate program-Cambridge University
- PG entrance test
- GSBTM capacity building program

#### PG student

• UGC NET/SLET/GATE

#### UG & PG

- Government competitive exams
- SUCEAT exam conducted by the CCDC of affiliating Saurashtra University, Rajkot

No. of students beneficiaries 800								
5.5 No. of students qualified in these examinations								
NET		SET/SLET [		GATE		CAT		
IAS/IPS etc	:	State PSC		UPSC		Others 10		

5.6 Details of student counselling and career guidance

The following counselling activities are carried out for the students:

1. **Preadmission counselling:** The admission committee along with departmental faculties chalks out a plan for counselling every year. The prospectus, flyers, banners, posters covering information related to program, structure of program, courses, special features, fees, scholarships & freeships, resources, future career, various schemes of the college/government etc. are prepared and placed on the campus.

The Parents & Students have been counselled for challenges & opportunity of Autonomy.

- 2. **Academic counselling:** Academic counselling starts with the induction program for the new entrants and lasts till exit of the student. The equal weightage is dedicated to communication skill in English and domain specific core specialisation during induction program. And throughout the year through mentor scheme counselling is done. The parent meeting is also conducted.
- 3. **Personal counselling:** Need based and general counselling is catered through mentor scheme. The personality development trainings and workshops are also conducted. Students are free to attend weekly spiritual assembly where expert talks are delivered. The authorities are freely accessible for students including the president of the trust, who is a saint. The grievance redressal cell/anti ragging committee/women empowerment cell are also actively supporting the students. The Yog & Meditation, Health check up camps are also conducted.
  - Career counselling: The training and placement cell & Career Guidance Cell jointly conducts various student development programs related to preparation of CV, mock interview, soft skill, aptitude etc. The academic departments including NCC, NSS & Sports department organises special coaching / crash workshop for various competitive exams and entrance test for UG & PG students. The libraries on campus have subject wise collection of books & e-resources for the same.

No. of students benefitted:	All students of the college	900+
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#### 5.7 Details of campus placement

	Off Campus		
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
11	281	118	20

#### 5.8 Details of gender sensitization programmes

The gender ratio of the college students is approximately 1:1.

- Empowerment of Girls (Smart Girls) programmes is organized for all the girls of the college.
- Atmiya Women's Association Knowledge Empowerment (AWAKE) organises various activities like guest talks, competitions, celebration of international women's day etc. for female faculties and girls students of the campus.
- Expert talks on various issues/challenges by lawyers, doctors, social activist etc.

No. of students participated in Sports, Games and other events

- Single girl child schemes awareness programs.
- Audio-visual shows/films for creating awareness regarding women empowerment.
- Discussion/Debates on Women rights.
- Workshop on self-defence techniques.
- Theme based street plays, skit, mime etc.

#### 5.9 Students Activities

	State/ University level	135	National level	20	International level	
	No. of students participa	ited in cul	tural events			
	State/ University level	148	National level		International level	
5.9.2	No. of medals /awards v	von by stu	idents in Sports,	Games and	l other events	
Sports:	State/ University level	03	National level		International level	
Cultural	: State/ University level	07	National level		International level	

#### 5.10 Scholarships and Financial Support

	Number of students	Amount in Rs.
Financial support from institution	134	14,43,451/-
Financial support from government	37	8,68,020/-
Financial support from other sources	-	-
Number of students who received International/ National recognitions	-	-

5.11	Student organised / initiative	es				
Fairs	: State/ University level	01	National level	-	International level	-
Exhib	ition: State/ University level	01	National level	-	International level	-
5.12	.12 No. of social initiatives undertaken by the students					
5.13 Major grievances of students (if any) redressed:				NA		

#### Criterion - VI

## 6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

#### Vision:

To be a premier Institution of Science, Technology and Human values, aiming at the holistic sustainable development of youth, society and mother earth, leading to excellence.

#### Mission:

- To create, acquire and disseminate knowledge, fostering skills and global competence among the students, through the intellectual facilitators, teachers and mentors, the "Gurus".
- To provide holistic science education through well structured relevant programmes, learner centric approaches, pedagogic innovations, along with the adoption of modern technologies and strategies.
- To provide dedicated qualified and competent faculty, state-of-art infrastructure and other support facilities to facilitate better learning and research activities.
- To motivate teachers and students to develop research culture and undertake scientific investigation to realize their scientific creativity, contributing to sustainable development as a means of better life and living.

- To inculcate lived values, culture, morality and spirituality in the heart of youths to foster universal brotherhood, patriotism, righteous living and selfless service through the practice of "ATMIYATA" and "Gurukul".
- To protect and promote Indian culture, heritage, and respect Indian Constitution and global charter of human rights and environmental protection.
- To make youth self reliant and productive through proper employment or entrepreneurship, ultimately in the service of society and humanity.
- To establish linkages and collaborations for the betterment of the educational process and objectives.
- To promote strategies and activities towards the overall personality development of youth, through defined student support and welfare systems.
- To facilitate cultural, sports and community development activities involving all stakeholders, as a means of institutional social responsibility.
- To aim at innovations and adopt best practices to move towards excellence.
- 6.2 Does the Institution has a management Information System

#### Yes

- Student Management System (SMS)
- Atmiya Academic Monitoring System (AAMS)
- Data capturing module for CoE process.
- 6.3 Quality improvement strategies adopted by the institution for each of the following:

#### 6.3.1 Curriculum Development

- Curriculum development is designed as per UGC's guidelines.
- The college contributes through its 94 BoS members and 6 science faculty members of the University.
- Conceptual Frameworks for the Programmes: The college has developed common Models of Conceptual Frameworks for similar types of Programmes, which would serve as guidelines for each Board to prepare the number of courses under each category of the curriculum in a pre-determined structure. 03 Models of Conceptual Frameworks were developed as indicated here under.
  - o Model I- Conceptual Framework for UG Programmes (other than B.Voc.)
  - o Model II- Conceptual Framework for B. Voc. Programmes
  - o Model III- Conceptual Framework for PG Programmes.

#### 6.3.2 Teaching and Learning

- The college conducts program wise Orientation program and Bridge courses for the new entrants at UG & PG level.
- A teaching planner/diary is prepared in the beginning of every academic semester /year.
- Departmental pedagogy and development of virtual lab, simulation, mind chart, concept mapping, and assignments-advanced/skill based etc.
- Innovative learning methods like peer teaching, model making, sci-simulation, demonstrative sessions and learning commons etc are adopted.
- Remedial coaching, Hands on experiential training workshops etc. are conducted.
- The teaching & learning process is closely monitored by feedbacks, monthly departmental staff meeting and meeting of HoD's with the Principal.

#### 6.3.3 Examination and Evaluation

- The academic calendar committee of this autonomous college prepares the academic calendar inclusive of examination calendar.
- The examination form filling, internal marks entry and degree registration is digitalized.
- The college has introduced innovative evaluation methods for internal components like
  - Skill based assignments,
  - o Open book test,
  - o Concept mapping,
  - Display board activities,
  - Question bank preparation,
  - Minor project/report preparation,
  - o Model making etc.
- The college maintains 100% transparency for internal evaluation, the evaluated assignments and answer scripts with comments are shown to the students and revaluation is also done, if needed.
- The college is conducting online entrance test for PG admission followed by personal interview.
- The controller of examination with the help of examination committee executes the semester end & supplementary examinations of this autonomous college.
- Paper setting both internal & external paper setters.
- 50% of the evaluation of answer scripts to be done by external examiners.
- Moderation of randomly selected categorised answer scripts.
- Provision of providing photo copy of evaluated answer script on demand.

#### 6.3.4 Research and Development

- The college has proactive Research Promotion Committee to strengthen research and development environment.
- The committee recommends active participation of faculty member in various level seminar/conference, summer/winter school etc.
- UG/ PG students are given industry defined or institute defined research / dissertation projects of innovative and interdisciplinary nature. UG & PG students are publishing their research work in journals or presents in the seminar / conference.
- Research facilities has been upgraded due to the generous support received from UGC, CPE, DBT, GSBTM, Govt. of Gujarat and managing trust of the college.
- The Students & faculties are trained for the use of existing / newly procured sophisticated instruments in phased manner.
- The college organizes various information literacy programs like Research methodology and scientific writing, N-LIST.
- The college motivates students and teacher by awarding Best researcher and reader awards
- The library and learning centre of the college has the following collection to cater needs of R&D:
  - o NLIST of UGC: 6000+ e-journals; 97,000+ e-books
  - o Shared e resources Science Direct, ASME /ASTM, Jgate, EBSCO, Prowess

#### 6.3.5 Library, ICT and physical infrastructure / instrumentation

- The Library committee of the college prepares a budget for every year for procuring latest reference/ text books, National/International Serials, magazines, journals etc.
- The Central Maintenance Cell on campus has two wings: 1. Physical Infrastructure 2. ICT& Instrument both the wings are actively looks after maintenance & purchase. The managing trust has appointed dedicated skilled manpower for the same and has made several AMCs.

#### 6.3.6 Human Resource Management

- Qualified & competent teaching and non-teaching (technical, maintenance & support) staff members are recruited based on the requirement of the program and student teacher ratio.
- The staff members (management appointee) are given incentives and increments based on their performance appraisal.
- Staff welfare schemes like special leaves, loans & advances, sabbatical leaves, cooperative society etc. are made available.
- The HR department of the college facilitates smooth execution of policy of the managing trust and Government.

#### 6.3.7 Faculty and Staff recruitment

- The staff members are recruited by the HR department based on the requirement of the program, student teacher ratio & as per the policy of the trust.
- The college follows affiliating University procedure for recruitment and gets approval from the parent University.
- In addition to the University procedure, the college has introduced selection through demo lecture, presentation / demonstration and also the feedback received from the student and faculty.

#### 6.3.8 Industry Interaction / Collaboration

- The college has Training & Placement Cell and Career Counselling Cell where every departmental coordinator are members.
- The college has several MoU's, collaborations & linkages with regional industries, Universities, research organizations, GO's & NGO's.
- Objectives of the MoU's /collaborations / linkages are achieved by the coordinating academic department.
- The industry partners are involved in curriculum design & development of innovative & vocational programs.
- The linkages with the industry are further strengthened by mutual cooperation, consultancy and Environmental Audit Cell of the college.

#### 6.3.9 Admission of Students

- The admission committee along with software & account section of the college monitors entire admission process.
- The admission committee along with departmental faculties chalks out a plan for counseling every year. The prospectus, flyers, banners, posters covering information related to program, structure of program, courses, special features, fees, scholarships & freeships, resources, future career, various schemes of the college/government etc. are prepared and placed on the campus.
- Admission of the students is done by merit/ entrance following the reservation policy of the Government.
- For post graduate students, admission is done through pre-test, cumulative marks in U.G. following a personal interview.

#### 6.4 Welfare schemes for

#### a) Teacher

- Loans & Advances
- Leaves- Marriage, Maternity, Advance, Sabbatical
- Educational loans
- Bachelors quarters
- Admission priority/ reservation

- Free health check up Sponsorships Consultancy share
- Credit Cooperative Society membership
- Discounted Uniforms
- Medical Service assistance/ Emergency care
- Subsidised Mess/ Gym facility

#### b) Non-teaching

- Loans & Advances
- Leaves- Marriage, Maternity, Advance, Sabbatical
- Educational loans
- Admission priority/ reservation
- Free health check up
- Consultancy share
- Credit Cooperative Society
- Discounted Uniforms
- Medical Service assistance/ Emergency care
- Subsidised Mess/ Gym facility
- Education progression.

#### c) Students

- Vocational programs
- Freeships & Scholarship
- Free Thalssemia testing
- Educational loans
- Free health check up
- Health awareness program.
- Discounted Uniforms
- Medical Service assistance/ Emergency care
- Subsidised Gym facility
- Sponsorship & free sports uniform
- Cambridge University Certificate Program -SCOPE
- Earn while Learn

6.5 Total corpus fund generated					
6.6 Whether annual financial audit ha	as been done	e Yes [	<b>✓</b>	No	

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	Ex	ternal	Internal			
	Yes/No	Agency	Yes/No	Authority		
Academic	No		Yes	IQAC		
Administrative	No		Yes	IQAC		

6.8 Does the University/ Autonomous College declares results within 30 days?
For UG Programmes Yes ✓ No
For PG Programmes Yes No No Mat efforts are made by the University/ Autonomous College for Examination Reforms?
The college has developed General Regulations of the Autonomous college viz.,
Regulations & Procedures of Evaluation & Examinations. Following are the reform
highlights:
<ul> <li>Digitalization system for CoE procedures</li> </ul>
<ul> <li>Skill based Assignment</li> </ul>
<ul> <li>Performance attendance in practical</li> </ul>
<ul> <li>Transparency – Double valuation</li> </ul>
<ul> <li>Subjective &amp; Objective question paper pattern</li> </ul>
<ul> <li>Computer Based Test for fundamental core courses</li> </ul>
<ul> <li>Feedback on question paper by faculty handling course &amp; Students.</li> </ul>
<ul> <li>Bar coding and Masking of answer scripts</li> </ul>
<ul> <li>Reassessment Process includes:</li> </ul>
<ul> <li>Re-totalling</li> </ul>
<ul> <li>Transparency (photocopy &amp; subject expert meeting)</li> </ul>
Revaluation
6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

#### 6.11 Activities and support from the Alumni Association

The alumni meet is organised annually at department & college level. The following activities and support are received from alumni.

- Feedback/suggestions on curriculum.
- Expert talks.

NA

- Procurement of instruments/equipments.
- Admission & scholarships.
- Industrial visits / tour.
- Training & placement.
- Sponsorship.

#### 6.12 Activities and support from the Parent – Teacher Association

The college organises parent meeting in the beginning of semester. Department wise need based meeting is conducted. The following activities & support are received from parents:

- Feedback on overall academic process.
- Procurement of resources.

- Scholarships & Freeships.
- Industrial visits / tour.
- Training & placement.
- Sponsorship.
- Participation in college functions, workshops, seminars etc.
- Extension activities.

#### 6.13 Development programmes for support staff

The main focus of the college for AY 2016-17 is effective implementation of academic autonomy. The college regularly conducts training programs for support staff on various aspects such as digital processes, good laboratory practices, safety & hygiene, record maintenance & human values. The technical / admin staffs are encouraged to study further on part time/distance education mode. They are also attending the trainings conducted by the University & the Government.

6.14 Initiatives taken by the institution to make the campus eco-friendly

#### **Energy saving initiatives:**

- Annual energy audit for electricity.
- Use of energy efficient instrument & equipments like UPS, power back-up & generators.
- Replacement of routine electric utilities like bulbs, tube lights etc. by CFLs & LEDs.
- Majority A/C computer labs are situated in lower base floors.
- Less power consuming Desktop systems.
- Roof Top Solar power generation.

#### **Environmental protection initiatives:**

- Paper recycling. (Better waste management by introducing separate waste bins (Green & Red) all over the campus. Green for recyclable paper waste and the other for non-recyclable waste)
- Rain Water harvesting.
- Plastic free campus.
- Neem tree plantation on campus.
- Fume hoods with wet scrubber (Air pollution control measure) for chemistry laboratories.
- Noise and Air pollution free power generators.

#### **Towards paperless administration:**

- Institutional mail ids for all the faculty members.
- All notices and communications are made through mail for faster delivery and better record keeping.
- Online test are also conducted in many subjects.
- Circulation of study materials in e-form through blogs and forums online.
- Online indent, maintenance call reports and other administrative work.
- The students are also sensitized and asked to work on projects which can be provided greener solutions to existing problems of Environment. The environment awareness massages is published the many walls of the college.

## Criterion - VII

## 7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

#### 1) Unique Academic Flexibility and Course Options

The college is known as premier science education in Saurashtra region of Gujarat. The college offers programs of pure, applied & innovative nature at both UG & PG level. The student has a choice to opt from the below mentioned programs at entry level:

- o B.Sc.
- o B.C.A.
- o B.Voc.
- o 5 Years Integrated B.Sc. M.Sc.

The student has the option of following specialisation:

- Chemistry
- o Industrial Chemistry
- Mathematics
- Biotechnology
- o Microbiology
- o Biochemistry
- o Biology & Physics as ancillary (allied) subjects
- o Chemical Technology
- o Pharmaceutical Analysis & Quality Assurance
- Medical Laboratory & Medical Diagnostics Technology
- o Radiation & Imaging

The students once admitted in any program will be having various other choices as below:

- o Value Added Courses
- o Co-curricular Courses
- o Generic Elective
- o Discipline Specific Allied
- o Discipline Specific Elective
- o Extra Credit Courses

Impact of the academic flexibility:

The students are happy to get their choice of subjects based on aptitude and interest.

#### 2) Recognition Works Wonders (Awards & Recognition)

Appreciation works miracles and recognition does wonders in a life of human being. Irrespective of the age it has motivated all those who were identified in the group, appreciated and recognized by giving the award as "Student of the Week". Along with the syllabus there are various co-curricular activities, which are announced in the class once a week and have to be submitted on the scheduled time. It's a challenge to activate the college students to make them do the activities even for their own benefit. In a class on an average around 2-5% would take part in curricular activities, around 30-40% would take part in co-curricular activities, around 60-90% would take part in extra-curricular activities.

So to increase the participation in curricular and co-curricular activities we introduced this practice.

Not only for the students, this practice started doing wonders among the staff even. The faculties organize and conduct some workshops related to the curriculum and increase their knowledge by having interaction with the experts for that topic and especially the young staff gained lot of confidence.

## Impact of the practice:

The participation percentage of staff as well as student has increased significantly. It has boosted their confidence to a great extent.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

Plan of Action	Action taken
Introduction of new programs	5 years Integrated B.Sc. – M.Sc. Program
	o Chemistry
	o Mathematics
	o Microbiology
Implementation of B.Voc Programs	Implementation of 3 <sup>rd</sup> Year of
	B. Voc MLMDT
	B.Voc ACTECH
	Implementation of 2 <sup>nd</sup> Year of
	B.Voc. CT
	B.Voc. PAQA
To organise seminar/symposium/	International Level Seminar / Symposium:
workshop/FDP/ Exhibition/Fair etc.	<ul> <li>Universal Human Values In Higher Education</li> </ul>
	National level Workshop:
	<ul> <li>Atmiya Scitech Utsav</li> </ul>
	GSBTM Workshop:
	<ul> <li>GSBTM crash workshop</li> </ul>
	Institute Level FDP/Workshop:
	o Bulk scale extraction : Challenges for medicinal plants
	<ul> <li>Chromatographic and spectroscopic analysis</li> </ul>
	<ul> <li>Unit Operation Equipment for Size Reduction</li> </ul>
	o Graphing and plotting techniques & fundamentals of
	Microsoft Excel
	o Manav Vyavhar Darshan
	Institute level SDP/Workshop/Training:
	o Soil Analysis: Estimation of Macro-nutrients
	o Chemdrawultra Software
	o Sophisticated Instrument like UV/IR/Ultrasonicator/Ultra
	Sonic Interferometer
	Wonders of Medicinal Botany
	o Vermi composting
	o Bio fertiliser
	Mushroom Cultivation  Institute Level Exhibition (Foire)
	Institute Level Exhibition/Fair:
	o Samarth-2017
	o Atmiya Science Fair in collaboration with ISRO,
	Ahmedabad.

Plan of Action	Action taken			
CPE & DBT Star activities	Student projects = 90+			
	Industrial/Educational visits = 10			
	Invited Guest lecturers = 18			
	Exhibitions = 01			
	New practical introduced = 50+			
Implementation of Autonomy	Conducted workshops/FDP/seminars/expert talks.			
	Prepared conceptual framework, regulations, and syllabus for all			
	programs under autonomy.			
Enhancing results	Brainstorming meetings of teachers teaching were organized and			
	preparation strategies were drawn for enhancing the results			
Admission Process	Implementation of digital admission process for all courses			
International and national	International publication = 13			
publication	National publication = 09			
Consultancy generation- GPCB	Revenue generation through consultancy –Earn while Learn			
Environmental audit and Soil	Scheme:			
Health Card program of Gujarat	Soil Health Card program = Rs. 11,00,000/-			
state government.	GPCB Environment Audit = Rs. 13,99,655/-			
	Research Consultancy extended to the society = Rs. 1,99,059/-			
Enhancing Value based education	Conducted 3 Days & 8 Days Shibir for students as well as staff			
programme	member of the college.			

7.3 Give two Best Practices of the institution (please see the format in the NAAC Self-study Manuals)

#### 1) Title: Guardian-Mentorship

#### Goals:

- To augment the interests of student's in academic and non academic areas.
- To understand student's physical, mental and emotional status more closely.
- To inculcate the feeling of oneness among the students and between students and Teachers.
- To make students emotionally bold to face the society more strongly.
- To get family ambiance in college campus.

#### Context:

- Informal and friendly talk was lacking between students and teachers due to busy Schedule.
- Students could not express their views (Suggestions, Complains) freely to the teacher.
- Students were emotionally weak and use to take wrong decisions.
- It is under these contexts that we have adopted this practice.

#### **Practice:**

- 1. One teacher is made counsellor for at least 30 students.
- 2. The relationship between counsellor and students is free enough so that student is free to share her/his all of problems.
- 3. Weekly gathering between counsellor and students for sharing problems.
- 4. Two separate gathering in a month is given to grievances related to college problems (Studies, Study matter, friends, teacher).
- 5. Parents and counsellor meeting, is carried out as and when required.
- 6. Counsellor meets every student individually also, so that introvert and shy students can share their problems freely.
- 7. All counsellors have complete information of his students which includes: Name, Permanent Address, Correspondence Address, Phone No. (Own, Father's, Local Guardian), Email Id.
- 8. All the students and their parents have Counsellor's Phone No. So that they can Contact him any time if they are in trouble.
- 9. Counsellor keep regular check on the student's health and those with migraine or like problems is given special care.

- 10. Counsellor regularly assess the student's rising or declining graph in exams and internal test and guide them to improve it.
- 11. It is very important to refresh the students as continue studies puts a lot of mental stress, so to relief them an outdoor picnic is at times organized.
- 12. There is spiritual and motivational talk by counsellor and experts regularly.

#### **Evidence of Success:**

- Students become more interactive with the teacher.
- There is reduction in grievances

#### Problems encountered and Resources required:

The major problems were:

- Time
- Convincing Student's is at times challenging.
- A class room or open space.

#### 2) Title: Value Education

#### Goal:

To fulfil the mission of the institute to make Yogidham Gurukul - a learning community of dedicated and motivated students.

#### Context:

The living science of education i.e. "Bio Psycho Psychic Science" I in our culture has been long lost due to ignorance of the people under blind pursuit of the western culture. The restoration of this spirit and its practice in the field of education at al levels is the pressing need of the hour. The traditional scientific educational culture can be the real "Sadhna" in this era of Science and technology. Moreover Science teaches how to make atom bomb and spirituality teaches how to use atom bomb. So we believe that Science and spirituality should go hand in hand. We strongly believe in GURU SHISHYA PARAMPARA since it has nurtured a dream of moulding the future citizens of our motherland by equipping them with the latest and the best knowledge in the ambience of GURUKUL. This is the sole endeavour of setting up YOGIDHAM which is analogous to "ASHRAM". Here immense care is taken to ensure the emotional, intellectual and spiritual development of students in tune with revered GURU and SAINT.

#### Practice:

Introduction of value education as a credit course. Our institute organizes regular inspirational talks of various saints. To name a few, we had talk by P.Jain Muniji, P.Parmatmanand Swamiji, P.Hari Charan Swami and others Every year students attend Annual International Youth Convention organized by Yogi Divine Society. We also have different Shibirs Women Youth Convention, Samarpan Dhyan Shibir. We had one workshop on Art of Living. Besides this, every week we have regular spiritual assemblies as per the setting of the time table, where we discuss about the moral values and Indian Culture. We have also taken the students feed back after the discussion based on that we started it as a regular practice and included in our regular schedule.

#### **Evidence of Success:**

As we are committed to providing the students with a stimulating and rewarding learning experience, ensuring that students complete their studies with substantially enhanced skills and abilities. So when our students enter the world, they are well equipped to add their own career accomplishments and are able to contribute to our society in many worthwhile ways.

#### Problems encountered and Resource Required:

The only problem encountered is to make the family of stack holders to attend such Shibirs. In order to percolate the right understanding, the presence of each stack holders is required but due to worldly engagements and commitments many time it is not possible for family members of the stack holders to attend Shibirs. Auditoriums and AV rooms in the campus are available. Audiovideo aids for better impactful way of teaching and extra hours especially after class or holidays and vacation. We have generated a pool of presentations and resources which are for value education on campus.

- 7.4 Contribution to environmental awareness / protection
  - In addition to initiatives taken for making the campus eco-friendly (pl refer 6.14); the college have included
  - The college has organized Swachchhta Abhiyan in collaboration with Officers from RMC on 02/10/2016 in which 250 students along with 50 staff members. They all downloaded Swachchhta MoUD application which is developed by Government of India.
  - Under the Mission of Swaccha Bharat Mission NSS, NCC and various forums have organized different competitions/activities like- Campus Cleaning, Painting/Scitoon Making/ Slogan Writing/Spot Photography Competition/Elocution/Quiz. Mahatma Gandhi Nirvan Din: The day was observed along with cleanliness drive.
  - A demonstration was presented by Er. Kunal Parekh, Bangalore entitled Principal and Working demonstration of Electrolytic Treatment of Drinking Water on 04/03/2017, 500 Students & 50 Faculties of AGI, Rajkot.

<ul> <li>Faculties of AGI, Rajkot.</li> <li>A pledge was taken by all staff and organized every year and eco trips/ camps a</li> </ul>	students on cleanliness. Tree plantation event is and visit to ETP /STP have been organised
7.5 Whether environmental audit was conducted?	Yes 🗸 No
7.6 Any other relevant information the institution w	rishes to add. (for example SWOT Analysis)
8. Plans of institution for next year	-
<ul> <li>Recruitment of staff required for the implet</li> <li>To organise FDP's/ Training program.</li> <li>To encourage faculties for major and minor</li> <li>To procure new infrastructures to meet den</li> <li>To upgrade facilities for Central Chemical</li> <li>To enrich library &amp; Learning resources.</li> </ul>	ular courses. of UG programs. ns. sium/workshops. ect of Interdisciplinary/multidisciplinary nature. mentation of new programme. r sponsored research projects. nands of new programs. Instrumentation. oration/MoU's with industries/ academic institute/ & greener. ousness for Values Education.
Name: Mr. R. S. Tank	Name: Dr. K. D. Ladva
Signature of the Coordinator, IOAC	Signature of the Chairperson, IQAC

# Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous), Rajkot Track ID: GJCOGN13267 Academic Calendar for year 2016-17

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DAY	Dt.	JUNE	Dt.	JULY	Dt.	AUGUST	Dt.	SEPTEMBER	Dt.	ester Planner 201 OCTOBER	0-17 Dt.	November
MON					1				31	Sardar Patel Jayanti		
TUE	П				2						1	Bhai Bij
WED	1				3						2	
THU	2				4		1				3	
FRI	3		1		5		2				4	
SAT	4		2		6		3		1		5	
SUN	5		3		7		4		2	Gandhi Jayanti	6	
MON	6		4		8		5	Samvatsari/ Ganesh Chaturthi	3		7	
TUE	7		5		9		6	,	4		8	
WED	8		6	Ramzan iid	10	47	7		5		9	
THU	9		7		11	CIE Test 1	8		6		10	
FRI	10		8		12	CIE Test 1	9		7		11	
SAT	11		9		13	CIE Test 1	10		8		12	
SUN	12		10		14		11		9		13	
MON	13		11		15	Independence Day	12	Bakari Id	10		14	Guru Nanak Jayanti
TUE	14		12		16	CIE Test 1	13	*	11	Dussehra	15	
WED	15		13		17	Pateti	14		12		16	
THU	16	College Reopen	14		18	Raksha Bandhan	15		13		17	Semster
FRI	17		15		19	CIE Test 1	16		14		18	End Examination
SAT	18		16		20	CIE Test 1	17		15	Last day for Teaching 97	19	Elia Examination
SUN	19		17		21		18		16		20	
MON	20		18		22		19	Sports Week	17		21	
TUE	21		19		23		20		18	CIE Test 2	22	
WED	22		20		24		21		19	CIE Test 2	23	
THU	23		21		25	Janmastmi	22		20	CIE Test 2	24	SU-1st Day of Sem4 & 6
FRI	24		22		26		23		21	CIE Test 2	25	FDP
SAT	25		23		27		24		22	CIE Test 2	26	***************************************
SUN	26		24		28	Cuanta Inde	25		23	CIT Took 2	27	
MON	27 28		25 26		29 30	Sports indoor	26 27		24	CIE Test 2	28	Fuen Cometer Regime
WED	28		26		31	Sports indoor	28		26		30	Even Semeter Begins
THU	30	13	28		21	92	28		25		30	
FRI	30	13	29				30	82	28		$\vdash$	
SAT	$\vdash$		30	38			30	02	29		$\vdash$	
SUN	$\vdash$		31				$\vdash$		30	Diwali		

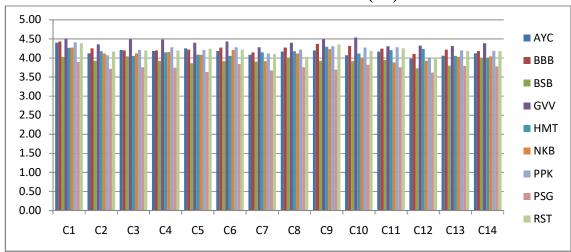
	Semester Begins
106	Working Days
97	Teaching Days
12	CIE Examination
9+21=30	Public Holidays+ Diwali Vacation
	Extra Curricular Activity
	Central Assessment
	FDP
	Preparation for Next Term
	Preparation Break
	Finalizing CIE & Attendance
	Issue of Hall Ticket &
	Submission of internal marks

										"Swami Shriji"					
						Shree Manibl	nai '	Virani and Smt. I	Nav	alben Virani Scie	nce	College (Autono	mous), Raj	jkot	
	10			·			_		_	VSC-A 2nd Seme	_		emester]	69	
DAY	Dt.	December	Dt.	January Sunday	Dt.	February	Dt.	March	Dt.	April	Dt.	May			
MON			2	Gunday							1	Summer Break			
TUE			3				_	Supplimentary Exam	H		2		121	Working Days	
WED			4		1	Vasant Panchmi	1	Sem-1 SEE Theory / Practical (Wed. & Sat.)  SU-All UG Sem. 6 & Sem-4 BVoc 2nd Theory Int. Test			3		92	Teaching Days	
THU	1	1st day of 2nd Sem.	5		2	Submission of % Theory attendance & % Practical performed (upto 31/01/17)	2				4		12	CIE Examination	
FRI	2		6		3		3				5		8	Public Holidays	
SAT	3		7		4	CIE 1st all components Marks Entry End	4	SU-SEE-UG All Practical 4th & 6th (Tentative)	1	Consolidated CIE report generation & student signature Issue of Hall Ticket SEE- Practical Exam	6		3	Central Assessment	
SUN	4	Sunday	8	Sunday	5	Sunday	5	Sunday	2	UG -sem-2 (2/4 to 11/4/17)	7	Sunday	2	National Level Seminar and Scitech	
MON	6		9		7		7		3	Ram Navmi	9		3+6 2	FDP + HOD Academic calender for AY 2017-18	
WED			11		8		8	Womens Day	5		10			shtra University Sem2, 4 & 6 - Teaching & evaluation UG 24/11/2016 to 01/05/2017	
THU	8		12		9		9		6		11			PG 24/11/2016 to 13/05/2017	
FRI	9		13		10	Atmiya Scitech Utsav 2017	10	2nd CIE Practical (Department wise- Batch wise) SU-All UG Sem4 2nd Theory Int. Test	7		12			Saurashtra University term end break (Summer Vacation) UG 02/05/17 to 14/06/17 PG UG 02/05/17 to 14/06/17	
SAT	10 11	Sunday	14 15	Uttrayan	11 12	Sunday	11 12		8	Mahavir Jayanti	13 14	Sunday	Saurasht	ra University commencement of new academic year from	
MON	12	Sunday	16	Sunday  1st CIE Sem2 Practical (Department wise- Batch wise) FDP-HOD Jivan Vidhya 16th to 23rd Jan.	13	SEE Form Filling Regular & Arrear courses	13	Sunday  Holi-2nd Day- Dhuleti	10	SU-SEE-All Sem4-Theory (Tentative)	15	Sunday		15/06/17  Saurashtra University all Sem6 and B.Voc4th Internal Theory Dt. 01/03/17 to 03/03/17 (Tentative)	
TUE	13		17	Last Date for all	14		14		11		16		- Saur	ashtra University all Sem6 and B.Voc4th SEE Theory	
WED	14		18	Sem 1st CIE  Que. Paper  Submission to  CoE	15		15		12	SEE- UG-PG Theory Sem2	17		Dt. 16/03/17 (Tentative)  - Saurashtra University all Sem4 SEE Theory Dt. 10/04/17		
THU	15		19		16		16	SU-SEE-UG Theory ALL 6th Sem. & BVoc-4th (Tentative)	13		18		- Saurash	(Tentative)  tra University Sem2 SEE Theory Dt. 21/04/17 (Tentative)	
FRI	16		20	49th Day SU-Sem4 & 6 1st Theory Int. Test	17		17	Last Date for all Sem 2nd CIE Que. Paper Submission to CoE	14	Ambedkar Jayanti Good Friday	19			Saurashtra University all Sem4 Internal Theory Dt. 10/03/17 (Tentative)	
SAT	17		21	End of 1st CIE Sem2 Practical	18		18	Last date of classes for VAC	15		20		Sai	urashtra University all Sem4th & 6th SEE Practical Dt. 04/03/17 to 20/03/17 (Tentative)	
MON	19	Sunday  FDP on  "Value	23	Sunday  45th Day VSC-A CIE-1 Theory & CIE 1st Marks Entry	20	Sunday	20	Sunday  2nd CIE Practical (Department wise- Batch wise) End	17	Sunday	22	Sunday	Saurashtr	ra University all PG Sem4th SEE Theory / Practical - April May-2017 (Tentative)	
TUE	20	Added Courses	24	SU-Sem4 & 6 1st Theory	21		21	Last date for 3rd assignment marks	18	SEE - UG-PG Theory Sem2	23				
WED	21	under CBCS"	25	Int. Test End	22		22	entry 92nd Day Sem. 2 CIE-2	19	End	24				
THU	22		26	Republic Day	23	entry	23	(100% svilabus)	20	Central Valuation & Moderation	25				
FRI	23	Educational	27		24	Maha Shivratri	24	Last date for VAC	21	Sem. End Practical	26				
SAT	24	Tour	28		25	0	25	marks entry	22	Exam - PG & B.Voc.	27	0			
SUN	25	Christmas	29	Sunday	26	Sunday	26	Sunday Submision of % Theory	23	Sunday	28	Sunday			
MON	26		30	VSC-A CIE-1 Theory Test End	27		27	attendance & % Practical performed (upto 21/03/17)	24	Perspective	29		Academic Committe	: Calender se Co-ordinator	
TUE			31		28	Science Day	28	Cheti Chand	25	Planning of department	30			N H W 500	
WED	28						29 30	CIE Test 2 End	26 27	Academic calender for AY 2017-18 Self appraisal for	31		CoE	Principal	
			Н		H			Last date for 2nd		2016-17	Н				
FRI	30				H		31	CIE Marks Entry	28	Parsuram Jayanti Last working	Н				
SAT	31								29 30	Day for staff Sunday	Н				
DAYS		27 Days		24 Days		23 Days		25 Days		22 Days	П				
C.Days		27 Days		51 Days	L	74 Days		99 Days	_	121 Days					

## Track ID: GJCOGN13267

## Analysis of Feedback – AQAR 2016-17

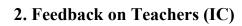
## 1. Feedback on Teachers (IC)

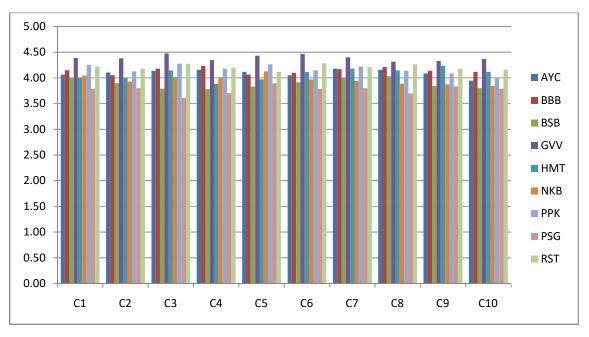


Initial	Full Name
RST	Er. R. S. Tank
BSB	Mr. B. S. Basu
GVV	Mr. Govind V. Vagadiya
PPK	Mr. Paras P. Kalariya
PSG	Mr. Prashant Gajera
AYC	Ms. Archna Y. Cholera
BBB	Ms. Bhumi B. Bhalodiya
HMT	Ms. Hemali M. Trivedi
NKB	Ms. Neha K. Baku

C1	Punctuality of the teacher
C2	Sincerity / commitment of the teacher
C3	Communication skills of the teacher
C4	Clarity of knowledge conveyed by the teacher
C5	Ability to integrate content of course with other courses
C6	Ability to integrate course with its applications
C7	Accessibility of teacher in & out of the class
C8	Interest generated by the teacher
C9	Teaching-learning methods adopted by the teacher
C10	Use of ICT (PPT/Video/lecturer/Software/Video conference/Virtual lab./Others)
C11	Use of other methods (specify) eg. Model, chart, demo etc.
C12	Your opinion on the handling by the teacher of the following assessment tools (Quiz/Surprise
C12	test/GD/Assignments/Seminar/Others)
C13	Provision of sufficient time for feedback
C14	Overall

## Analysis of Feedback – AQAR 2016-17



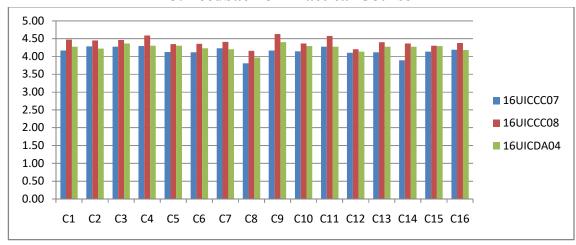


Initial	Full Name
RST	Er. R. S. Tank
BSB	Mr. B. S. Basu
GVV	Mr. Govind V. Vagadiya
PPK	Mr. Paras P. Kalariya
PSG	Mr. Prashant Gajera
AYC	Ms. Archna Y. Cholera
BBB	Ms. Bhumi B. Bhalodiya
HMT	Ms. Hemali M. Trivedi
NKB	Ms. Neha K. Baku

C1	Preparation for Class
C2	Syllabus Coverage
C3	Encouragement of students participation in the class
C4	Type of internal assessment conducted
C5	Type of assignment given
C6	Discussion of assignment with you
C7	Extent of availability of material for prescribed reading
C8	Helpfulness of teacher in guiding / advising
C9	Feedback on performance in test
C10	Frequency of feedback on performance in test

## Analysis of Feedback – AQAR 2016-17

## 3. Feedback on Practical Course

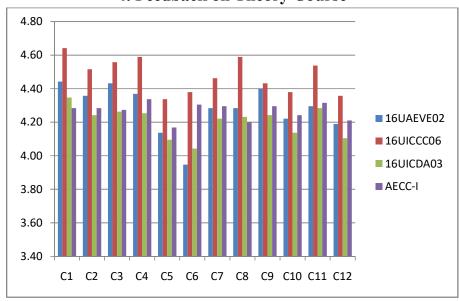


Course Code	Course Name
16UICCC07	16UICCC07 Core Practical-3 Surface Chemistry Practical
16UICCC08	16UICCC08 Core Practical-4 Polymer Chemistry & Technology Practical
16UICDA04	16UICDA04 DSE Allied Practical-2 Chemistry-II Practical

F	
C1	Adequacy of equipment
C2	Clarity & relevance of lab manual or procedures
С3	Conduct of CIE tests
C4	Conduct of experiments with concepts & inference by the teacher
C5	Depth of the syllabus of the course
C6	Its relevance as a fundamental / Application-oriented course
C7	Laboratory facilities
C8	Learning value in terms of (Information/Knowledge/Concepts/Analytical abilities/Physical/Technical skills/Application)
С9	Number of experiments
C10	Positioning of the course in this semester
C11	Punctuality of evaluation of experiments
C12	Relevance of components of CIE
C13	Relevance of the course to real-life situations/applicability
C14	Relevance of the course to your programme
C15	Technical support by lab assistant
C16	Working condition of equipment

## Analysis of Feedback – AQAR 2016-17

## 4. Feedback on Theory Course

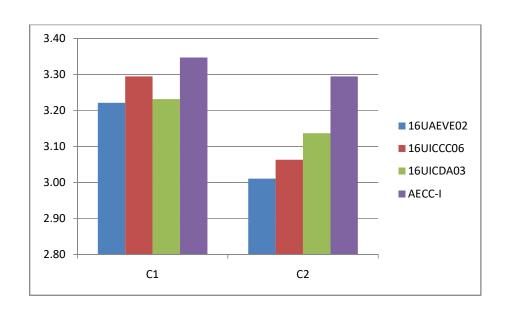


Course Code	Course Name
16UAEVE02	16UAEVE02: SEC-I Value Education-II
16UICCC05	16UICCC05 Core-3 Surface Chemistry
16UICCC06	16UICCC06 Core-4 Polymer Chemistry & Technology
16UICDA03	16UICDA03 DSE Allied-2 Chemistry-II
AECC-I	AECC-I Environmental Science

C1	Relevance of the course to your programme
C2	Relevance of the course to real-life situations/applicability
C3	Positioning of the course in this semester
C4	Depth of the syllabus of the course
C5	Clarity and relevance of text books
C6	Clarity and relevance of reference books / journals
C7	Its relevance as a fundamental / Application-oriented course
C8	Understanding of the course in relation to practical, if any
C9	Facilitation of learning of the course by the teacher
C10	Information on additional learning / reading resources given by teacher
C11	Learning value in terms of (Information/Knowledge/Concepts/Analytical
	abilities/Physical/Technical skills/Application)
C12	Overall rating of the course

## Analysis of Feedback – AQAR 2016-17

## 5. Feedback on Theory Course



<b>Course Code</b>	Course Name
16UAEVE02	16UAEVE02: SEC-I Value Education-II
16UICCC05	16UICCC05 Core-3 Surface Chemistry
16UICCC06	16UICCC06 Core-4 Polymer Chemistry & Technology
16UICDA03	16UICDA03 DSE Allied-2 Chemistry-II
AECC-I	AECC-I Environmental Science

C1	Efforts required by Students to understand the course
C2	Efforts required after class hours for self study of the course