



2018

REPORT ON THE PERFORMANCE OF THE  
COLLEGE UNDER AUTONOMY



**ST. XAVIER'S COLLEGE (AUTONOMOUS)  
AHMEDABAD**

## **Preface**

From a quiet beginning as an arts college in 1955, St. Xavier's college, Ahmedabad, has risen to be the number one institution of Arts and Science in the state of Gujarat. The National Assessment and Accreditation Council (NAAC), an autonomous body of the University Grants Commission (UGC) has rated us a "five-star" college in 2001 (highest rank), and A+ in the second cycle in 2007 (the top rank as per the NAAC's new ranking methodology). When the NAAC changed its methodology of ranking once again in the third cycle, we were awarded Grade 'A' (3.41 out of 4 CGPA Score) in 2013, which is again a very high score. Moreover, the UGC has recognized St. Xavier's College, Ahmedabad, as a "College with Potential for Excellence", in 2008, and the Department of Biotechnology placed us in the "Star College" scheme in 2009. And 'India Today' survey has been ranking St. Xavier's College among the top 40 colleges in the country, consistently for the past many years. It may also be noted that St. Xavier's College was awarded the IMA Ramakrishna Bajaj Merit Award for academic excellence in 2011. Taking note of our consistent efforts to provide a world class education, the UGC has granted our College autonomous status on June 19, 2014. More recently, NIRF undertaken by the MHRD ranked us at 65<sup>th</sup> position in the country, in June 2018. Today, this institution is much sought after, and has become a desire and centre of the elite, and the crème-de-la-crème of the city.

The process of teaching-learning-evaluation is at the core of the activities of the College. With the conferment of autonomous status, syllabus has been revised with greater emphasis on learning. Seminars, class-presentations, assignments, quizzing, group projects, field trips/study tours/contact programmes, internships etc. are some of the student-centric methods used as means of learning. Not just faculty but also students are encouraged to participate at national seminars, undertake internships and entrepreneurial ventures, do hands-on research, etc.

The process of admission is transparent and student-friendly, and has come in for praise from several quarters. Use of student as well staff counsellors at the time of admissions has helped in this effort. The College has special counters for the differently-abled and for students from dispossessed classes. The College systematically ensures both equity and access to students of different strata and diverse talents which is reflected in the student profile of the College. The admission process is closely evaluated and suitably modified each year after the autonomous status.

With a view to providing inclusive education, Xavier's has institutionalized a mechanism to accompany students from disadvantaged groups: Jagrat, and Utkarsh continue to respond creatively to the needs of these groups. Hand holding of the weaker students by the Star batch, mentoring by faculty and colleagues, remedial learning, personalized study and group study are ways by which the College effectively caters to the needs of advanced, differently-abled and slow learners. Faculty have been trained in mentoring and sensitized to issues of stigma and inclusiveness.

In keeping with its mission and based on the demands of the times, the College has revised syllabus and initiated 7 new courses to meet the need of the time.

The College tries to induct quality faculty. The criteria and process of faculty selection has been reviewed and streamlined by the Management. At Xavier's, the feedback of students at demo-lectures is taken seriously before deciding to employ a faculty. Faculty are encouraged

not only to complete their Ph.D. but also to keep up presenting papers and publishing. Financial assistance and other facilities are given for research, and faculty have been encouraged to accept scholarships abroad. Faculty are also encouraged to attend trainings aimed at handling new curricula. The annual Staff Research day is a healthy tradition which Xavier's continues.

Xavier's has minimised the examination burden on students by splitting the syllabus to two halves. The students are given their assessed papers look at so that the evaluation system becomes transparent. Faculty are encouraged to try different methods of evaluation with the prior permission of the Principal. Students' evaluation of teaching is systematized. Faculty have also been helped to understand 'quality' and integrate quality concerns into their teaching-learning. They are also being trained to move towards technology advanced learning. The College has seriously implemented the API (Annual Performance Index) as recommended by the Govt.

Research is our major thrust. Both faculty and students are provided with research facility on campus. Any number of students from each department can take part in an annual research projects which culminates in a research medal ceremony. A number of them go on to pursue top class research later due to this (UG and PG level) training and exposure. Faculty research output is constantly on the increase. In order to encourage consultancy the management does not insist on sharing the remuneration. We collaborate with academic, research, industry and philanthropic organizations.

Our extension activities go beyond the regular NSS activities. Our faculty engage themselves in extension activities in areas of their expertise. Conducting advanced classes for the neighbour hood colleges, offering advanced Physics programmes for the state of Gujarat, mentoring school children in entrepreneurial activities, regular programmes for nearby slum children and visually challenged persons, are some of our ways of carrying our extension activities.

The infrastructure of the college keeps pace with the needs of the College. The College has 36 lecture rooms, AV rooms, a Conference Room, a high tech video conference room, an Assembly Hall, two auditoriums, an open air theatre, playgrounds, well-furnished computerized library, laboratories, Computer labs language lab, 2 ITUs, 15 LCD projectors, two central laboratory facilities, recreation centres etc. The 26-acre campus is pleasing to the eye with lush greenery. The facilities are maintained well by Estate Manager, Electrician, Gas Mechanic, Hardware Engineer, and others.

The College is student-centred. Student data are computerized with the help of an ERP. Two full time counsellors, a faculty with added responsibility of a Career Cell, teams to take care of co-curricular and extracurricular activities, sports director, etc. take care of various aspects of student support and progression. The Campus Ministry cell conducts PGOPs to facilitate the holistic growth of every student. The College has held trainings in human resource development, Ignatian Pedagogy, mentoring, facilitation skills, sensitivity and inclusiveness to equip the faculty. Facilitating mechanisms include a career cell, and a Campus Ministry cell which coordinates welfare measures and regular activities for the disadvantaged groups. The institution permits students to make maximum use of its infrastructure so as to excel holistically.

The College Management is highly structured and yet with sufficient freedom to the persons on the spot. In an effort towards greater participatory management, Xavier's has three Vice

Principals: Dr. Lancy D'Cruz and Dr. Johnson Kuruvilla are fully empowered to deal with academic aspects of Arts, Science, Computer and Commerce students, Dr. Sebastian Vadakan looks after Quality, Research, and IQAC. Various bodies meet regularly to plan and evaluate. The Management ensures that lack of finances do not hinder implementing a good idea.

Thus the College keeps in tune with the changing needs, serving not only the students that come to it, but also contributes to areas beyond through creative outreach programmes. It provides excellent education without losing sight of providing equal opportunity to all sections of society. It blends academic excellence with skills development while making creative attempts to ensure value inculcation. We realise that the status of autonomy helps us to enter into a high orbit of excellence.

**Fr (Dr) Robert Arockiasamy, S.J.  
Principal**

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# *I. BROAD AREAS*

## I. BROAD AREAS

### 1. *Has the core values of NAAC strengthened in the college after obtaining autonomous status?*

The core values of 'NAAC' have been strengthened in the college after obtaining autonomous status.

#### (a) **Contributing to Nation Development.**

- To ensure equity, seminar for students (60 hrs long) was conducted which culminated in a human chain which began from the College gate to the GU gate.
- Seminar conducted for staff on gender sensitivity where over 80 staff members attended.
- Seminars aimed at bringing awareness about self-defence, personality development, importance of education etc. were discussed by the women cell
- JAGRAT activities aimed at mentoring the SC/ST students
- Reservation policy for weaker section of the society as well as sports persons, army persons executed. This ensured greater access to higher education.
- Cleanliness drives organized by NSS
- Traffic awareness drives organized by NSS
- Tree plantation events organized by NSS

#### (b) **Fostering Global Competencies among Students.**

- Exchange programs with St. Xavier's College (Jaipur)
- Lectures by various faculties from Foreign Universities
- In house skill development programmes such as in-Xitu and DEXIC developed
- All science programmes are conducted in English language
- Workshops aimed at skill development organised by Chemistry, Biochemistry-Biotechnology departments
- Training students of nearby school in entrepreneurial skills
- Internships in industry promoted and collaborations with PRL, IPR, ACTI, Botany dept.
- NET examination training offered by Department of Mathematics
- Procuring and equipping laboratories so that students get chance to work with instruments
- The Department of Physics conducts advanced BSc Physics programme with the assistance of INSA and GUJCOST to network with other science colleges in Gujarat
- The Department of Biochemistry-Biotechnology network with all science colleges in Ahmedabad district to train students in clearing national level competitive examinations.
- Revising the syllabus after autonomous status to pose more challenges to students and modern
- Promoting cultural, sports and youth festival at the University level. College cultural festival to ensure greater participation and healthy competition among students.

**(c) Inculcating a Value System among Students.**

- Activities of UTKARSH, an association meant for physically challenged students
- The entire admission process is managed by our student volunteer force under the leadership of a main volunteer. There are volunteers to counsel parents and students, to serve water, enter data, to assist students in filling the form etc. It is such a unique feature of our College. Parents were so impressed by the kind of training offered at our College so that all of them wanted their ward to study here.
- Eucharistic celebrations for catholic students
- Activities of TARUMITRA: A series of activities aimed at sensitizing them to the concerns of Mother Earth.
- Admission based on merit, and students admitted from pan India
- Regularize Personal Growth Oriented Programme for all students.

**(d) Promoting the Use of Technology.**

- 440 Tablets distributed as part of a Govt. Project.
- Increasing the use of computers
- Wi-Fi enabled campus (by Jio and BSNL)
- Smart class rooms established
- Equipping 14 class room with LCD projector
- Migrating to ERP in administration and data management
- Use of website as a means of communication
- Institutional e-mail for general communication
- Establishing bulk messaging mechanism for effective communication
- Setting up a computer laboratory for physically challenged students and another computer lab for SC-ST students to promote use of computers
- Online management of attendance system

**(e) Quest for Excellence.**

- Staff Research Seminars; Research medal ceremony
- Fr Herbert D'Souza SJ memorial lecture series (eminent experts invited to deliver lectures annually)
- Every alternate year a group of MBA students from the Marquette University, Wisconsin, visit and interact with our students of Voc. Biotechnology and Voc. Industrial Chemistry.
- Faculty development workshops by Campus Ministry, IQAC
- In order to equip the faculty and strengthen our curriculum a workshop on "Learning Outcome Based Syllabus" was conducted separately for Arts and Science faculty from March 24 to 25. Now that we are an autonomous College the workshop was an inspiration to many departments to overhaul the existing curriculum.
- Workshops for Support staff also conducted
- Skill development programmes offered to selected staff members in SPSS, research methodology, proposal writing etc.
- Regularising staff feed back

- Two internal examination system where 50% of the syllabus is covered in each of the Internal evaluation
- Continuous internal evaluation in some of the PG programmes
- Several new UG and PG programmes initiated
- Many soft skill, foundation courses, and electives introduced
- ‘Employee of the Year’ award has been constituted for teaching as well as administrative section to encourage staff members.

*2. Is there a significant change in the curriculum, evaluation and research of the institution?*

**CURRICULUM**

One of the most valuable aspects of an autonomous system, in an educational institution is the right to choose a very appropriate curriculum for its different fields of studies. We have invested a lot of our efforts in doing so. Key points are listed below:

- The ‘Board of Studies’ was constituted for all the subjects, which comprised of the members of the Department and subject experts from university departments, other colleges, industries and meritorious students from alumni.
- These boards of studies conducted a series of meetings (formal and informal) to design the most suitable curriculum for their field of study.
- The main criteria, kept in mind, were to prepare a syllabus which is at par with the requirement of post graduate studies, job employability, university-industry research, awakening the social awareness and global competency.
- As a result, there has been a significant change in the curriculum of all the fields of studies. Subject topics considered obsolete were removed and relevant topics were added in each subject.

**EVALUATION**

- A new evaluation system has been crafted for the assessment of the growth of the students. Continuous Internal Assessment – I (CIA- I) and Continuous Internal Assessment – II (CIA- II) were introduced by the CoE within each semester for testing the learning outcomes of 50% of the syllabus in each of these tests.
- Apart from CIA, class quizzes/class tests/seminars and assignment writing is conducted in each paper/course.
- A radical change has been introduced in the sitting arrangement of the students in the examination halls. With the use of ERP, the examinees were arranged in columns A, B, C, D, etc. The seating arrangement for each day is uploaded on the college web portal one day prior to the scheduled exam. Students can view it in their ERP login and find the location of their exam seat.
- A similar new format has been introduced in the block supervision in the exam hall. Each block consists of at the most 30 examinees drawn from different subjects.
- Examinations timings were also modified. A gap of 1 hour between two consecutive exam schedules would suffice the administrative staff for necessary preparation.
- End Semester Exams are also conducted well in time. The appointment of external examiners has been made mandatory in each subject. These examiners are selected from well reputed government institutions/colleges/universities.
- Assessment work of answer papers is carried out, after assigning dummy roll numbers, masking the identity of the paper so that the confidentiality is well assured.

## RESEARCH

- An improvement of a very high degree and significance has been manifested by the college after achieving autonomous status. Number of students doing research projects, the number of faculties indulged in research work has shot many folds in an environment of an autonomous educational institute.
- About 10 staff members have either completed or registered for Ph.D. Number of students joining and completing UG and PG research has also increased by at least 15%.
- Medals, certificates and cash support have been introduced to encourage research among staff and students. 24 student awards and ‘Researcher of the year’ for staff has been introduced.
- Regular meetings of faculty research committee are conducted by the research coordinator to monitor the progress of research activities.

### 3. *Has the institution made changes in its approach to student care and support?*

- As a student enters the college premise, his/her first concern is to park his/her vehicle at proper place. A parking ticket system was created with token fees for authenticity of students and outsiders. It worked very effectively. Later, the parking was made free of charge, and the number of security guards increased to help the students.
- The entire college campus has been maintained ‘neat and clean’ by the support system enforced by authorities, such as campus ministry.
- The record of students’ attendance in classes/labs, is maintained by the ‘attendance signature sheet’ for each class. Students would sign against his/her name in the sheet. Thus, students feel more confident about their attendance records. This record is uploaded on daily basis on college web portal. So, the guardians of students can view their ward’s whereabouts.
- Personal Growth Oriented Programme offered to all students in each semester. This is integrated in the curriculum to build the emotional quotient. It is an activity based programme with reflections on self – evaluation, rational thinking, ways of dealing with emotions, understanding self and others, aspects of acceptance and sharing, spiritual self, and conscientious transformation. The institution extends many of its capacity building programmes to students of other colleges and institutions to bring together best thinking minds.
- Ladies lounge and Counselling room was renovated.
- More drinking water facilities has been introduced on each floor with coolers
- College office was renovated and reorganized to make it more student-friendly.

### 4. *Is there any significant change in the institutional contribution to the society?*

The NSS unit of our college has been constantly thriving for contributing to the society by means of arranging many programs such as blood donation camps, traffic awareness programmes, thalassemia test camp, tree plantation, etc.

### 5. *How the leadership and commitment of the Management facilitated the institution to grow?*

The leadership and Management of the College are very much committed in facilitating several new initiatives for the growth of the college, such as:

- Starting M.Sc. programs in several subjects

- Industry-university linkage programmes like M.Sc. in Big Data Analytics and B.Com.(BPS)
- A full fledged use of ERP in online admissions, maintaining valuable data bank etc.
- Investment in human resource development to take the institution forward
- Investing in developing courses, laboratories
- Investing in developing infrastructure facilities

**6. *Has investment in human resource development and team work helped the institution after autonomous status?***

Investment in human resource development has been done by means of:

- Constituting several committees to look into the matters pertaining to different requirements of students, faculties and management. The committees conduct regular meetings to discuss, design and decide about the situations and problems arising in day to day proceedings
- Suggestions and proposals made by these committees are moved forward to higher authorities for making final decisions
- Investing in training programmes so that cohesiveness is developed

**7. *Have there been new bench marks set after the autonomous system?***

After attaining the autonomous status, the new bench marks set are:

- The commencement of post-graduate programs in all fields of studies.
- The development of a professional approach in achieving several goals set by the college.
- Strengthening of the career cell of college so that the students get valuable information for making best choices towards their career goals and future planning. We are in the midst of appointing a full time professionally trained coordinator to lead the career cell.
- Establishing a bio-metric system for recording the working hours and attendance of staff and faculties
- Formalizing extension activities for each department
- Strengthening student care and establishing a support system
- Establishing SOPs in the institution
- Migrating to digital mode of administration
- Greater transparency in administration

**8. *Has the institution established appropriate systems in place with SOPs after the autonomous status?***

- The payments made by the student are accepted in cash-less mode only. Same is the case with refunds, if any.
- Not only are the salaries credited in bank accounts, all other payments like examination work remunerations, credit society dividends etc. are also credited directly in the respective bank accounts.
- Students and staff. I.D cards are issued in the beginning of an academic year for their every - day uses.
- A very good number of student volunteers are appointed to help the new admissions seekers and other cultural activities.
- Date for the meeting of all statutory committees are decided in advance

- Academic calendar is in place so that teaching and examinations are well organized

**9. *Is there a conscious, target oriented approach in the institution?***

- As a Jesuit Institution, our approaches are always target oriented and of very clear consciousness. We are committed to make a significantly positive change in the well-being of the people in our society and make this world be a better place to live in.
- We are very clear to uplift the poor and marginalized people of our society.

**10. *How feedback system has been used to drive change in the institution?***

- An agency was assigned the task of evaluating
- Dr. Chittiwale also talked to students
- Feed- back system is used in several ways like:
  - Organizing an open - house event to address students' grievances.
  - To make the faculties aware of correcting/improving their teaching methodology.
  - To quantify the performances of faculties.
  - To regularize the availability of staff and faculties to the students and authorities.
  - Internal auditing system was set up with the help of Dr Vijay Parmar and Dr Tara who met the faculty. The feedback was used in designing faculty development programmes
  - Programmes such as IPP were conducted for new faculty members.
  - Suggestion box for addressing grievances

## *II. SPECIFIC AREAS*

## II. SPECIFIC AREAS

### *A. Infrastructure facilities*

#### (i) *Class Rooms*

<b>Year</b>  <b>No. of Class Rooms</b>	<b>2014</b>	<b>2018</b>	<b>No. of New constructs</b>
In regular use	30	36	06
Renovated & LED lights Fitted	00	10	10
Equipped with LCD projectors	00	14	14
Fitted with 'smart boards'	00	03	03
With enabled CCTV	00	36	36

#### (ii) *Science Laboratories*

<b>Year</b>  <b>Number Of Laboratories</b>	<b>2014</b>	<b>2018</b>	<b>No. of New Constructs</b>
In regular use	19	26	07 1-DST FIST Lab 1-M.Sc. Physics Lab 1-B.Sc. Chemistry Lab 1-M.Sc. Physics Lab 1-B.Sc. Biotechnology Lab 1-B.Sc. Biochemistry Lab 1-Biosciences Central Lab
Renovated	00	01 Chemistry Lab	01-Bath area for safety - Rooms for Lab assistants and gas mechanic
With CNG fuel supply	00	15	15

*(iii) Computer Laboratories/Facilities*

Description of Facility	Year 2014	Year 2018	No. of New Additions
Computer Lab with	No. of Terminals 225	No. of Terminals 00	00
Exclusive Computer Lab (DELL) for Learning Language with	No. of Terminals 25	No. of Terminals 25	00
New Computer Lab For Mathematics	–	No. of Terminals 32	32
4 Computer Labs for Backpack Journalism Course with (in collaboration with Marquette University, Wisconsin, USA)	No. of Terminals 10	No. of Terminals 10	00
An Exclusive Super Computer Lab with Advanced Computing Facilities	–	01	01
Total No. of New Computers Assigned to Different Departments	00	15	15 1-Campus Ministry 1-Sports 1-NSS 1-Purchase Department 1-Economics 1-Sanskrit 1-Biochem. 1-Chemistry 2-Physics 4-College Office 3-SC/ST Computer Lab

*(iv) Equipment*

Description Of Equipment	Year 2014	Year 2018	No. of New Additions
OHP & LCD Projectors	2	3	1
DVD Players	0	0	0
Portable Amplifiers System	3	10	13

New Advanced Photocopiers	02	02	02
Laboratory equipments	13	21	8 (Rs. 6881394.5 Total Expenditure on equipments)

*(v) Hostels*

**Men's Hostel**

Facility Characteristic	Year 2014	Year 2018	No. of New Additions
Maximum Capacity	174	174	-
Total No. of Students Admitted	150	150	0
Total No. of Rooms Available	58	58	0
Total No. of Beds Available	150	150	0
Maximum Capacity of Mess	60	60	0
No. of Drinking Water Facilities	1	7	6
Total No. of Recreational Facilities	1	0	0
Total Fees Charged (per month)	1700	1800	100
Total No. of Cases of Indiscipline/Ragging	0	0	0

**Women's Hostel**

Facility Characteristic	Year 2014	Year 2018	No. of New Additions
Maximum Capacity	144	144	-
Total No. of Students Admitted	144	144	
Total No. of Rooms Available	50	50	
Total No. of Beds Available	144	144	
Maximum Capacity of Mess	60	60	
No. of Drinking Water Facilities	2	0	
Total No. of Recreational Facilities	1	0	
Total Fees Charged (per month)	2000	2200	
Total No. of Cases of Indiscipline/Ragging	0	0	0

*(vi) Internet facilities*

Description	Year 2014	Year 2018	Improvement
Connectivity Available?	Yes	Yes	Sustained
Speed of Internet	02 MBPS	20 MBPS	Highly Upgraded
Wi-Fi Connectivity	No	Yes With the help of	None to Every -one

in College Campus Available?		Jio Hotspot BSNL Hotspot	
Staff/Faculty 'email id' provided?	No	Yes	None to Every-one

*(vii) Medical Facilities*

Description	Year 2014	Year 2018	Improvement
Availability of First-Aid Box?	Yes (i)With College Councilor (ii) Sports Office	Yes (i)With College Councilor (ii) Sports Office (iii) NSS Office Biochemistry Lab College office	Highly Upgraded
Availability of Common Use Medicines?	Yes	Yes	Enabled
Availability of Sanitary Napkins?	Yes	Yes With the College Counselor	Enabled
In-House Health Centre?	No	No	Need fulfilled by nearby GU Health Center
Level of Medical Emergencies	Low	Low	Low

*(viii) Canteen Facility*

Description	Year 2014	Year 2018	Improvement
Total Floor Area (in sq. meters)	30 x 15 ft	30 x 15 ft	Renovated
Maximum No. of Seats Available	-----	-----	
Total No. of Employees Providing Service	3	3	----
Count of the Types of Dishes	30	30	----
Count of the Types of Dishes Purchased from Outside	----	----	-----
Type of Fuel Used	LPG comm	CNG comm	----

Opening – Closing Timings	7:30 am to 5:30 pm	7:30 am to 5:30 pm	
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*(ix) Common Rooms*

Description	Year 2014	Year 2018	Improvement
Ladies Lounge	01	01 Renovated	

*(x) Sports*

Play & Utility Area	Year 2014	Year 2018	Improvement
Hockey Ground	80 x 60 m	80 x 60 m	
Football Ground	100 x 80 m	100 x 80 m	
Cricket Ground	70 sq yards	70 sq yards	
Basketball Court	30 x 20 m	Synthetic flooring done	
Volleyball Ground	20 x 15 m	20 x 15 m	
Paleta Court	30 x 15	30 x 15	
Table Tennis Court	20 x 15 sq ft	20 x 15 sq ft	
Weight-Exercise Facility	30 x 10 sq ft	30 x 10 sq ft	
Sports Wash-Room	In Use	Renovated	Very High
400-Meter Track	Mud track	Repaired	Enough

*(xi) Other Facilities*

Description	Year 2014	Year 2018	Improvement
Open Air Theatre	800 capacity	800 capacity	
Closed Door Auditorium (SAH)	In Use with sitting capacity of 2000 people	Renovated with (i) permanent glass windows (ii) new sound system (iii) new cotton spreads for sitting on floor for 2000 people (Total Expenditure Rs 4.1 Lakhs app.)	Very High
Seminar halls/auditoriums, Audio-Visual Room	07	07	02 Renovated, one of them with AC
Alumni Room	Yes	Yes	

Conference Room	No	Video conferencing facility added with TCS	
Library	A separate building block assigned to house 'Central Library' of the college 5-Departmental Libraries functioning at departmental levels 3-Servers installed to link central library with various departments		
Parking	Spacious parking plot for staff and students enabled	Extension and renovation of parking plot made possible to accommodate more vehicles	Very High
Facilities for Physically Challenged	(i) Ramps (ii) Elevators (iii) Special Toilets	Elevators renovated @ Rs 2.8 Lakhs	Very High
Drinking Water Facility	(i) Availed separately for staff and students (ii) Municipal Water connection maintained (iii) 2-Tubewells maintained (iii) 4-water recharging systems enabled	(i) RO Water Plant with 360 L cooling capacity installed in college building (ii) Water connection for wetting the Football Ground installed. (iii) Water connection for watering plants, lawns and college campus installed.	Very High
Power	A solar system with 5-KW capacity installed	(i) An additional solar system with 75-KW capacity installed (ii) All street lights changed to solar / LED lights (iii) A solar pump of 5-Hp installed	Exceptionally High

Facility for Staff	Separate cubicles assigned to all faculties	(i) Staff toilets renovated (ii) A new spacious room allotted to house the Mathematics and Economics Departments	Very High
Wash-Rooms	In house wash room facility enabled		
Miscellaneous		(i) College office renovated @Rs 15 Lakhs (ii) College compound wall strengthened @Rs 4 Lakhs (iii) Entrepreneurship programs DEXIC & in-XITU set up (iv) New examination wing set up (v) LED lights installed in Central Library, Old Library and Corridors	Extremely High

## **B. Library**

### *(i). Working hours*

The library is open on all days except Sundays and public holidays. It operates from 9.00 am to 5.00 pm from Monday to Fridays, and 8.00 am to 1.00 pm on Saturdays.

### *(ii). Advisory committee*

The New Library committee was formed on June 15, 2018 for the period of three academic years (2018-21) for planning, guiding, monitoring and awareness activities in the College. The members are:

#### **Library Committee**

1. Dr Pinky Desai
2. Dr Aruna Pandya
3. Dr Atul Makwana
4. Dr Maulik Gadani
5. Dr Nandita Christy
6. Dr Shraddha Doshi
7. Dr Shuchita Mehta
8. Dr Udayan Prajapati
9. Fr (Dr) Vinayak Jadav
10. Mr Amit Khosti
11. Mr Anil Parmar
12. Mr Dinesh Katara
13. Mr Gaurav desai

14. Mr Hirabhai
15. Mr Mukund
16. Mr Puransinh Makwana
17. Mr Tatpar Joshipura
18. Ms Annaashirvadita
19. Ms Dipali Talsania
20. Ms Jill Mehta
21. Ms Kinjal mistry
22. Ms Mitali Ghotikar

### **Functions of the Library Committee**

- a. Recumbent towards use of library grant
- b. Ensure library database on subscription of journals and magazines are monitored and audited.
- c. Update cataloging of library books and make them available to students
- d. Ensure smooth functioning of the library and promote walk-ins of staff and students
- e. Encourage staff to use inflibnet facilities
- f. Organize awareness programmes on library/ reading
- g. Work towards linking N-List, shodhganga, shodhgangotri to website
- h. Promoting the use of SOUL 2.0 for library upgradation
- i. Initiate awards for those students and faculty using the library facilities to the maximum
- j. Encourage departmental library and equip each departmental library with swipe machine for book distribution.
- k. Revamp weak students library
- l. Initiate awareness programmes/ book reading etc.
- m. Increase access points in library for online library/ inflibnet

#### ***(iii). Man power development***

Dr Devang Pandya was trained in Inflibnet facilities

#### ***(iv). Infrastructure of the library***

Total area of the library (in sq. mts.): 489.27 sq.mts (ground floor: 346.83 sq. mts and first floor: 142.83 sq.mts)

Total seating capacity: 215 students (ground floor 85; first floor 130)

**Layout of the library:** The new library has a separate section for reference, and reading room facilities for about 215 students. It has a collection of 49290 books, 20 journals and 27 periodicals on various subjects. The library also has INFLIBNET (N-List) and internet facilities. 17 terminals with internet facilities are set aside for students. The library also has three computers with special programmes for visually challenged students. It also has a book bank to take care of the needs of poor students.

#### ***(v). Library budget***

Sr. No.	Year	Budget Rs.
1	14-15	269815
2	15-16	223000
3	16-17	846342
4	17-18	280838.2

(vi). *Library services and use*

**OPAC:** Currently we are using the SOUL software as the Online Public Access Catalogue.

**Library automation:** All books are barcoded. There is a swipe machine used for book distribution. This makes book distribution and tracking books easy. In the near future we plan to install automated tracking system in the library to collect data on library usage/ walk-ins.

**Internet band width/ speed:** Internet band width/ speed: Currently SXCA has 20 Mbps band width subscribed from BSNL, and Jio

**Institutional Repository:** Library repository is spread on 126.09 sq.mts that can house 70,000 books

**Average number of walk-ins:** 200. About 6.5% of students use the library every day and 5% of faculty regularly uses the library for reference. We are in the process of installing a digital tracking system to monitor the walk-ins.

**Average number of books issued/returned:** 120 books/day

**Average number of books added during last five years:**

SUBJECTS	2013-14 (number of existing books)	Books added			
		14-15	15-16	16-17	17-18
ENGLISH	8670	61	34	258	
GUJARATI	6431	149	89	95	18
HINDI	3015	28	15	16	
SANSKRIT	2603	69	182	12	18
ECONOMIC	2451	53	16	257	32
PSYCHOLOGY	2199	65	12	113	
REFERENCE	2652	4	28	04	4
VALUE EDUCATION	223	0	0		
SPORTS	47	0	0		

JOURNALISM	258	0	0		
BIOGRAPHY	298	0	0		
PHILOSOPHY	293	0	0		
RELIGION	958	0	0		
SC / ST / OBC	0	12	0		
ELECTIVE	0	12	0		
HISTORY, GEOGRAPH, POLITICS	209	0	0		
MINOR RES. PROJECT			0		
PSYCHOLOGY	0	30			
SOFT SKILL	0	12	0	15	
FOUNDATION				40	
CHEMISTRY	2860	38	22	89	44
CHEMISTRY (IC)	115	0	0	0	
PHYSICS	2824	37	57	207	34
ELECTRONIC	958	84	35		
BOTANY	1321	59	18	49	26
ZOOLOGY	1304	76	27	107	3
BIOCHEMISTRY	1274	16	20	68	28
BIOTECHNOLOGY	124	0	58		
MATHEMATICS	2788	90	67	80	84
STATISTICS	1215	32	24	47	
COMPUTER	607	14	0		
COMMERCE				45	
BIG DATA ANALYSIS				27	
Gifted by Dr. Amarnath				59	
RUSA grant			28		
UGC grant			40		
TOTAL BOOKS ADDED	45697	941	772	1588	292

**Details of the specialized services provided by the library Reference:** The library has a separate reference section. These books are not given out. Anyone can access these books within the library.

**Reprography:** Photocopying facility is available in the library.

**ILL (Inter Library Loan Service):** Library has ILL facility.

**Download:** Library has 17 computers with internet facility where 17 are for student use.

**Printing:** We have not yet established a system for computer printouts in the library. However, photocopying facilities are available.

**User Orientation and awareness:**

The library follows DDC 20 for classification. Books are arranged according to the rules of DDC 20 which helps users to trace books. The library is also located in a strategic place with good illumination.

**INFLIBNET/IUC facilities:** The library has INFLIBNET facility. Currently we have only N-list.

**Support provided by the Library staff to the students and teachers of the college:**

The library has clerks and a peon. The clerk maintains purchase details, accounting of books, register maintenance. The clerk assists students with issuing of books, in locating books, and the peon helps in photocopying.

**Special facilities offered by the library to the visually/physically challenged persons?**

There are three special computers with special software for visually challenged students. Audio cassettes are available for them in the departments of Sanskrit and Gujarati.

*(vii). Best practices of the library*

**Title of the Practice:** Annual maximum library use award for students

**Objectives of the Practice:** To encourage students to use the library facilities; to channelize their energies into productive activities; encourage a research aptitude among the students

**The context that required the initiation of the practice:** In today's digital wherein students while away their time in non-coherent activities on their smart phones the usage of books as a source of learning needs persistent motivation. The inclusion of such an award in the annual awards given to meritorious students will promote the use of library resources among students.

Reading books/journals the students may come across many ideas; which will help develop a research aptitude.

**The Practice:**

The library staff keeps a track of the footfall in the library by maintaining an in-out register.

**Obstacles faced if any and strategies adopted to overcome them:**

Unable to keep a track of students not actually reading in the library

**Impact of the practice:**

An increase in the usage of the library

Students making suggestions regarding books and periodicals that they would like in the library

**Resources required:**

Staff as well as better organization of the library; a digital tracking system to monitor the walk-ins

(viii). *Digitization of the Library - RFID ect.,*

All books are barcoded and automated with the SOUL programme. We are in the process of automating the library.

**C. Website**

(i) *Updated:* Yes, updated in Wordpress in 2017

(ii) *Information is available on the College website on*

1. *Courses offered*

Details available at <https://sxca.edu.in/academics/>

2. *Fee structure coursewise*

Details available at <https://sxca.edu.in/admissions/>

3. *Faculty details such as qualification, unique ID*

Details available at <https://sxca.edu.in/academics/> (under each dept/ staff) or <https://sxca.edu.in/nirf/>

4. *Admission procedure*

Details available at <https://sxca.edu.in/admissions/>

5. *Infrastructure available*

Some details available at <https://sxca.edu.in/research/>

6. *Research activities*

Some details available at <https://sxca.edu.in/research/>

7. *Details of Ph.D. students enrolled with enrolment no., date of enrolment, topic, name of supervisor, likely date of completion, etc.*

Data not available

8. *Whether undertaking from the College is available on its website to the effect that the College will abide by all the Regulations of UGC notified from time to time?*

Data not available

# *III. GENERAL*

### III. GENERAL

#### *A. Workforce*

*(i) Courses started/ approval letter*

The high payment programs offered are:

Course	Year of commencement
B.Sc. Biotechnology	June 2015
B.Com. BPS	June 2016
M.Sc. BDA	June 2016
M.Sc. Biochemistry	June 2016
M.Sc. Mathematics	June 2017
M.A. English	June 2017
M.Sc. Biotechnology	June 2018
M.Sc. Chemistry (Analytical)	June 2018
M.Sc. Physics	June 2018

Additionally a new subject combination offered for B. Sc.

- B.Sc.: Mathematics-Statistics-Computer Sciences

The college also offers foundation Courses and soft skills as electives for undergraduate students

- New programmes developed: Volunteering, career skills, Indian Constitution, World religions, Cultural Heritage of Gujarat, Writing skills in Gujarati.

*(ii) Students' Progression during the assessment period*

	Academic year	No. Of students graduating in the stipulated time	No. Of students placed	Median salary of placed graduates (Amount in Rs.)	No. Of students selected for higher studies
UG	14-15	698	80	180000	398
	15-16	543	88	180000	359
	17-18	681	59	204000	364
PG	14-15	52	46	240000	6
	15-16	52	45	240000	7
	17-18	50	44	240000	6

*(iii) Usage of Smart Class room by the faculty*

3 smart boards have been installed:

1. AV Room (common)
2. LR 30
3. Electronics Laboratory

*(iv) Community Empowerment Programme in the neighborhood through the College Extension (Out Reach) Activities - (Lab to Land)*

• **Outreach activities/Extension**

1. The NSS organizes traffic awareness camp for students, aiming to inculcate responsibility towards following traffic rules in students as well as the public.
2. NSS also organizes blood donation camp in association with The Ahmedabad Red Cross Society.
3. Thalassemia awareness, Cleanliness drives, Blood donation, Gender sensitization, the empowering of marginalized SC/ ST students through the TCS programme were conducted to give a thrust on social responsibility
4. The College Women Development Cell (CWDC) regularly organises talks such as: 'Self-defence for the safety of girls and boys'; 'Making a difference'; 'Gender sensitivity and gender discrimination'; 'Equal opportunity to all' and 'History of beginning of injustice with women and gender discrimination'.
5. JAGRAT- SC/ST cell to empower and assist students in all walks of life

• **Lab to land**

1. Entrepreneurship programs: DEXIC and INXITU; in-house industries for students of VBT and IC. Students manufacture, market and sell various products increasing entrepreneurship skills and employability
2. Mathematics Olympiad Program – Department of Mathematics
3. The project by Physics Department in collaboration with ISRO (Safar) to assess the air pollution levels in the city of Ahmedabad, and displaying the same on screens put up at crossroads is an effort to alert the citizens of their responsibilities in preventing further deterioration in the condition.
4. College has an extension programme named *Aadi Aushadhi*, which trains people to cultivate, process and market medicinal plants
5. Tarumitra organises ecological auditing. The major areas of thrust were electricity, paper and water.

*(v) Programme for the Slow Learners, Differently abled Students and High Achievers.*

Students from SC/ST, OBC and economically weaker sections. SXCA is a minority College that has special admission policies for SC, ST, OBC, economically weaker, and differently-abled. SXC offers services at three levels:

1. Securing admission
2. Moving towards adjustment
3. Marching towards excellence.

**Securing of admission:** During the admission process there are separate admission rooms allotted and a Management person scrutinizes their forms. Student volunteers are trained to help these candidates at the time of admission. They are given guidance, counseling, explained the career prospects, and if need be the forms are filled for them.

**Move towards adjustment:** All our ST and most our SC and OBC students come from rural areas. Initially there are adjustment problems. Hence the College, under the aegis of Jagrat offers several hand holding programmes which is spread over three years that helps them to understand urban culture and compare it with the rural culture from which they have come.

**Move towards excellence:** Students with the above background are offered various tailor made programmes to ensure that they are at par with mainstream students. They are offered special coaching classes in their subject by faculty/ senior students. This helps them to understand the subject and to prepare for examinations. The special cell called Jagrat ensures the all round development of these students by organizing various programmes for personality development etc. It is a three year module which has been successfully conducted for the last two rounds. The College has also published a manual for their training programme.

Students are encouraged to opt for Computer as a second elective to make them computer literate.

They have been supported financially to pay their College fees, buy books, secure bus passes, pay up mess bills etc. The College also helps them to get scholarships from the Government.

One of the College faculties (Fr Vinayak Jadav) initiated a magazine called Adilok which gives visibility and voice to the issues, customs and practices of the tribals of Gujarat.

Students with physical disabilities: SXC has 38 physically challenged students. It also has a cell called Utkarsh which takes care of their needs. The College has made a special policy to ensure that a challenged student who has applied is given a chance to study the subject of her/his choice. Special programmes are organised for them. Every year there is a one day seminar cum gathering of all College going challenged students of the city on our campus. During College programmes, they are given a chance to perform on stage. Motivational talks are conducted by the Campus Ministry.

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

All Xavierites are encouraged to take part in various competitions. Special allowances are made for such students. They are exempted from attending classes on the days of the competition. SXC spends money on training them (sports and extracurricular activities). Students represent the College at the West Zone, Inter-Zonal, and National levels. They also compete in other competitions of the University. They also participate in competitions organised by other colleges and corporate houses.

Besides taking part in academic competitions, students do participate in academic festivals conducted by various departments. Dept of English, Chemistry, Economics and Biochem-Biotech conducts competitions. Students regularly participate in Minaxi Lalit Quiz competition, English essay writing competition.

**Medical assistance to students:**

SXC usually depends on the health care facilities of the University health centre for minor needs. In special cases, students have been referred to doctors associated with

the College. Financial aid is also given to needy students. Cases of sports related injuries are referred to one of the orthopaedic doctors associated with SXC. The ladies hostel has a consultant doctor.

**Organizing coaching classes for competitive exams:**

The Department of Mathematics initiated NET exam training.

UPSC guidance sessions were conducted by Chemistry

The Department of Physics organizes special coaching in the form of advanced

BSc course in physics during the summer vacations every year

Coaching for JAM Chemistry is provided by Dr. Pranav Trivedi

**Support for ‘slow learners’:**

Several departments (Physics, Chemistry, Biochemistry, Economics, and Gujarati) of the College regularly organize remedial and support classes for weaker students.

The Alumni are also involved in remedial classes organized by the Physics Department. Special support in the form of remedial classes conducted by senior students are organized to facilitate students transitioning from vernacular medium

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

Several departments organize study tours to institutions of higher learning to ensure that they are at an advantage. Dept of Botany, Chemistry, Economics, Psychology, and Biochemistry conducts.

Internship is compulsory for students of IC and BT. Some of the COPs have projects which the students have to carry out in other institutes/ labs. Some of them take summer training or in students exchange programmes.

**Efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts:**

Students of the vocational course have a course in entrepreneurial skills and they have implemented the same by setting up two student run companies named in-Xitu and DEXIC. In-Xitu produces tissue cultured ornamental plants and markets the product. They have a separate cell for planning, executing, and marketing managed entirely by them.

DEXIC is a student company that produces colourful candles, petroleum jelly, detergents, customised candles, etc. and sells them. These are activities conducted to help student know the intricacies of entrepreneurship, develop skills related to it, and translate what they have learned in classrooms into action.

Additionally, the college also organizes various events to develop facilitate entrepreneurial skills:

1. 50 hr Training for Retail Analytics by TCS where about 30 students of Economics, Mathematics and Statistics.
2. Three days Entrepreneurship Awareness programme in collaboration with Oakbrook University where more than 90 students participated.

**(vi) Linkages with industries for projects, internships, placements etc.,**

1. Physics department has an MoU with Institute of Plasma Research, wherein selected students carry out small projects
2. Conducted 4 programmes: Gandhi Fellowship, The Young India Fellowship, SBI on recruitment of Probationary Officers post and Teach for India; 32 students were selected by Infosys. Career Guidance was offered to their students by the Chemistry Department.
3. Two MoU were signed: with ACTI and Gandhi fellowship
4. MoU with SPU, UNEP-GEP-MOEF-ABS Project, Gujarat Biodiversity Board, Gandhinagar for preparation of two PBRs of Zod and Hadgud villages, Anand was signed

<b>Details of campus placement</b>				
<b>Year</b>	<b>Number of Organizations Visited</b>	<b>On campus</b>		<b>Off Campus</b>
		<b>Number of Students Participated</b>	<b>Number of Students Placed</b>	<b>Number of Students Placed</b>
2014-15	10	569	43	Not available
2015-16	06	237	Not available	Not available
2016-17	03	79	19	Not available

*(vii) Initiatives for over all formation of Students*

College also admits students who may be academically weak but are strong in sports and extracurricular activities. The College has an auditorium, an open-air theatre, and a room for cocurricular activities. In order to promote student participation in sports SXC has separate grounds for football, basketball, volleyball, cricket, paleta, tennis, table tennis, tennis, hockey, a 400m track, and necessary items for weight exercises. It has a full time sports faculty and coaches for athletics, basketball, football, hockey and cricket etc. The College uses the swimming pool facility of Ahmedabad Municipal Corporation for aquatic practices.

At the beginning of the year, students are chosen for various sports activities and training is given for University level competitions.

College allows flexibility in examinations and provided academic support to students who have reached the National level. Sports uniform and kit is provided all sports persons and financial assistance to students who have special dietary requirement. Achievement is recognized with certificate, awards, and scholarships on the Annual Day.

Sports persons may remain absent from regular classes and compensate the classes by completing compliances to cope with studies. The College has retained the General Championship at the University level for the last 25 years.

*(viii) Mentoring and Counselling facilities for the students*

The College has two fulltime trained Management appointed counselors. Several students, ex-students, and faculty make use of the facility and expertise of the counselors. Students are counseled in personal matters and input is given on handling relationships. The counselors also offer a course in Personal Growth Oriented Programme (PGOP) to the entire College where students go through a process on how

to deal with personal life and relationship with friends, family, and society. The manual prepared by the PGOP is in the process of being published. When required, students are referred to professional counselors. Some of the help involves students and their family getting together.

Academic and career counseling is offered by faculty and HoDs at the appropriate time of the calendar year. The College has a Career Cell that offers career guidance. It also offers training in resume writing, group discussions, and interviews. The cell organizes campus interviews for placement.

**(ix) Faculty Development Programmes for the Staff & Performance Based Appraisal and Incentives**

Various faculty development programs for the staff have been conducted as listed below:

1. Teaching effectiveness by Mr Arvind Chittewale, where over 65 staff members participated
2. Several sessions in the Organizational Development Programme conducted by Mr. Arvind Chittewale was oriented towards group building, especially of new recruits to enable them to grow and contribute to the mission and vision of the institution. There were many informal sessions too that familiarized the new faculty members with the ethos and culture of the college.
3. FDP on Ignatian pedagogy by Fr. Sunny Jacob for newly recruited staff

**Performance Based Appraisal and Incentives**

All newly appointed staff is required to submit performance based appraisal forms; these are evaluated and staff is encouraged to set goals and focus on areas to improve performance in the next academic year. Salary increments are also based on the PBAS.

**(x) E-Content and E-lectures by Staff members uploaded in the College Web sites.**

The college website does not have E content or E lectures by Staff. But various staff members maintain their own e-content pages privately.

1. Dr. Dweipayan Goswami runs a You Tube channel named learnatease; the concept of his channel is to enable young minds to easily learn the subject represented in the textbooks by using animated videos that allows rapid learning. Dr. Goswami also conducts all his tests online
2. Dr. Maulik Gadani (Botany) has a website [www.efloraofgandhinagar.in](http://www.efloraofgandhinagar.in) wherein the details of flora around Gandhinagar is enlisted. It is a ready reference for botany students listing all plants with names and pictures.

**(xi) Consultancy by staff**

Year	Revenue generated through consultancy	Staff involved
2014-15	Rs. 2,40,700	Fr. Lancelot D’Cruz
2015-16	Rs. 60,000	Fr. Lancelot D’Cruz
2016-17	Rs. 60,000	Fr. Lancelot D’Cruz
17-18	Rs. 60,000	Fr. Lancelot D’Cruz

**(xi) Start Ups & Incubation Centre**

Students of the vocational course have a course in entrepreneurial skills and they have implemented the same by setting up two student run companies named IN-XITU and DEXIC.

Two students of B. Sc. Industrial chemistry have been selected by the University Start-up Incubation centre: Mr. Rishi Polara (S.Y. B. Sc.) and Mr. Darshan Patel (T.Y. B. Sc.). They have both been sanctioned a seed money of Rs. 40,000/- by the Centre

**(xiii) Teachers/regular/ adhoc/contractual/guest**

	Regular	Contractual	Management	Self-finance	Visiting
Teachers	53	07	03	20	04

**(xiv) Vacant position:** One in Biochemistry and One in Library

**(xv) Non-teaching staff**

	Regular	Contractual	Management	Self-finance
Non-teaching	24	00	09	09

## B. Research

**(i) Research publications in the last 5 years (2013-18)**

Faculty achievements	Academic Year				
	13-14	14-15	15-16	16-17	17-18
Books/Chapters in books	9	3	7	4	2
Research articles in Journals	72	63	68	59	76
Papers presented in Conferences/Seminar	16	16	20	43	17
Acted as Resource person	27	30	10	12	10
Attended Conf./Seminar	15	25	107	60	10
Workshops/Training	5	30	66	4	12
Articles in Media	4	5	3	18	4

Milestones in Publications	Impact factor
Nano Energy	12.34
Nature (Scientific Report)	4.45
Physical Chemistry Chemical Physics - Royal Society of Chemistry	3.906
Journal of Material Chemistry- Royal Society of Chemistry	5.976

**Research related Awards received:**

1. Dr T C Pandya is awarded the Ph D Guide ship from GU
2. Dr Udayan Prajapati is awarded M Phil Guide ship by GU
3. Dr Lancelot D'Cruz : YOUNG SCIENTIST AWARD for “Value Addition and Productivity Enhancement Conserving Traditional Knowledge: The AadiAushadhi Paradigm”
4. Dr. Nandita Ganguly INSA Research Fellowship

Students achievements	Academic Year				
	13-14	14-15	15-16	16-17	17-18
Won Prizes in seminars/competitions	18	21	15	19	10
Presented Paper/Posters	50	81	84	27	24
Attended Conf./Seminar	222	90	84	87	32
Undergone training/Research	51	45	57	57	55

*(ii). Research projects undertaken*

Sr. No.	Date	Name Of The Staff Member	Department	Title Of The Project	Amount (Rs.)
1.	20/02 /2015	Prof. Arti Kumar	English	<i>Vritant: Tribal Oral Narratives and Translation</i>	90,000/-
2.	11/03 /2015	Dr. U.M. Prajapati	Mathematics	<i>On Various Cordial Labeling Techniques</i>	1,80,000/-
3.	12/03 /2015	Dr. I.L.Mahera	Sanskrit	<b>धर्मशास्त्रप्रणीत चार आश्रमव्यवस्था और सांप्रत समयमें इनकी प्रस्तुतता</b>	1,50,000/-
4.	03/03 /2016	Prof. Dinesh Katara	Chemistry	Synthesis and Characterization of surface modified graphene and graphene oxide polymer nanocomposite	3,35,000/-
5.	27/03 /2014	Dr. Dilip Vasava	Chemistry	Synthesis and characterization aromatic polystyrenes containing fluorescence properties	3,30,000/-
6.	20/04 /2015	Prof. Rajesh Iyer	Physics	Characterisation Of Aerosols, Black Carbon and Radiative Forcing Over Urban Environment Of Ahmedabad and Gandhinagar City, Gujarat	33,96,000/-
7.	11/06 /2016	Dr. Sanjeev K. Gupta	Physics	First principles characterization of metal nanowires for sensing and energy harvesting applications	17,22,600/-

8.	23/06 /2017	Dr. Sanjeev K. Gupta	Physics	Simulation of the transport phenomena and the phase changes in thorium and mixed uranium-plutonium oxide nuclear fuel	23,61,800/-
9.	01/06 /2016	Dr. Sanjeev K. Gupta	Physics	Band gap engineering of perovskites for photovoltaic applications	1,00,000/-
10.	23/06 /2016	Dr. Sudeshna Menon	Biotechnology/Biochemistry	Exploring Penicillium Spp. to develop multifaced biopesticide and phytoaugmenter for invigorating green revolution in indian agriculture system	13,94,920/-
11	2017	FIST			90,00,000

*(iii). Seminar and conference/ workshops arranged*

1. St. Xavier's College in collaboration with the Gujarat Biodiversity Board, Gandhinagar conducted a 1-day Workshop on "Capacity Building for BMC Members" July 17, 2015. (75K).
2. The Chemistry Department, St. Xavier's College organized a National Seminar on "Recent Advances and Future Trends in Chemical Science – 2018" organized on Saturday, 17th February 2018
3. National Symposium titled "Herbal therapeutics: Biochemical and Biotechnological Interventions", 29-30 December, 2017 was organized by Department of Biochemistry and Biotechnology, St. Xavier's College, Ahmedabad.
4. Hands-on training on microbiological Techniques (8th-10th, May, 2018) was organized by Department of Biochemistry and Biotechnology, St. Xavier's College, Ahmedabad.
5. Department of Computer Sciences organized a national seminar on "Deep learning for Computer Vision"
6. Department of Psychology organized a National seminar on 'Counselling'

**Total seminars / workshops/ talks organised**

1. Staff research seminar and annals: (Dr. K. Pundarikakshudu on 'Development of Herbal Drugs')
2. 'Vision Building under Autonomy'
3. Fr. Valles Lecture Series
4. 'Sanskrit Bhasha Kaushalyam'. Four day workshop
5. 'Next Generation DNA Sequencing'
6. Strategic Action Planning
7. Advanced BSc Programme
8. 'Computational Chemistry',
9. 'X-ray Crystallography',

10. 'General Awareness of Chemical Industries'
11. Public Policy Perspectives in India
12. 'Measuring Molecules: Mass Spectrometers in Science, Education and Business'
13. 'Plasma and its Production'.
14. workshop on RTI
15. Workshop in Problem Solving and Enrichment in Mathematics.
16. Sanskrit also organised a popular lecture: possible to get details
17. Simulated Scanning Tunnelling Microscopy and Spectroscopy based on First Principles Methods'.

(iv). *Attended/ dept. wise*

Department	Academic Year				
	13-14	14-15	15-16	16-17	17-18
Physics/Electronics	2	4	15	5	4
Chemistry/IC	1	4	13	6	2
Mathematics	2	2	12	5	1
Biochemistry/Biotechnology	3	2	10	10	1
Zoology/Botany	1	1	12	7	1
Statistics	0	2	5	7	1
English	1	2	7	5	0
Economics	2	1	6	6	0
Psychology	1	3	6	6	0
Sanskrit	1	2	6	2	0
Computer Sciences	0	0	0	0	0
Hindi/Gujarati	1	2	15	1	0

(v). *Any consultancy related activities*

1. Father Lancelot D'cruz SJ Consultancy work
2. Dr Sanjeev Gupta (Department of Physics) has given consultancy to Mr Shital Patwa farms. (2015-16).

(vi). *Research Potentials - Patent any ? or Applied any innovation for Patent ? Gen Banking*

Dr. Dweipayan Goswami (15 Gen Bank), and Dr. Sudeshna Menon (23 Gen Bank), Department of Biochemistry and Biotechnology, St. Xavier's College, Ahmedabad

(vii). *Any Research Centre for Policy Making*

**MEMBERS OF THE RESEARCH COMMITTEE**

Dr Fernando Franco  
 Dr Nirmal Desai  
 Dr Atul Makwana  
 Dr TC Pandya

Dr Shital Doshi  
Dr Nandita Ganguly,  
Dr Profaina Christian  
Dr C J Chammasheril  
Dr Mallika Sanyal,  
Dr U V Chhaya,  
Dr Rajesh Iyer,  
Dr Pinky Desai,  
Dr Sudeshna Menon  
Dr DG Trivedi  
Dr Sanjeevkumar Gupta  
Dr Sebastian Vadakan

### **Role of the members of the research committee**

1. Stimulate and promote the research atmosphere of the departments/ college by engaging in the following activities:
  - Motivating the faculty members to apply for major and minor projects and ensuring that at least one project is presented every year.
  - Motivating at least three students every year to present projects and monitor their progress.
  - Promoting inter-departmental and inter-institutional research collaboration and projects, at least one in two years.
2. Formulate criteria for selecting the best candidates for the award and suggest external qualified persons to judge the projects presented. This will involve at least three one-hour meetings very year.
3. Coordinate and be in the editorial board of Xavier Research Annals and attend the corresponding meetings, at least once a year.
4. Take responsibility for the decisions taken by the Research Committee and communicate the same to the students.

### **Guidelines for carrying out research**

#### **UG-and PG Research students: Common rules:**

1. Each HoD proposes a budget for student research for the approval
2. A separate register is maintained by each HoD for the UG or PG students for chemicals and glass wares.
3. Quarterly report is submitted to Research Coordinator
4. Only students who are selected by the department are allowed to work not their friends
5. As far as possible all researchers of the same stream work in the same place/lab
6. All research work of students is concluded by 6.30 pm. In case it exceeds, on working or on holidays, the Professor in charge is responsible for research/ laboratory, gas, electricity, water, lab safety etc.
7. In case if some staff member decides to work for longer duration or on Sunday/ holidays, the staff member is responsible for procuring the lab keys and safety of the lab.

### Research Awards

Research awards are given as per the following criteria. The mentor and the external evaluator are asked to assign marks in the below headings to choose the right candidate for the prize money. Awards are given to the highest scorer in a particular category as per the directive of the donor.

*Details of the Prizes are given below:*

Donor	Award Name	Subject
Lt. Mr. Peter Gabriel Jadav	Excelling in Research in	Gujarati/General
Lt. Mr. Peter Gabriel Jadav	Excelling in Research in	Gujarati/General
Mr. Donald Marks	Excelling in Research in	English
Mr. Prabhat Vijh	Excelling in Research in	Psycho-1 (Eng)
Ms. Rupalee Vijh	Excelling in Research in	Hindi
Mr. Naresh J. Monga	Jayshree Enterprises	Indl.Chem.
Mr. Jayantibhai Patel	Nagar Chasmaghar	Biochemistry
Lt. Madhuben J. Patel	Nagar Chasmaghar	Economics
Mr. Tushar J. Patel	Nagar Chasmaghar	Maths
Mr. Manish J. Patel	Nagar Chasmaghar	Physics
Mr. Hiten Shah	Unjha Health Care S.P.L.	Maths
Mr. Nilesh Patel	Rank Additives	Chemistry
Mr. Nilesh Patel	Rank Additives	Biotechnology
Mr. Harshad Shah	Doshi Chemicals P.Ltd.	M.Sc. Chem.
Mr. Harshad Shah	Doshi Chemicals P.Ltd.	Botany
Mr. Harshad Shah	Doshi Chemicals P.Ltd.	Zoology
Mr. Harshad Shah	Doshi Chemicals P.Ltd.	Voc. Biotech.
Mr. Dilipbhai Parikh	Ex-Chief Minister	Economics
Mr. Aldwyn Dias	B/o. Late Fr. Donald Dias	Statistics
Mr. Aldwyn Dias	Late Fr. Donald Dias	Computer Sc.
Mr. Shital Patwa	Excelling in Research in	Sanskrit
Mr. Nadeemahmed Jafri	Excelling in Research in	Physics
Mr. Nadeemahmed Jafri	Excelling in Research in	Electronics
Mr. Krishnakumar Vijh	Excelling in Research in	Electronics
Ms. Nutankrishnakumar Vijh	Excelling in Research in	

### Details of Research students and research awards:

Sr. no.	Academic year	Research Awards
1	13-14	51
2	14-15	45
3	15-16	44
4	16-17	49
5	17-18	55

## ***C. Admission policy/Transition***

### **Admission Policy for the year 2016-17**

1. Admission for the academic year 2016-17 will be online.
2. An applicant can fill the form online using the college website interface ([www.sxca.edu.in](http://www.sxca.edu.in))
3. Those who wish to apply in person will be assisted to fill the application on campus
4. Online application fee will be Rs 300, to be paid online. Those who wish to pay offline can pay in college office and collect the accession code from office.
5. Once the last date to apply is over, list of students applying for a particular subject will be prepared according to XII std marks for each department. Based on this list, all students will be called for counseling and skill assessment on a given date and time. This information will be communicated to the respective student through sms/phone/email and it will also be displayed on the website.
6. Completed application form of those called for the counseling and skill assessment will be printed and given to each department to facilitate counseling and skill assessment process.
7. The points for each area covered in the counseling and skill assessment will be given to the Department.
8. Based on the counseling and skill assessment marks, each department will choose students for the department according to the number specified by the College.
9. After three days of Counseling and skill assessments and a fourth day to prepare the lists, the list of students selected for all subjects will be displayed on the notice board/web site. The students will be invited for Counseling and skill assessment with the Principal. If selected they will then be required to pay their entire first Semester fees within 24 hours, pending which the admission remains cancelled.
10. A second list may be put up if there are vacancies in any subject.
11. College may give an advertisement in the website or put up flexes to advertise the process.
12. The entire process of admission will be explained on the College web site.
13. The admission for Catholics/Christians/ SC/ST/OBC will follow a parallel procedure, with a separate counter for counseling and skill assessments, etc.

Weightage for admission should be given as follows:

- 12<sup>th</sup> Marks (60%)
- Motivation for the subject (10%)
- Social Concern (10%)
- Motivation for Research (10%)
- General Impression (10%)

More students should be inducted under sports, extra-curricular, NCC to bring in various aspects of development under the autonomous system. Therefore marks should be increased for these categories so that they gain entry into the institute.

### **Guidelines for counselling:**

1. Why do you want to study this subject?

2. Give 1-3 fascinating ideas you have about this subject?
3. What is your future plan and how is studying this subject going to help you to achieve your future plan?
4. Why do you want to study in Xavier's?
5. Share with us the scope of this subject by focusing on your career.

**Social concern and Environmental concern (10%)**

1. Which are the most important social issues according to you that our country is facing?
2. What contribution you wish to do in order to eradicate this issue?
3. Give 1-2 ideas that you wish to implement to address human right/ illiteracy/ racism/ castes issues/ public health/ etc.
4. Is the student a member of any social issues related NGO?
5. What have you done so far to serve society? Are you involved in any social organizations?
6. List 1-2 contribution the student has made towards a better, cleaner environment
7. Is the student a member of any environment related NGO?
8. What contribution student wishes to give to keep the campus an environment friendly campus?
9. Does this student show concern for environment/ cleanliness/ neatness/ etc.

**General impression (10%)**

1. Is the student regular in attending classes during 11 and 12
2. Do you think that he/she has the required value system/ can be trained into our values system? (integrity, honesty, hard work, fairness etc.)
3. Does he/she have a good personality?
4. Does he/she appear disciplined, groomed and obedient?
5. Do you want him/her in your department for the next 3 years
6. Do you think that this student if selected will bring glory to your department?

**Research Ability (10%)**

1. Does he/she show research aptitude? Have a curious mind?
2. Does he/she ask relevant questions
3. Has ever taken up small projects in school? Narrate.
4. Gauge interest in internship/ project etc.

**Admission Policy for the year 2018-19**

1. Admission for the academic year 2018-19 is online and applicants have filled the online form.
2. Merit list of students applying for a particular subject will be prepared according to XII standard marks for each department by June 4 and given to HoD. Based on this list, all students will be called for scrutiny of their mark sheet and other credential. This information of mark sheet verification will be communicated to the respective student through sms/email and it will also be displayed on the website as well.
3. Each student is expected to come with a print out of their application for verification with the following attachments:

- Original mark sheet
  - Photocopy of the mark sheet
  - School leaving certificate
  - First attempt certificate
  - Eligibility certificate in case if the student is from outside the Gujarat state
  - Adhar card copy
4. Each department is expected to verify the mark sheet and other certificates and forward to principal's office for meeting Fr Principal.
  5. Kindly note that 15 marks should be deducted from the 3 core subjects in preparing merit list in case of old students/year to a maximum of 30 marks
  6. In case of second mark sheet, please mention it on the application form.
  7. The students will be invited to meet the Principal. If selected they will then be required to pay their entire first Semester fees within 48 hours, pending which the admission remains cancelled. Mode of payment: DD/online
  8. A second list may be put up if there are vacancies in any subject.
  9. The admission for Catholics/Christians/ SC/ST will follow a parallel procedure, with a separate counter for scrutiny, etc. In addition to the certificates mentioned in point 3, letter from parish priest is to be submitted.
  10. All OBC/SEBC students will be counseled by the respective department
  11. Candidates aspiring to take admission to St. Xavier's College (Autonomous), Ahmedabad are hereby notified that St. Xavier's College accepts all types of fees and charges (for Application, Admission etc.) in CASHLESS mode only [as per Government/UGC directives]. No cash payment will be accepted.
  12. Candidates have the following choices of payment
    - 1) DEMAND DRAFT must be in favour of "ST XAVIERS COLLEGE FEES" payable at Ahmedabad.
    - 2) Debit/Credit Card facilities with Online Banking activated on the card. Further, the Debit/Credit Card must have sufficient transaction limit in accordance with the amount to be paid.

## ***D. Teaching learning methods adopted by the college***

### *(i) Teaching Learning Methods adopted by the College.*

#### **Student Learning Outcomes oriented curriculum was designed after obtaining autonomous status**

This is to help faculty in designing Student Learning Outcomes oriented curriculum for a UG/PG degree programme in Xaviers. Programme learning outcomes are clear, concise statements that describe how students can demonstrate their mastery of programme goals. These statements identify the knowledge, skills, values, and attitudes that students will be able to demonstrate, represent, or produce upon successful completion of the programme.

#### **1. It includes:**

- 1) Mission Statement for the department
- 2) Programme level Student Learning Outcomes with each of the following domains:
  - ✓ More knowledge and skill oriented course design (content)
  - ✓ Research is included in each paper (critical thinking, Project management)
  - ✓ Extension aspect is linked in each paper
  - ✓ Interdisciplinary nature of each subject (Extra Departmental Courses)
  - ✓ New methodology adopted to teach/ methodology wish to change
  - ✓ Introducing alternate/ new subjects/ new topics in the curriculum (content)

- ✓ Incorporating PGOP values/ personal growth in designing course (Integrity and values)
  - ✓ Incorporating global vision in course content (self-development leading to global citizenship)
  - ✓ Career orientation/ internship in course designed
- 3) Summary of the assessment plan for the programme and Assessment modifications wish to be include in the course
  - 4) A list of employment prospects for graduates of the programme
  - 5) The URL address for the website address of the programme

## **2. Course Overview & Course Objectives**

This is a set of Statements to explain concisely

What the course is about?

How the overall course will support student learning in the discipline(s) of the programme.

It provides a holistic view of the course with coherent information to the students.

A description of any prior knowledge or co-requisites required for this course should also be explained.

Course objectives should be very clear and explain what the course is designed to achieve.

The objectives should align with Course description (what is taught and when), Programme Learning Outcomes, Course Learning Outcomes, Teaching & Learning activities and Assessment plan. Also reveal gaps in the curriculum.

## **3. Course Content**

The fundamental concepts involved in each topic should be highlighted so that students understand what is and what is not covered in the course.

## **4. Course Learning Outcomes/Students' Learning Outcomes (SLO)**

They describe the Knowledge, Skills, and abilities students can expect to attain during the course. These are the statements that describe what students will be able to know, think, do or value as a result of their educational experience during the said course. Course SLOs should be related to programme's Academic Learning Plan. They should align firmly with the course topics, assignments, research, extension, global competency, examinations, newer methodology implemented, and other graded work.

- They are a set of statements that describe what students will be able to know, think and do at the end of the course.
- They should be written from the perspective of the students and should clearly communicate what is expected of students at the level they are at and what they should achieve by undertaking the course.
- They are more specific/detailed as they describe the unique skills and knowledge associated with the specific course. However they should be general enough to provide flexibility and accommodate variations in specific content as the field evolves over time.
- They should be written in a language that clearly implies a measurable behavior (Action words) or quality of students' work.
- They should be written in a language that a non-specialist will understand, i.e. the students and individuals who do not share your disciplinary expertise will be able

to understand the knowledge, skills, abilities, and values they can expect to attain from the course.

**5. Assessment Schemes (including rationale)**

- A break up of Internal assessment and Final examination should be provided
- It should be clearly stated that what is required to pass the course and also the requirement for progression such as:
- Class attendance & Participation
- Projects& Presentation
- Assignments/ Quiz
- Lab. work/ Field trips
- Biweekly test
- Mid Semester Exams
- Semester Exams
- A breakdown of each of the component with their weight and it will be due should be clearly stated

**6. Course Policy**

- What do I do if I need more time?: Contact faculty through email
- Policy for accepting & grading late work: one mark deducted per day after the schedule date
- Re-marks & Moderation procedure: According to the policies laid down by the BoS
- Group work/Peer Assessment/Self Assessment:
- Referencing style required in the course
- A statement relating to plagiarism and dishonest practice and regulations

**7. Means/Processes for student feedback on the course:**

An online student feedback is collected after end semester. It is then analyzed and communicated to the faculty by IQAC

**8. Career Opportunities:**

Suggest possible career option

***E. Examination reforms by the College***

*(i) Examination and Evaluation*

1. Regarding assessment

- a) CoE will mask the roll number on the answer sheet and a dummy number will be assigned to script before it is given for assessment in future
- b) Semester-2 answer sheets will be first, internally evaluated, then externally.
- c) Putting tick sign should be done by the examiners inside the paper.
- d) Marks sheet will be prepared in a separate sheet given for that purpose and submit to the Controller of Examinations.
- e) The assessed answer sheets should be submitted to the Controller of Examinations.
- f) CoE will distribute the script to the external examiner and collect the mark sheet.
- g) Mechanism for gracing will be finalized by examination committee.

2. CoE will also explore the possibility of centralized assessment for internal assessment.
3. Over a period of time, CoE will set up a system of selecting the external examiners and moving towards double evaluation of all papers
4. ATKT examination for Semester 1 (internal) will be conducted from March 30 and External will be conducted from May 2, 2015.
5. A student must take at least one CIA examination to pass internally.
6. Principal will address the entire faculty and highlight the discrepancy observed during the End Semester-1 assessment.

*(ii) Achievements of Students (in examinations and other activities co-curricular, extracurricular activities)*

Academic year		Sem	Distinction	First class	Hi-second class	Second class	Pass class	Reappear	Total
2014-15	BA	1	42	60	32	16	3	2	155
		2	54	63	30	37	6	0	190
	B. Sc	1	24	60	27	11	5	6	133
		2	42	78	35	41	16	0	212
	M. Sc. (Chem)	1	0	6	2	2	0	0	09
		2	1	4	7	7	3	0	22
	M. A. (ENG)	1	6	7	3	2	1	0	19
		2	9	5	4	2	1	0	21

Academic year		Sem	Distinction	First class	Hi-second class	Second class	Pass class	Reappear	Total
2015-16	BA	1	35	52	21	16	7	0	131
		2	51	61	22	13	5	0	152
		3	56	52	22	9	6	1	146
		4	59	74	22	21	11	1	188
	B. Sc	1	43	52	19	5	0	0	119
		2	49	53	20	4	5	1	132
		3	47	62	26	13	7	6	161
		4	61	75	40	21	4	5	206
	Bca	1	28	13	10	12	3	0	66
		2	27	20	6	3	1	0	57
	B. Sc.	1	8	18	1	0	0	0	27
	Bt	2	14	17	2	0	0	0	33
	M. Sc. (Chem)	1	1	7	6	5	1	0	20
		2	3	4	8	4	1	0	20
		3	1	8	4	4	0	0	17
		4	1	7	4	3	0	0	15

	MA	1	5	16	2	0	0	0	23
		2	6	11	1	1	0	0	19
		3	9	8	3	1	0	0	21
		4	11	5	3	0	0	0	19

Academic year		Sem	Distinction	First class	Hi-second class	Second class	Pass class	Reappear	Total
2016-17	BA	1	59	66	16	7	4	0	152
		2	66	71	13	17	2	0	169
		3	61	50	18	11	5	0	145
		4	60	50	22	10	7	0	149
		5	84	67	20	11	5	0	187
		6	95	66	16	8	3	0	188
	B. Sc	1	56	47	19	13	0	0	135
		2	72	64	25	6	2	0	169
		3	84	60	22	11	6	0	183
		4	85	60	16	12	1	0	174
		5	81	64	22	14	2	0	183
		6	82	90	35	22	8	0	237
	B. Com	1	4	12	6	0	0	0	22
		2	6	9	4	2	1	0	22
	Bca	1	30	20	10	5	1	0	66
		2	38	18	9	4	1	0	70
		3	19	11	17	13	6	0	66
		4	36	21	12	7	4	0	80
	B. Sc. Bt	1	9	19	3	2	1	0	34
		2	24	12	1	0	0	0	37
		3	20	8	3	1	0	0	32
		4	25	4	3	1	0	0	33
	M. Sc. (Chem)	1	3	12	4	1	1	0	21
		2	3	8	3	2	2	0	18
		3	2	7	0	3	0	0	12
		4	5	10	2	3	0	0	20
	M. Sc. (Biochem)	1	1	5	4	1	0	0	11
		2	5	7	2	2	0	0	16
	M. Sc. (BDA)	1	13	2	0	0	0	0	15
		2	13	1	1	0	0	0	15
	MA	1	5	4	0	0	1	0	10
		2	5	4	0	0	0	0	9
		3	8	11	3	1	0	0	23
		4	7	13	2	0	0	0	22

Academic year		Sem	Distinction	First class	Hi-second class	Second class	Pass class	Reappear	Total
17-18	BA	1	76	78	36	16	4	0	210
		2	59	66	16	7	4	0	152
		3	91	44	12	11	2	0	160
		4	80	69	14	7	2	0	172
		5	79	43	14	9	1	0	146
		6	80	60	22	10	1	0	173
	B. Sc	1	88	79	24	7	1	0	199
		2	140	66	13	7	0	0	226
		3	76	59	37	12	5	0	189
		4	77	71	25	20	2	0	195
		5	81	64	22	14	2	0	183
		6	91	62	30	12	2	0	197
	B. Com	1	12	21	4	3	1	0	41
		2	9	8	7	6	3	0	33
		3	16	13	4	3	0	0	36
		4	14	7	1	3	0	0	25
	BCA	1	54	30	1	2	0	1	88
		2	41	21	2	0	0	0	64
		3	40	17	12	4	6	0	79
		4	45	20	9	2	8	0	84
		5	36	35	15	7	6	0	99
		6	38	33	15	5	4	0	95
	B. Sc. Bt	1	10	24	1	0	0	0	35
		2	28	6	0	0	0	0	34
		3	15	18	4	0	0	0	37
		4	12	14	3	0	0	0	29
		5	9	18	3	1	0	0	31
		6	18	14	2	1	0	0	35
	M. Sc. (Chem)	1	0	12	6	1	0	0	19
		2	2	13	8	5	0	0	28
		3	1	12	9	1	0	0	23
		4	7	16	1	0	0	0	24
	M. Sc. (Biochem)	1	2	9	2	1	1	0	15
		2	6	11	1	2	0	0	20
		3	7	6	1	1	0	0	15
		4	15	1	0	0	1	0	17
	M. Sc. (BDA)	1	12	7	1	0	0	0	20
		2	11	4	3	1	0	0	19
		3	13	0	0	0	0	0	13

		4	15	0	0	0	0	0	15
	MA	1	3	6	3	1	1	0	14
		2	6	3	0	0	0	0	9
		3	4	5	0	0	0	0	9
		4	5	4	0	0	1	0	10
	M. Sc. (Math)	1	3	3	2	1	0	0	9
		2	7	10	2	0	0	0	19

*(iii) Achievement of Teachers*

**MoU signed for collaborative research work**

1. Department of Chemistry and ACTI (The Association of Chemical Technologists India)
2. Department of Physics and IPR
3. SXCA with SPU, UNEP-GEP-MOEF-ABS Project, Gujarat Biodiversity Board, Gandhinagar for preparation of two PBRs of Zod and Hadgud villages, Anand.

**Total Seminar proposal submitted:**

1. Sanctioned: 5 approved: Department of Sanskrit, Gujarati-Hindi, English, Mathematics and Chemistry

**Total seminars / workshops/ talks organised (only for faculty):**

1. Staff research seminar and annals: (Dr. K. Pundarikakshudu on 'Development of Herbal Drugs')
2. 'Vision Building under Autonomy'
3. Fr. Valles Lecture Series
4. 'Sanskrit Bhasha Kaushalyam'. Four day workshop
5. 'Next Generation DNA Sequencing'
6. Strategic Action Planning
7. Advanced BSc Programme
8. 'Computational Chemistry',
9. 'X-ray Crystallography',
10. 'General Awareness of Chemical Industries'
11. Public Policy Perspectives in India
12. 'Measuring Molecules: Mass Spectrometers in Science, Education and Business'
13. 'Plasma and its Production'.
14. workshop on RTI
15. Workshop in Problem Solving and Enrichment in Mathematics.
16. The Department of Gujarati and Hindi also organized guest talks: Can you give details
17. Sanskrit also organised a popular lecture: possible to get details
18. Simulated Scanning Tunnelling Microscopy and Spectroscopy based on First Principles Methods'.

**Special educational award for services:**

1. Dr. Profina Christian
2. Dr Arti Oza
3. Dr Atul Makwana

4. Dr TC Pandya
5. Dr Rajesh Iyer
6. Dr Lancelot D'Cruz
7. Dr Nandita Ganguly

## **F. Administrative activities**

- (i) *Whether the Governing Body, Academic Council, Finance Committee and Board of Studies are constituted? If yes, give constitution of these bodies.*

The Governing Body, Academic Council, Finance Committee and Board of Studies constituted are:

### **Governing Body**

1. Fr Francis Parmar, Chairperson
2. Dr (Fr.) Robert Arockiasamy, Principal, Member Secretary
3. Dr. Rajpalsinh, UGC Nominee
4. Dr Himanshu Pandya, State Govt. Nominee
5. Dr Baldev Patel, Gujarat University Nominee
6. Adv. Rakesh Gupta, Management Nominee
7. Dr (Fr.) Lancelot D'Cruz, Management Representative
8. Fr Fernando Franco, Management Representative
9. Dr U.B. Gothi, Senior Faculty
10. Dr Nirmal Desai, Senior Faculty
11. Dr Sebastian Vadakan, IQAC Coordinator

### **Academic Council**

1. Fr Robert Arockiasamy, S.J., Principal, St. Xavier's College
2. Dr Nisha Shah, Dept of Chemistry, Gujarat University
3. Dr Hyacinth Highland, Dept. of Zoology, Gujarat University
4. Dr Manubhai Makwana, Dept. of Sociology, Gujarat University
5. Dr Sudhir K Jain, Director, IIT Gandhinagar
6. Dr Ernesto Noronha, Professor, IIMA
7. Dr Malay Mahadevia, Whole Time Director, Adani Infrastructure
8. Mr Pankaj Mudholkar, Director, Aakruti promotions & Media Ltd
9. Dr Abhijit Sen, Ex-Dean, Plasma Research,
10. Mr Janmejy Vyas, Managing Director, Dishman Pharma
11. Ms Aditi Vyas, MD, Azafran group
12. Dr Abhay Chauhan, TCS, Bangalore/ abhay.chauhan@tcs.com
13. Dr Lancy Lobo SJ. Director, Centre for Culture and Development, Baroda
14. Dr Raghavan Rangarajan, Dean of the Undergraduate College, Ahmedabad University, Ahmedabad
15. Dr Lancelot D'Cruz, Dept of Botany, St Xavier's College
16. Dr Nirmal Desai (CoE), Dept of Chemistry, St Xavier's College
17. Prof Ami Shah, Dept of Economics, St Xavier's College
18. Prof Saurabh Vaishnav, Dept of English, St Xavier's College
19. Prof Puransinh Makwana, Dept of Gujarati-Hindi, St Xavier's College
20. Dr Khushnuma Banaji, Dept of Psychology, St Xavier's College
21. Dr Shuchita Mehta, Dept of Sanskrit, St Xavier's College
22. Dr Sudeshna Menon, Dept of Biochemistry, St Xavier's College

23. Dr Atul Makwana, Dept of Chemistry, St Xavier's College
24. Fr Johnson Kuruvilla, Department of Computer Sciences, St Xavier's College
25. Dr Rajesh Iyer, Dept of Physics-Electronics St Xavier's College
26. Dr Udayan Prajapati, Dept of Mathematics, St Xavier's College
27. Dr UB Gothi, Dept of Statistics, St Xavier's College
28. Prof Bhadauria, St Xavier's College
29. Prof M.C. Patel, St Xavier's College
30. Dr Sharad Sondarva, Dept of Biology, St Xavier's College
31. Dr Mallika Sanyal, Member Secretary, St Xavier's College
32. Dr Sebastian V, IQAC Coordinator, St Xavier's College

### **Finance Committee**

1. Fr Robert Arockiasamy, Chairman, bobsj@sxca.edu.in
2. Fr Ramesh Macwan, Nominee by the Governing Body of St Xavier's College, Ahmedabad
3. Fr KT Mathew, Treasurer of The Ahmedabad St Xavier's College Trust, ktmathew@jesuits.net
4. Prof Victor Saldanha, External Financial advisor, saldanha.victor@gmail.com
5. Dr MD Momin, Senior Teacher of the College, mahmadali.momin@sxca.edu.in
6. Prof Mahesh Patel, Senior Teacher of the College, mahesh.patel@sxca.edu.in

### **Examination Committee**

1. Dr Robert Arockiasamy (Principal), robert.arokiasamy@sxca.edu.in
2. Dr Nirmal Desai (dCoE), nirmal.desai@sxca.edu.in
3. Dr Arun Patel, Senior faculty of the college, arun.patel@sxca.edu.in
4. Dr TC Pandya, Senior faculty of the college, tushar.pandya@sxca.edu.in
5. Dr Pinky Desai, Senior faculty of the college, pinky.desai@sxca.edu.in
6. Dr Shuchita Mehta, Senior faculty of the college, shuchita.mehta@sxca.edu.in
7. Dr Johnson Kuruvilla SJ, Faculty of the college appointed by the Management, johnsj73@gmail.com
8. Dr Sebastian Vadakan (IQAC Coordinator), sebastian.vadakan@sxca.edu.in

### **IQAC**

1. Fr (Dr) Robert Arockiasamy SJ, Principal, SXC
2. Fr (Dr) Lancelot D'Cruz SJ, Vice Principal for Science, SXC
3. Dr Nirmal Desai, CoE, SXCA
4. Dr Sudhir Jumani (External Expert)
5. Dr Surendra Bakshi, Director, Shrunik Biotech Pvt. Ltd.(External Expert)
6. Ms Dipali Vijh (External Expert)
7. Prof. Ami Shah, Member
8. Dr Clement CJ, Member
9. Dr BB Bhadauria, Member
10. Dr Arti Oza, Member
11. Mr Agnelo Gonsalves, Administrator, SXC
12. Dr Sebastian.V. (Coordinator, IQAC)

### **Summary of AQAR submission**

AQAR 2013-14: Submitted on 2/1/2015

AQAR 2014-15: Submitted on 27/1/2016  
 AQAR 2015-16: Submitted on Feb 3, 2017  
 AQAR 2016-17: Submitted on January 29, 2018  
 AQAR 2017-18: Yet to submit

(ii) *Whether meetings of these bodies are conducted as per UGC guidelines for autonomous colleges? If yes, give dates of the meetings held during the last five years.*

Committee	1 <sup>st</sup> meeting	2 <sup>nd</sup> meeting	3 <sup>rd</sup> meeting	4 <sup>th</sup> meeting	5 <sup>th</sup> meeting	6 <sup>th</sup> meeting	7 <sup>th</sup> meeting	8 <sup>th</sup> meeting
Governing Body	21/3/2015	12/9/2015	19/3/2016	17/9/2016	25/3/2017	7/10/2017	10/3/2018	8/9/2018
Examination Committee	8/8/2014			4/3/2016	30/8/2016	1/3/2018	7/8/2018	
Finance Committee	9/10/2014	16/3/2015	15/3/2016	15/2/2017	26/2/2018			
Academic Council	18/10/2014	28/2/2015	22/8/2015	20/2/2016	18/3/2017	23/9/2017	24/2/2018	4/8/2018
IQAAC	24/9/2014	15/10/2014	18/2/2015	11/7/2015	7/9/2016	26/8/2017	18/8/2018	

(iii) *Comments of the Committee on the resolutions passed by the above bodies in recent times*

### G. Fund utilization/ financial planning

Sr. No.	Year	Expenditure Heads	Total
1	2014-15	Maintenance of Campus	4740476.00
2	2015-16	ICT	13350000.00
3	2016-17	Campus Infrastructure and facilities	73,01,303.00
4	2017-18	Equipments Others	--

### H. Achievements of the college after autonomy

- The introduction of 9 new courses and the student strength in each of these courses clearly indicates the demand for them
- The competitive syllabus designed by the BOS of each department resulting in students being accepted to prestigious universities globally
- The implementation of ERP/Staff and students e-mail/up gradation of the website
- The increased participation in research by staff and students
- Our ranking as a college in NIRF and India today
- The state of the art laboratory set-up by TCS with a budget of 60 lakhs within our campus
- The 1 crore grant received by the college from DST-FIST

***I. Action taken report on the recommendations the last Autonomy review Peer Team visit***

**Recommendations of NAAC team to College (2013)**

<b>Suggestions</b>	<b>PI indicate what can be done</b>
College may draw up a detailed perspective schedule for its development	IQAC prepares a plan and it is discussed in the Governing Council meeting subsequently translated into action.
The college need to create a research council of tis own to monitor and promote research, projects and international collaborations	<ul style="list-style-type: none"> <li>Created and responsibility are spelt out</li> </ul>
Dynamic growth strategies should be developed for active participation of the stakeholders for the academic growth and development of the institution	<ul style="list-style-type: none"> <li>Students are roped in, in various activities and in decision making</li> <li>IQAC and Micro IQAC plays a key role in developing growth strategies</li> </ul>
College may introduce more course options and PG programmes in emerging areas	<ul style="list-style-type: none"> <li>9 new course have been initiated</li> <li>New course option offered</li> <li>Several new soft skill, foundation and electives initiated</li> </ul>
Placement, mentoring, tutorials, counselling, entrepreneurship and incubation activities may be systematized	<ul style="list-style-type: none"> <li>There is a staff member acting as placement officer</li> <li>Incubation centre is being formalized</li> <li>There are two entrepreneurial programmes and centers</li> </ul>
Indoor sports facilities, gymnasium and health centre may be created	<ul style="list-style-type: none"> <li>Being worked out</li> </ul>
ICT may be intensely utilized in the teaching leading process	<ul style="list-style-type: none"> <li>3 Smart boards installed</li> <li>14 classrooms equipped with LCD projectors</li> </ul>
Automation of the admission process, administration, finance may be completed	ERP is being used
Automation of Library may be carried out	To be completed

***J. Green Initiatives -- Solar Lights, Introduction of Bio Gas - Waste water Management & Solid Waste Treatment,***

- 75KW power
- Solar water pump
- Solar street lights
- LED being replaced with conventional lights
- Waste management as much as possible on campus

- Organic manure production
- Rain water harvesting in place
- More trees planted
- LPG gas in laboratories replaced with CNG
- Equal Power distribution of the buildings done
- Water tanks were cleaned and regular replacement of leaking pipes
- Two permanent earth pits connected to college power supply
- Shifting of main switch board and replacing of armed Cable

### ***K Best Practices & Institutional Values***

1. **Title of the Practice:** SXCA Chronicles
2. **Objectives of the Practice:**  
Document and show case the achievements of staff and students; Give visibility to Xavierites; Document events for the preparation of AQAR
3. **The context that required the initiation of the practice:**  
Acknowledging and showcasing the achievement of staff and students of an institution is vital to bring in camaraderie. A chronicle was the felt need of the hour. Chronicles began with its first issue in 2013. So far 10 issues have been released to the public.
4. **The Practice:**  
Every achievement of staff and students are highlighted in short description and supported with appropriate photographs. These are then released in two forms: electronic to all well wishers and past students and in the printed form only to a handful of neighbouring institutions and various departments.
5. **Obstacles faced if any and strategies adopted to overcome them**  
The major difficulty is in gathering information when several programmes are being organised by various in-charges. There is a need to evolve a system where information is passed on to the IQAC office with relevant photographs so that all activities are documented.
6. **Impact of the practice**  
It has helped the institution to document all the events and bring in a lot of unity and oneness with the institution. Staff and students feel belonging to the institute.
7. **Resources required**  
Stationary, manpower and infrastructure facilities

## **Special Thanks to the Micro IQAC members who compiled the report**

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