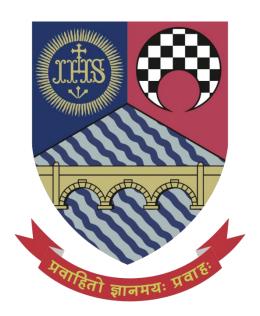




# ST. XAVIER'S COLLEGE (Autonomous) Ahmedabad

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# (Autonomous) Ahmedabad



**Annual Report** 

(2022 - 23)

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# Education is not the filling of a pot but the lighting of a fire.

- W.B. Yeats

# **INTRODUCTION**

Education includes a lot of giving, inculcating and sowing; however, it also includes enlightening, nurturing, igniting. The annual report of St. Xavier's College, Ahmedabad, for the academic year 2022-23 is a testimony of our efforts towards fostering academic prowess, enlightening thought processes, empowering ethical self-hood, and nurturing wholesome growth. The achievements of the college evidence that focus and milieu. In other words, this report is an assessment of whether we have kindled the flame to set ablaze the spirit of an all-round education.

This report is divided into following sections:

- 1) About the College
- 2) Achievements
- 3) Student activities and events (Co-curricular and Extra-curricular)
- 4) Research
- 5) Faculty pursuits and activities
- 6) Departmental activities and achievements
- 7) Best Practices

#### ABOUT THE COLLEGE

St. Xavier's College, Ahmedabad, is a Catholic Minority educational institution run by the Society of Jesus, a religious group of international repute. As one of nearly 150 institutions of higher education across the world run by the Society of Jesus (or Jesuits), the college has a history and tradition of commitment to quality education. In alignment with that commitment and with international standards, the college provides the students with an environment for all-round development, helping them grow to their intellectual, physical, aesthetic, social and spiritual potential even as they develop values of integrity, hard work, nation-building, social welfare, and fairness. In other words, the college is dedicated to building a more inclusive and humane society.

St. Xavier's College, Ahmedabad, maintains a high level of excellence in all curricular and extra-curricular aspects. The activities and events of the college have all been focused on the comprehensive development of the students. The pursuits and accomplishments of the faculty members and staff have contributed towards fostering an environment of scholarship and learning. The staff and students together create a healthy environment for learning equitably, unbiasedly and open-mindedly, where all students have equal opportunity as children of God.

# **ACHIEVEMENTS**

# **College Ranking / Rating:**

- St. Xavier's College, Ahmedabad, was accredited by the National Assessment and Accreditation Council (NAAC) with A+ grade and a CGPA of 3.27 in the fourth cycle of academic evaluation.
- St. Xavier's College, Ahmedabad, tops the Gujarat State Institutional Rating Framework (GSIRF) with a Five-star rating, emerging the Best College in the State.
- St. Xavier's College, Ahmedabad also achieved a rare feat of getting ranked among the top 100 colleges at the National Institutional Rating Framework (NIRF), acquiring the 52<sup>nd</sup> position.
- The college was surveyed by the leading national magazine, India Today, on different parameters and achieved the following positions:

- o Ranked 22<sup>nd</sup> on the list of the best Arts colleges in India
- o Ranked 30<sup>th</sup> on the list of the best Science colleges in India
- o Ranked 13<sup>th</sup> on the list of the best Computer Applications colleges in India
- In another national survey conducted by The Week, the college achieved the following positions:
  - o Ranked 28<sup>th</sup> on the list of the best Arts colleges in India
  - o Ranked 25<sup>th</sup> on the list of the best Science colleges in India

#### **Academic Achievements:**

Pass Percentages: Our results and pass percentages are evidences of our academic achievements:

# **Under-Graduate Pass-Percentages (2022-2023)**

PROGRAMME	SEM 1	SEM 2	SEM 3	SEM 4	SEM 5	SEM 6
B.A.	65%	79%	79%	87%	92%	76%
B.Sc.	47%	55%	59%	65%	74%	83%
B.Sc BT	67%	63%	76%	80%	72%	97%
B.C.A.	75%	74%	77%	80%	86%	83%
B.Com. (BPS)	73%	80%	88%	84%	92%	82%
B.Com. (General)	73%	82%	78%	66%		
B.Sc. (Computer Science)	65%	70%	67%	72%		
B.Sc. (Maths)	100%	100%	100%	100%		
B.A. (Economics Hon.)	71%	91%				



#### Post-Graduate Pass-Percentages (2022-2023)

PROGRAMME	SEM 1	SEM 2	SEM 3	SEM 4
M.A. (English)	72%	80%	100%	96%
M.A. (Psychology)	91%	87%	96%	100%
M.Sc. (Organic Chemistry)	75%	93%	85%	100%
M.Sc. (Biochemistry)	77%	82%	92%	100@
M.Sc. (BDA)	91%	97%	96%	90%
M.Sc. (Mathematics)	73%	94%	81%	83%
M.Sc. (Biotechnology)	82%	76%	78%	100%
M.Sc. (Physics)	81%	96%	87%	100%
M.Sc. (Chemistry Analytical)	72%	83%	87%	100%
M.Sc. (Botany)	91%	100%		

Further details pertaining to the results are attached in Annexure 3.

# **Sports Achievements:**

At the Gujarat University level, St Xavier's College, Ahmedabad, took part this year in 15 games in the men's inter-college categories and 10 games in women's inter-college categories.

In the men's section the college participated in Swimming, Chess, Table Tennis, Badminton, Cross Country, Football, Basketball, Boxing, Volleyball, Kabaddi, Cricket, Kho-Kho, Hockey, Wrestling and Athletics. Of these, the college were champions in Football, Basketball, and Athletics and second in Cross Country.

In the women's section the college participated in Table-tennis, Badminton, Volleyball, Basketball, Swimming, Rifle Shooting, Archery and Athletics. Of these, the college emerged champions in Swimming, Basketball and Athletics, and achieved the second positions in Volleyball and Table-tennis. In Athletics, the college won the Gold Medal in Discus Throw (women), Silver Medal in High Jump (men), and the Bronze Medal in 200 meters running (women).

This year 166 student took part in different Inter-collegiate tournaments, and 28 students were selected to participate at the All India Inter University and National levels. A detailed list of individual student achievements in sports is attached in the <u>Annexure 1</u>. Listed here are a few of the highlights:

- Priyanshi Bhandari (SYBA) was selected for Khelo India National Games, and won the Gold Medal in Lawn Tennis.
- Ayushi Hirani (SYBA) was selected for Khelo India National Game for the Gujarat
   State Women's Football team. The team won the Silver Medal.
- Hiranya Parekh (SYBA) participated in the 58<sup>th</sup> Gujarat State Shooting championship and won the Bronze Medal in the women's 50m Rifle Prone Shooting event. She was also selected to represent Gujarat University.
- Vishwa Panchal of the Commerce Department has been an outstanding Basketball player, and part of the winning teams at the University and State levels. She also participated at the National level events. She was also a member of the Runners-up 4x100 meters Relay Race at the Inter-College University event.
- Patel Dhruvi won the Gold Medal in Discus Throw at the Gujarat University intercollege event.
- Gautam Bhimani secured the Runners-up position at the 400m. race and was part of the 4x100m. relay race team that won the Runners-up position too.
- Kushwaha Rohit and Patel Dhyey jointly won the Silver Medal in High Jump at the Gujarat University inter-college event.
- Choksi Shri won the Bronze Medal in the 200m race at the Gujarat University inter-college event.

#### **Achievements in Co-curricular Activities:**

The staff and students of the college have won accolades in different fields. A detailed list of individual achievements of students in co-curricular activities is attached in <u>Annexures 2</u> and 3. Some highlights are listed here:

- o Disha Parmar (T.Y.B.A.) achieved a Diploma in Sanskrit Teaching.
- Amisha Dandodara (T.Y.B.A.) a student of the department of Gujarat, is recognized for reading news in Braille for the All India Radio, Ahmedabad.
- Palash Shah won the First Prize in Poster Presentation at the International Conference on Recent Trends in Chemical Science, at M.N College Visnagar. Keya Chavda won the third prize at the same conference.
- Sneha Mukherjee, a student of the Commerce department, won the first position for Classical Dance at Genesis 2023, an intercollege competition organized by Nirma University, and the runner's up trophy as well at an intercollege event held under 'Elysian 5.0'.
- Dr. Shivani Shah, faculty at the Commerce Department, achieved a Copyright (L-116372/2022) for developing a model questionnaire for evaluating the impact of e-marketing on the purchase decisions of consumers.

#### **Youth Festival Achievements:**

Every year Gujarat University organizes an inter-college and inter-zonal Youth Festival, a series of competitions of fine arts, performing arts, and drama and oratory arts spreading over two or three days each. This year, 180 students of SXCA participated in 21 different events at the festival - 'Yugam' - in September 2023. The college won prizes in 16 events at the inter-college round and 11 events at the inter-zonal round. The detailed list of these winners is attached in Annexure 2.

#### **Culfest:**

Out of a participation in 26 events, the trophy for the department with the best performance was awarded to the Department of Biochemistry and Biotechnology, and the runners-up was the Department of Physics-Electronics and second Runner-up was Chemistry Department.

#### **NCC Achievements:**

- Essay-writing competition: The college NCC unit conducted an essay competition on campus. Our cadet MANDIRA ROY from 1 Gujarat Naval Unit stood first among the students and was awarded the best essay by home mister Harsh Sanghavi on 30 July, 2022.
- Camp-7 prizes: The college cadets who participated in the camp at the NCC headquarters won accolades in the following categories:
  - Best Discipline Cadet (CDT Mandira Roy)
  - Best Group Song (CDT Mandira Roy, CDT Mansi Parakh, CDT Kinjal Vaccheta, CDT Vedangi Jasleniya, CDT Ayushi-Parmar)
  - Recognition as the Best Anchor of the event (CDT. Suryanshu Singh, CDT. Hemiksha Gohil)
- Rashtriya Ekta Divas: Our Naval Unit cadets, senior Lcdt. Smit Chaudhary and Lcdt. Vandit Soriya, were a part of this national event from 21 October to 1 November 2022 at Rajpipla, representing our unit.
- SW Aayushi Parmar, an NCC cadet from our college, was selected to participate at a camp at Ezhimala, Kerala, on 6 January 2023. INA is the place where Navy officers are trained and prepared to fight.
- L.Cdt. Bhutiya Divya, Cdt. Priyanshi Parikh and Cdt. Aayushi Parmar of our NCC unit were selected to participate at the National SW Camp Attachment, from 9 to 20 January 2023.
- Our cadet, LCDT Smit Chaudary represented the college and Gujarat State in the RDC Parade in Delhi.
- Cdt. Aniruddh Patil and Cdt. Astha Jani from the college participated in the RDC camp from 1 to 29 January 2023 at Delhi. Cdt. Aniruddh Patil was also selected to participate in the PM's Rally, which is held on the 28th of January in the presence of the Hon. Prime Minister of India as an integral part of the RDC.

#### **NSS Achievements:**

NSS SXCA Volunteer, Smeet Mishra, represented the college at the NSS 3-day Intercollege Zonal Camp at Bhanpur village, Mehsana, from 18 to 20 August 2022.

Two volunteers of NSS, SXCA, Smeet Mishra and Hetarthi Umaraniya were selected to be a part of the 10-member delegation representing the state of Gujarat at the National Integration Camp at Rashtrasant Tukdoji Maharaja University, Nagpur from 26 February to 4 March 2023.

#### **Research Awards:**

Since the awards for research were not given out in 2021-2022 due to the Covid limitations, the awards for both 2021-22 and 2022-23 were presented during this year.

- Research medals were awarded to 24 students for 2020-21 and to 74 students for the year 2021-22.
- The 'Researcher of the Year' awards were conferred to four staff members: Dr. Rajesh Iyer and Dr. Shital Doshi for the year 2020-21 and Dr. Suhani Parikh and Dr. Avni Divetia for the year 2021-22.

#### New Courses added to the Curriculum:

This academic year, the following new courses were added to the curriculum:

- i) Department of Economics : BA Economics (SF) Honours.
- ii) Department of Botany: MSc Botany.
- iii) Certificate course in Music offered to all undergraduate students.
- iv) Value-added course: Gardening and Horticulture for Beginners (Department of Botany).
- v) Value-added course: Statistical Analysis with SAS (Department of Statistics).

#### **Placement Cell:**

The college is concerned about the placements of students and their careers. The placement cell functions actively and conducted three career counselling seminars this year on resume building and interview skills, higher education, and studying abroad. The Commerce department conducted job placements wherein seven students were appointed at the Bank of America, Gift City, and 19 students were appointed at the Tata Consultancy Services, Gandhinagar. The details of this are given in Annexure 5.

# STUDENT ACTIVITIES AND EVENTS: CO-CURRICULAR

In the vibrant tapestry of academic life, participation in co-curricular and extracurricular activities provides students and teachers with invaluable experiences beyond the classroom.

# **Department Activities:**

The different departments of the college have also been actively engaged in a wide array of activities, ranging from state-level competitions to national-level events, giving students opportunities for all-round development:

- Chem-Cho, a State level event organized by the Department of Chemistry, is a conglomeration of science competitions based on green chemistry. It is an experiential learning module where students demonstrate the applications of what they have learned in the class rooms. It encompasses fun-games adapted to Chemistry, like Chem-Charades, Chem-Hunt, Cross word puzzles, Fun zone and card board games, model-making and innovative lab based experiments to familiarise chemical principles. It is organised annually by the Chemistry department. This year the event was organised on 2<sup>nd</sup> of February 2023.
- Cognizance, the Economics festival, which is popularly known as the Xavier's Ecofest is an annual National level event which started in the year 2013. The event consists of activities which hone the analytical and reasoning skills of the students in the area of economic thinking and encourages the development of leadership, public relations, marketing, team spirit, financial management, marketing, presenting, graphics and computing, discipline, punctuality etc. This year's EcoFest, held on 28 and 29 January 2023, attracted 346 participations in 6 offline and 2 online events on it's 10<sup>th</sup> anniversary. The Inaugural Ceremony welcomed Guest speakers Mr. Vinod Agarwal, past chairman CII Gujarat, Mr. Umesh Menon, Consul General of Mozambique, Gujarat and Mr. Ketan Mehta, RTD.
- The Biochemistry and Biotechnology Department of SXCA participated in the State level G-BION Science competitions on 19th February and 14 March 2023. This event encompassed a range of activities such as Scientoon, Article Writing, Bio Quiz, Poster Presentation, Oral Presentation, Concept Making, and Extempore.

- National Level Startup Bootcamp 1.0: The Department of Commerce organized a bootcamp for entrepreneurs and start-up enthusiasts from 20 to 25 February. This programme was intended to give participants extensive start-up guidance. The event compiled of a series of lectures by industry experts who, through their expertise, took participants on a journey from the origin of a plan to the fruitful development of a business.
- The Commerce Department participated in various State and National events:
  - 'MONETA 2022', a national management event, organized by R.A. Podar College of Commerce & Economics from 17 to 22 January 2023
  - Pitchers and Finexchange, a business conclave, organized by GLS University on 9 October 2022.
  - One student from the department published her poem in an anthology called Leaves and Thorns – Vol. 1 (10 January 2022).

Students of the Commerce Department participated in many other extra-curricular and won prizes therein.

# STUDENT ACTIVITIES AND EVENTS: EXTRA-CURRICULAR

#### **Sports:**

Besides participating in various events, the college organized the following Sports tournaments and events:

- The Rev. Fr. Donald Dias Invitational Football Tournament: This event was held from 23 January to 1 February, 2023. It was an invitational tournament for all the teams affiliated to the Ahmedabad District Football Association (ADFA) as well as other Districts of Gujarat State under GSFA. 14 teams participated in this Knock-out tournament at St. Xavier's College Football Ground. The first two places were given Trophies, Cash price and mementos. Participation certificates were given to all the participants.
- The Inter-College Basketball Tournament: This tournament was held from 1 to 3 February, 2023, for men and women on the Basketball Court of St. Xavier's College, Ahmedabad. 14 teams participated, of which 10 were men's and 4 were women's teams. The format of the tournament was league-cum-knockout. SXCA won the women's cup.
- The Inter-College Gujarat University Football Tournament: Gujarat University assigned the college the organization of this tournament this year too.

- Beginning on 22 September 2022, 19 colleges of Gujarat University participated at St. Xavier's football ground. The college team emerged champions.
- The Inter-College Gujarat University Basketball Tournament: Gujarat University assigned the organization of the Inter-College Gujarat University Basketball Tournament to our college this year too. 7 men's and 4 women's teams from Gujarat University colleges participated in this tournament on 11 December 2021 at the AES Basketball court. SXCA were the champions in both the men's and women's categories.
- Sports-fest 2022-23: St Xavier's College held its Sports-fest 2022-23 from 17 to 19 December, 2022. The sports-fest had six team-sports: Basketball, Football, Cricket, Volleyball, Kabaddi and Relay Race. This year the Sports-fest was conducted at an inter-departmental level. There were 14 teams for each of the six sports from the different departments at SXCA. The Captains and other players of the teams volunteered and officiated for the matches.

#### **NCC** activities:

- 1) Puneet Sagar Abhiyan: This event was organized by the respective NCC unit of the college, i.e 2 GUJARAT AIR SQN (F) NCC along with the help of CATCH Foundation on 3 April 2022. This activity involved cleaning the area of waste, as well as learning, creation of awareness and sensitization. Essentials like gloves, garbage bags were provided to the cadets for this purpose. Cloth bags were distributed to the all the cadets and ANOs by the CATCH Foundation.
- 2) NAAC Visit: The cadets of 2 GUJ AIR SQN (F) NCC, actively volunteered during the visit of the NAAC Peer Team on 21-22 June 2022, starting right from welcoming the evaluators to maintaining the discipline throughout the process, selflessly devoting their timely disciplinary services whenever and wherever required.
- 3) Essay-writing Competition: An awareness campaign was conducted by Gujarat Police to promote the new system of E-FIR. An essay writing competition was held for this purpose by the college NCC team on 30 July 2022.
- 4) CATC CAMP 7: The camp was a part of cadet-training, which is mandatory for all NCC cadets. Students of SXCA NCC of 2 GUJ AIR SQN (F) NCC, 10 SWs and 08 SD, took part in this camp at the NCC headquarters from 11 to 18

- August, 2022. They went through rigorous drill sessions, morning PT and exercise which gave them an overall exposure to life in the armed forces.
- 5) Combined Annual Training Camp: This training camp held from 11-18 August 2022 at the Ahmedabad headquarters annually, brings together multiple NCC units from different branches. The camp conducts joint training exercises so as to enhance interoperability and cooperation among different units.
- Independence Day Celebration: The college cadets celebrated Independence
  Day at the NCC Group Headquarters, Ahmedabad with the Commanding
  Officer Group Captain Manish Mahajan Sir, JWO Kuldeep Hooda Sir, Sgt.
  Jaipal Sir and other PI staff along with ANO Kirtan Parmar Sir from SXCA.
- 7) Combined Annual Training Camps: Four of these camps were held
  - At the Ahmedabad headquarters on 22-29 August 2022
  - On 16-19 September 2022 at the same place
  - At Rajpipla on 22-29 September 2022
  - On 7-20 October 2022 at the Ahmedabad headquarters
- 8) Here, the cadets are taught to face difficult and intense physical and mental situations. 1 Group Commander, 9 Circle Officers, 12 Permanent Instructors quided and supported the cadets in all the camps.
- 9) Guest Lecture on E-FIR: On 26 August 2022, the college invited honourable Police officials, zone -1 DCP Dr. Lavina Singh (IPS officer) and Mr. Vijay Sinh Jadeja (GPS officer) to talk to the students about digital governance of the Gujarat Government, particularly its e-FIR service.
- 10) The All India Vayu Sainik Camp (AIVSC): This is one of the most prestigious camps for the NCC Cadets of the Air Wing. Our cadets had participated in the pre-AIVSC activities to prepare for the camp, which was organised in Bhavnagar, Gujarat on 15 September, 2022. They took part in various competitions like drill, skeet shooting, aero modelling of various models, 0.22 rifle shooting, tent pitching etc.
- 11) Puneet Sagar Sankalp: NCC has launched a 'pledge-taking program' pan India titled 'The promise to preserve water bodies', or the Puneet Sankalp. Cadets of 1 GUJ NAVAL UNIT NCC, SXCA, took the vow with the vision to save mother earth. Over 45 cadets and the ANO took the pledge.
- 12) NCC Selection: On 28 September, 2022, the college unit conducted a selection programme for the enrolment of first year SDs AND SWs on the campus. The selection process involved a general awareness test in national

- and internal affairs and their physical fitness according to the standard protocol.
- 13) Volunteering for the 36<sup>th</sup> National Games: On the 29th of September, 2022 the cadets of 2 GUJ AIR SQN NCC volunteered for the event of 36th National Games held at Motera Stadium, Ahmedabad. The cadets witnessed the opening ceremony in the presence of the honourable Prime Minister of India Shri Narendra Modi.
- 14) 'Know Your Air Force' Exhibition: The cadets of 2 GUJ AIR SQN NCC paid a visit to the exhibition organised at the Air Force Station, Ahmedabad on Gandhi Jayanti (2 October, 2022).
- 15) Coast Guard Visit and Visit to a Ship Establishment: On 7-11 October 2022, our cadets visited the Coast Guard's Airbase at Porbandar. They were taught about the aircraft, weather observation and rescue and replenishment missions. The cadets were also taken to ICGS "Shoor" which is a 4-storey ship accommodating 100. Here, the cadets learnt about the engine room, diesel system, life boat, guns and missiles, fire safety mechanism and many other structures in the functioning of a ship. During this trip, cadets visited the Air Force air base as well to learn about the fighter jets used in the Indian Air Force.
- 16) Defence Expo 2022: DefExpo is a flagship biennial event of the Ministry of Defence, showcasing the land, naval, air as well as homeland security systems. Cadets of No. 2 GUJ AIR SQN NCC represented the unit and volunteered at the Defence Expo 2022 held at Ahmedabad and Gandhinagar on 18-22 October 2022. The cadets got the opportunity to meet the Hon. Prime Minister Shri Narendra Modi and Hon. Defence Minister Shri Rajnath Singh.
- 17) Blood Donation Camp: The college NCC unit participated in a blood donation drive on 27 November 2022 at the NCC Headquarters, Ahmedabad, as well as in other blood donation drives at the college and elsewhere.
- 18) Ship Modelling: In this camp from 6 to 9 December, 2022, at the NCC headquarters, cadets were introduced to naval ships. Ship modelling is an important part of NCC exposure at the RDC camp and Nau Sena Camp.
- 19) 'We Dare Not Fear' Naval Camp: Our cadets of the 1 Gujarat Naval Unit took part in a camp on 18 December 2022 at Naval Boat House, Kankaria, Ahmedabad, where they were instructed how to pull a boat, how to direct a

- motor boat, and kayaking. The activities were loaded with learning and cadets got a good exposure to water sports.
- 20) Boat Pulling Activity: On 18th of December, the Naval Unit cadets were taken to learn sailing, rafting, kayaking at Kankaria Lake, Ahmedabad.
- 21) Night Marathon: Our cadets participated in this marathon organized by the Gujarat Police on 21 January 2023 at the Riverfront, Ahmedabad. The marathon was held to create awareness about deaddiction.
- 22) Republic Day Celebration: The NCC cadets were at the forefront during the Republic Day celebrations. On 26 Jan 2023, the first year NCC cadets performed a drill to mark the beginning of the event. This was followed by flag hoisting and cultural events.
- 23) Swachchta Abhiyan at NCC Unit: On 2 February, 2023, our NCC cadets participated in a cleanliness drive in the walled city, organized by the NCC Unit, Delhi Chakla, Mirzapur, Ahmedabad.
- 24) Self-Defence Seminar: The Collegiate Women's Development Cell, together with the NCC unit, organized a self-defence seminar on 25 February 2023 to teach students to defend themselves against physical attacks and threats.
- 25) Firing Competition: On 28 March 2023, our cadets participated in a firing competition at the Golden Katar Baffle Range. The competition was conducted to select cadets who excel in firing and shooting, to participate in the Malvankar Camp which will be held in Kerala soon.
- 26) Tree Plantation Drive: On 20th March, 2023, our cadets participated in a tree plantation drive organized by the NCC Directorate Gujarat, Dadra and Nagar Haveli, Daman and Diu and Sabarmati River Front Development Corporation Ltd.
- 27) Swimming Practice Sessions: The college NCC unit tries to ensure fitness and energy in its cadets. Keeping this in mind 1GUJ Naval Unit organizes regular Swimming sessions for its cadets at the Gujarat Vidyapith swimming pool from the 1<sup>st</sup> of April 2023.

#### **NSS** activities

- Animal Welfare Drive: Four NSS volunteers of the college took part in a session organized by Jivdaya Charitable Trust aimed at raising awareness about how animals can be helped and protected during the summer season. They were also guided upon how to treat dehydrated animals and help them.
- 2) Farewell to Seniors: The junior volunteers had the pleasure of organising a farewell for their seniors at NSS SXCA. The event began with all the volunteers joining in the NSS Lakshya Geet. Thereafter, NSS coordinator, Dr. Devang Pandya, expressed gratitude on the institution's behalf to all the volunteers for their valuable service. Principal, Fr. Lancelot D'cruz also encouraged students to carry their selfless services beyond.
- 3) Environment Day: On the occasion of Environment Day on 5 June 2022, our volunteers decided to raise awareness about the effects of plastics on our environment, the need to minimise their usage, and alternatives that can be used in place of plastics. Using old newspapers, our volunteers made about 300 paper bags. They distributed these to various medical stores, explaining the harm caused by plastics. The volunteers were also awarded certificates by the Mahatma Gandhi National Council of Rural Education (MGNCRE).
- 4) International Yoga Day: The NSS Unit of the college celbrated International Yoga Day on 21 June 2022. The 94 students who participated were explained the importance of Yoga for physical, mental and spiritual wellbeing. They performed various yoga asanas under the guidance of our four volunteers: Astha Patel, Shailja Patel, Vishal Chauhan and Arjun Bhatt.
- Expert Lecture on Women's Health: Dr. Mukesh Bavishi and Dr. Vidula Bavishi conducted a seminar on 'What's new in Women's health?' at St. Xavier's College. This event, coordinated with the Collegiate Women's development cell, informed the students about the facts of women's health, bust the myths surrounding it, and spoke about the new technologies in the field. Dr. Mukesh Bavishi is an experienced gynaecologist, fertility specialist, oncologist, and cosmetic surgeon. His wife Dr. Vidula Bavishi is also a gynaecologist.
- 6) Independence Day Celebration: Under the theme of "Har Ghar Tiranga", NSS Volunteers organized an oath-taking ceremony to respect the national flag. For a week before the 76th Independence Day, volunteers tried to spread

knowledge about the importance and meaning of the tricolor. Together with this, as part of the Amrit Mahotsav, the NSS volunteers also asked the people to share their pictures with the National Flag, understand its significance and make others realize the same also. Further, the NSS Unit of Gujarat University had invited 10 volunteers from each college to celebrate the Day by flag hoisting at the Gujarat University premises. 10 of our NSS volunteers joined the event.

- 7) Thalassemia Testing Camp: The NSS Unit of the College organized a Thalassemia Testing Camp for the students in association with the Red Cross Society of India and the Rotary Club of Ahmedabad, West. 207 students got tested for the same during the period of 17 September to 15 October 2022.
- NSS Day Celebration: 24th September 2022 was celebrated by the NSS volunteers of the college. The event took place in order to celebrate the spirit of service and encourage students to participate in volunteering. The event commenced with teaching the new volunteers the NSS Clap. Dr. Devang Pandya and the fellow faculty members spoke about with the history and the importance of the NSS. A slideshow of photos from the previous events was displayed in the background that observed the social work done by the volunteers. Former student volunteers and campus ambassadors also shared their experiences and memories from the camps and events. The NSS Song was sung by all the volunteers and the faculty members.
- 9) 36<sup>th</sup> National Games: Two of our students were selected to volunteer at the 36<sup>th</sup> National Games through an interview-based selection process. The National Games were hosted by Gujarat State Government from 26 September to 12 October 2022 at Sabarmati Riverfront.
- 10) Taru-Mitra Seminar: The college NSS unit held a seminar to discuss the environment and the earth on 8 October 2022 in association with Tarumitra "Friends of Trees" –a nationwide student organization NGO to protect and promote a healthy environment on Earth.
- 11) Vishwa Student Divas: Two of the college NSS volunteers participated in a one-day workshop organized by the NSS department, Gujarat University, in collaboration with Red Cross Society, on the occasion of 'Vishva Student Diwas' on 15 October 2022, at the Red Cross Bhavan, Ahmedabad.
- 12) Khushiyon Wali Diwali A Donation Drive: The volunteers at NSS SXCA, conducted a donation drive under the title 'Khushiyon Wali Diwali' with the purpose of ensuring the joy of the festival to those in need, and help

- underprivileged children. The campaign began on 28th September when students were asked to donate unused clothes, shoes, books, etc at the NSS college office. These items were checked for usability and were then donated to the needy at Aai Shree Khodiyar Maa Temple on 15th of October 2022 in the presence of the temple authorities and NSS coordinator, Dr Devang Pandya.
- 13) Prakram, Orientation of the newcomers into the NSS unit: On 26 November 2022, new NSS volunteers were inducted into the NSS unit of the college. The principal, Fr. Lancelot D'cruz and the NSS P.O., Dr. Devang Pandya, spoke to the new volunteers about the workings of the NSS cell. The newcomers were also introduced to the new core team and the team heads at the event in a video specially prepared by the second-year volunteers. The senior volunteers were also recognized for their contribution at this event.
- 14) 'Know Your Constitution' Samvidhaan Diwas Quiz: 26 November marks the anniversary of the drafting of the Indian Constitution. The NSS unit of the college organized a quiz competition to raise awareness among students about the importance of constitutional democracy. It consisted of questions regarding basic provisions and rights as well as some questions related to the drafting committee.
- 15) Gujarat Assembly Elections: Three volunteers of our NSS unit assisted the election process at the A.G Teacher's High School booth, Ahmedabad. Their duty involved managing the queue and guiding the citizens who showed up at the center for casting their vote.
- 16) Voter Awareness Mega Marathon-2022: A Voter Awareness Mega Marathon was organized by the Collectorate on 27th November 2022, at the Riverfront, Ahmedabad. Two volunteers from NSS SXCA took part in it.
- 17) Voter Awareness Videos: The NSS Volunteers of first year indulged in creating voter awareness videos for the upcoming Gujarat Assembly elections in December 2022. The volunteers were involved in a week-long process of researching and designing the content, performing, shooting and editing the videos. Two types of videos were shot- one wherein the volunteers attempted to spread awareness through attractive slogans, and other wherein the students interviewed the professors, gaining insights into why the electoral process is important and what they would like to say to the first-time voters. The videos reached an audience of 5000+ on social media.

- 18) Vision GPSC Seminar: On 17 December 2022, three of our NSS volunteers attended a guest lecture organized by Gujarat University and Udaan Charitable Trust. The event was conceived to encourage and guide students pursuing the GPSC examination.
- 19) Vatsalya- Senior Citizen Home Visit: On 7 January 2023, 26 NSS volunteers visited a senior citizens' home at Juna Wadaj, Ahmedabad, to spend quality time with the inmates. The students sang prayer songs, film songs, and played games with them. They also talked with the senior citizens about their experiences and memories.
- 20) International Youth Day: In 1984, the Government of India declared 12th January, the birth anniversary of Swami Vivekananda, as National Youth Day. The NSS Volunteers celebrated National Youth Day by playing a fun game about how the youth can help protect and help our nation, and a discussion about how we the youth can contribute to our country and the world. The discussion veered into whether the youth are the today, tomorrow, or future of the nation.
- 21) Traffic Awareness Exhibition: On 17 January, 2023, the NSS volunteers visited an exhibition organized by the Active traffic consultative committee, Ahmedabad.
- 22) Post-Uttarayan Cleanliness Drive: The kite-flying festival, Uttarayan, usually leaves behind many discarded kites and threads, causing pollution and hazards. The post-Uttarayan Cleanliness Drive 2023 (PUPC-23) was organized from 17 to 21 January 2023 to clean the streets of wasted kites and threads. The drive was organized for a total of 5 days (20th January was a rest day), and 42 NSS volunteers participated in it. Locations were chosen to give more emphasis on areas the Municipal Corporation neglected like internal roads, apartment terraces etc.
- 23) Night Half-Marathon for Drug Addiction Awareness: NSS volunteers participated in the 5km Night Half Marathon on Drug Addiction Awareness organized by the Ahmedabad Police on 21 January 2023 at the Riverfront, Ahmedabad.
- 24) Republic Day Celebration: NSS volunteers participated in the Republic Day celebration at Gujarat University. The Chief Guest at the event was vice-chancellor Prof. Himanshu Pandya.
- 25) Vision in the Dark: On 4 February, 2023, 40 NSS volunteers participated in an event called "Vision in the Dark". This activity, organized by the Blind

- People's Association, Ahmedabad, focuses on giving sighted people an experience of the blind. The sighted people are taken into an area where it is pitch-dark and are led through this area by a blind person.
- 26) Mega Cleanliness Drive: The FY Volunteers of the NSS cell organized a cleanliness drive in the campus area on 11 and 12 February 2023. This drive, mainly focused on the periphery of the cricket ground where large amounts of waste mainly plastics, glass bottles and wrappers had accumulated. The waste was segregated into biodegradable and non-biodegradable waste and disposed of with the help of the AMC staff.
- 27) International Mother Language Day Celebration: On 25 February 2023, the college NSS Unit and the Gujarati Department together conducted the celebration of International Mother Language Day. The event intended to give special attention to the native language of people from across the world. A guest lecture was delivered by Chief Guest, Mr. Ramesh Tanna, on the topic 'Essence of Mother Language'.
- 28) Indian Red Cross Society Visit: 12 NSS volunteers visited the Care Section for Thalassemia patients at the Red Cross Bhavan on 25 February 2023 in order to learn more for the upcoming Blood donation camp to be organised in the college. They chatted with Thalassemia patients getting blood transfused there, mostly children. The children and the volunteers developed a friendly relationship instantly.
- 29) Inter-college Work Camp: A 7-Day Inter-College Work Camp from 22 to 28 March 2023 was organised by the NSS Unit of Gujarat University at Punadara Village, Kheda District. 7 volunteers of the NSS unit of St. Xavier's College participated in it. This camp made the volunteers connect to our nation's roots, that is, villages. It trained them in social service, helped in improving communication skills and in building confidence in public speaking.
- 30) Rudhirshana Blood Donation Camp: A blood donation camp was organized on 25 March 2023 by the NSS unit, in collaboration with The Red Cross Society, Ahmedabad. A total of 111 units of blood were donated by students, faculties as well as non-teaching staff. This is the highest number of units of blood donated by the college.
- 31) Heritage Walk: 29 NSS volunteers participated in the Heritage Walk on 7 April 2023 conducted in the walled city of Ahmedabad. The guided walk

- explored the various heritage sites in the city and acknowledged history associated with them.
- 32) Tree Plantation Drive: On 16 April, 2023, the NSS unit of the college organised a Tree Plantation drive at Vasna Barrage, Ahmedabad, in collaboration with Rotary Club. Astonishingly, in 2018 NSS volunteers of SXCA had conducted a plantation at same place! It was a proud moment to see those green trees swaying.

#### **Culfest:**

A hugely popular event with remarkable performances is the college Culfest. Organizing an event of this level with imagination and creativity is itself an achievement. This year, the culfest – ABHIGAM: An Approach towards Ecstasy – was held in December 2022. There were 26 events, which included Dance, Drama, Literary, Music and Fine arts, and had a participation of 300 students in various events.

# **RESEARCH**

The college's research activities encompass a wide array of intellectually stimulating pursuits that drive academic progress and innovation. These endeavours involve faculty members, post-graduate students, and sometimes undergraduate students exploring various disciplines.

#### **Funded Research:**

Not only has the college has taken many strides in acquiring funding for research projects from different sources, the college itself provides funds for research as well. The details are as follows:

- Dr. Rajesh Iyer, faculty of the Physics-Electronics department, received research funding from SAC, ISRO. Funds of Rs. 28.35 Lakhs over a period of 3 years have been granted to the project.
- Fr. Dr. Lancelot D'cruz, faculty of the Physics-Electronics Department, was given a grant of Rs. 75.01 Lakhs for three years by the National Medicinal Plants Boar, Government of India, to work on the project titled "Supporting Ethno-medicinal

linkages (the Aadi Aushadhi paradigm) in 6 clusters of 12 BMCs of Dediapada taluka, Narmada district".

Faculty members from the departments of Biochemistry and Biotechnology, Botany, Chemistry and Economics were given seed money for different research projects detailed in Annexure 5

#### Students' Research:

The college has the culture of student-teacher collaboration for research, and this is a rare research activity. Moreover, though these are non-funded research activities, some students are awarded prizes for their research. The details of these research activities are given in <u>Annexure 4</u>. Notably, the Physics-Electronics Department has a high teacher-student research output at both the undergraduate and postgraduate levels. The college students have also worked on research projects under the guideship of professors from IPR and PRL. The departments of Chemistry, Biochemistry and Biotechnology, Computer Science, Botany, Statistics, Sanskrit, Gujarati-Hindi, Psychology and Economics too had a remarkable student-research output.

# Students' publications:

- Two students from the Department of Physics-Electronics published their papers in UGC Listed journals.
- Three students from the Department of Computer Science published their paper jointly in a UGC approved journal which will be published in December 2023.

# **Research Output:**

The faculty of SXCA has contributed greatly to research in their respective fields. The research publishers amongst the college faculty members are as follows:

- Dr. Nithya Nadar, faculty in the Computer Science Department was awarded a Ph.D. on 9 July 2022 for her thesis titled "Monitoring and Identification of Garbage at source in Ahmedabad".
- Dr. Hardik Thakkar, faculty in the English Department was awarded a Ph.D. in 2022 for his thesis titled "Writing Across 20<sup>th</sup> century Raj: Post-Raj Narrative Aspects and Linguistic Elements in the British Colonial Perspective"

- Dr. Sanjeev Gupta, faculty in the Department of Physics-Electronics, published 40 research papers during the academic year 2022-23 in different UGC listed journals.
- Dr. Monica Thakur, faculty in the Department of Biotechnology and Biochemistry, published one research paper in Scopus-indexed journals, and three papers in international journals.
- Dr. Suhani Parekh, faculty in the Botany Department, published one research paper in a UGC listed journal with 5.7 impact factor, and another paper in a national journal.
- Dr. Arti Salat, faculty in the Mathematics Department, published two papers in Scopus-indexed journals with impact factors of 1.23 and 0.4 respectively.
- Dr. Rajavi Oza, faculty in the Sanskrit Department, published three research papers in UGC listed journals.
- Ms. Sonal Thakur, faculty in the Department of Biotechnology and Biochemistry, published one paper in a Scopus-indexed journal with 3.53 impact factor.
- Dr. Uma Harikrishnan, faculty in the Chemistry Department, published a research paper in a UGC listed journal with an H-factor of 6 and an impact factor of 1.933.
- Ms. Srishti Chhabria, faculty in the Department of Biotechnology and Biochemistry, co-authored a research paper.
- Dr. Dhara Bhatt, faculty from the Computer Science Department, published a paper in a UGC listed journal. Dr. Pravida Raja from the same department published a paper in a national journal.
- Ms. Kinjal Mistry, faculty in the Commerce Department, published a paper in a journal with an impact factor of 6.465. Ms. Mitali Konnur, faculty in the same department, published a research paper in a UGC listed journal.
- Dr. Mallika Sanyal, faculty in the Chemistry Department, Dr. Rashmi Yadav, faculty in the Botany Department, and Kishan Vyas, faculty in the Mathematics Department, published research papers respectively.

Besides these publications, the college faculty members participated in 20 International, 18 National, 47 State level Conferences, Seminars, Workshops, Webinars and Symposia. Of these, 44 faculty members presented papers, one was a guest of honour and resource person, and two chaired sessions at conferences.

# **FACULTY ACTIVITIES**

# **Updating Skills and Knowledge:**

To update their subject knowledge and learn from fellow faculty members of other colleges, the SXCA faculty members participated in Faculty Development Programmes:

- Dr. Rashmi Yadav, faculty of the Botany Department, participated in in two National and two State level FDPs.
- Dr. NC Raghavi Chakravarthy, faculty of the Commerce Department, participated in two National FDPs.
- Dr. Erica Macwan, faculty of the Commerce Department, participated in one National and three online FDPs. Dr. Shivani Shah from the same department participated in one National FDP too.
- Dr. Yogesh Baravalia, faculty of the Biochemistry-Biotechnology Department, attended a one-month Orientation Course at Khalsa College, Delhi.
- Dr. Sonal Thakur, Dr. Monica Thakur and Dr. Nandini Ghosh, faculties of the Department of Biotechnology and Biochemistry, participated in National level FDPs respectively.
- Dr. Kirtan Parmar and Dr. Aruna Kaushik Pandya, faculty of the Statistics Department, participated in one State level FDP each.
- Dr. Suhani Parekh, faculty of the Botany Department, and Dr. Pravida Raja, faculty of the Computer Science Department, participated in one State Level FDP each.

#### **Extension activities**

- Dr. Ishwar Mehra, faculty in the Sanskrit Department, was invited to five different events as Resource Person. Dr. Rajavi Oza from the same department was interviewed on radio, and was also invited as special guest speaker at five events. Dr. P.U. Makwana of the same department was invited as an expert speaker for a lecture series.
- Dr. Uma Harikrishnan, faculty in the Chemistry Department, was invited as Resource Person, and Dr. Atul Makwana from the same department delivered visiting lectures.
- Dr. Rajesh Iyer, faculty in the Physics-Electronics Department, was invited as an expert on a panel at PRL, Ahmedabad, and was on an interview committee at Zydus School, Ahmedabad. He was also invited as a music expert at two events.

- Dr. Sanjeev Gupta of the same department was invited as an expert at two events.
- Dr. Sebastian, faculty in the Department of BC-BT, and Dr. N.C. Raghavi, faculty in the Commerce Department, were invited as a resource persons respectively.
- Dr. Dhara Bhatt, faculty in the Computer Science Department, was invited as a guest lecturer thrice at Sarvajanik University, Surat. She was also invited as Examiner by KSV University and GLS University.
- Dr. Savan Patel, faculty in the Mathematics Department, was invited as expert resource person at three events.
- Dr. Maulik, faculty in the Botany Department, was invited as an expert resource person to an event.
- Dr. Atul Makwana, faculty in the Chemistry Department, was invited as an examiner to evaluate a Ph D thesis by Saurashtra University, Rajkot. He was also invited to evaluate the progress of a Ph.D. research by Ganapat University, Mahesana.
- Dr Gurudatt Gaur and Dr. Akshay Satwara from the Physics-Electronics Department are on the Board of Studies for Physics & Electronics at Gujarat University.
- Dr Sebastian VA and Dr Sudeshna Menon faculty at the Department of Biotechnology and Biochemistry are on the Doctoral Thesis Evaluation committee at Gujarat University. Dr. Sudeshna Menon and Dr. Yogesh Baravalia also examine the BSc Final Examination at Gujarat University.
- Dr. Kinjal Bhatt, faculty at the Department of Biotechnology and Biochemistry, was invited as an External Expert for start-up research projects of Gujarat Technological University (LD Engineering College).
- C.A. Harsh Khoradia, Mr. Rajmohan Nair and Dr. Shivani Shah of the Commerce Department were invited as paper-setters for the examinations by GLS University. Dr. Shivani Shah was also invited for the same by Gujarat University.
- Dr. Ishwar Mehera of the Sanskrit Department and Dr Sebastian VA and Dr Sudeshna Menon of the Department of Biotechnology and Biochemistry have been appointed as Ph.D. guides at Gujarat University.
- Dr. NC Raghavi Chakravarthy, faculty at the Department of Commerce, was awarded a Certificate of Appreciation by NPTEL for working as a Translator and translating one NPTEL course from English to Gujarati.

• Dr. Suhani Parekh, faculty in the Botany Department, participated in the National Biking and training Expedition, Goa, organized by Youth Hostel India.

# INNOVATIVE TEACHING LEARNING PROCESS

#### The department of Physics-Electronics

The Physics-Electronics Department innovated by simulating Laboratory Experiments on computers using software like Multisim. This innovation gave students a better understanding about the experiments, even without their physical presence in the laboratories. The software was also used for the purpose of evaluation.

Other innovations by the Physics-Electronics Department include an elective paper for the SY students titled "Introduction to Nanoscience" during the academic year 2022-23. Moreover, as part of their internal evaluation, the department sent students to attend a conference organised by L J College, after which they had to submit a report of their learnings. This report was used for evaluation and grading for their internal examination.

# The department of Biochemistry and Biotechnology

The Department of Biochemistry and Biotechnology came up with innovative laboratory learning. Every lab session had a set of thought-provoking questions that required students to read ancillary material and think beyond regular lab work. Some of these questions were factual, some required discussion, some problem solving, and some developing newer ideas.

The department further innovated these sessions by adding an activity to the exercises. This experiential learning was aimed at bringing in collaboration and interaction among students, developing a research mindset, and learning to generate data and analytical skills. Divided into smaller groups, the students carried out the activities and presented their findings to the class.

#### The department of Commerce

The Department of Commerce made the following innovations in their teaching methods:

i) Advertisement Review Assignment and Presentation: In order to improve critical thought, ethical awareness and communication skills, the Sem 5 BPS students were assigned an advertisement each to review for its ethical or unethical aspects. They were then asked to present their observations to the class.

- ii) Assignment on Women Entrepreneurs: In order to increase gender sensitivity and entrepreneurial insights, students of Sem 6 BPS were assigned the task of selecting a Woman Entrepreneur and assess what made them successful.
- iii) Assignment on Social Entrepreneurs: Sem 6 BPS students were assigned the task of selecting a Social Entrepreneur to study their journey of identifying a social problem, and examining how they came up with solutions. This helped create in the students empathy, social awareness, and detect creative solutions to common problems.
- iv) Business Plan Assignment: In order to impart practical training, students in groups of 3 to 5 were asked to come up with an innovative business plan for a new product or service. This included creating a budget, a marketing plan, strategy, and projecting time lines.
- v) Live Market trading session in the Capital Market class: An innovation in teaching was to give three Live Market classes to students of BPS to familiarize them with the working of the Capital Markets.
- vi) 10 lectures on the use of Virtual trading platform Sensibull: The whole of the derivatives segment in the subject of Capital Markets for BPS students was taught innovatively using the Sensibull Virtual trading platform for Derivatives, so that strategies could be explained in practically.
- vii) Use of videos for classroom teaching:
  - A video of Captain Raghu Raman's talk on 'Business Lessons that you can Learn from the Streets of India' from Josh Talks was shown in the class and a classroom discussion highlighted the importance of learning from the street vendors and small business owners in India.
  - Classroom discussions took place after watching video case studies of the Amul and Lijjat Papad.
  - A video of the behaviour of Organizational Personnel and employees was explained and discussed in the class to teach Organizational Behaviour.
  - Video followed by classroom discussion of the start-up "Ather"
- viii) Role play: International trade was taught through role play with 8 students enacting different roles.
- ix) Interactive Quiz: After every unit, an oral quiz is conducted. The results are displayed in real-time and the winner is awarded.
- x) Classroom games: In order to enhance team skills and communication skills, innovative games are played in the classroom that offer enjoyment in the teaching process.

#### The department of Statistics

The Department of Statistics introduced the following innovations in their teaching:

- i) The department used questions from JAM, JEE and GSET for the viva and assignment questions.
- ii) All members in the department were brought updated laptops with digital pens so that faculty members could teach mathematical calculations of statistics better.

# The department of Botany

The Department of Botany introduced the following innovations:

- i) In order to the topic of Types of Inflorescence innovatively, students were asked to make a collection of at least five types of inflorescences from their surroundings. After collection, they were instructed to dry the specimen and paste the inflorescence onto a sheet of paper along with some basic information about the inflorescence that they collected. These were assignment submissions as a part of their CIA 1.
- ii) In order to teach Sem 1 Botany the types of tissues in plants, the students were instructed to enact a play. The Class was divided into three groups. Each group was given a different topic: Group 1- Simple tissues; Group 2- Meristematic tissues; Group 3- Complex tissues. The students were evaluated based on their group activity.
- iii) The students of Sem 3 Ecology were instructed to make poster-presentations and were evaluated on the basis of their presentations.
- iv) In order to explicate the topic of Carbon Footprint, students of Sem 6 were instructed to calculate their own carbon footprint by feeding the data to an app. They were instructed to take screenshot of the Questions asked to them in the application along with the final results. The students made the data into pdf documents and submitted these as CIA 2 assignments.
- v) Making use of the green campus at SXCA, a walk around the campus was conducted by the students of Botany.
- vi) MSc. (Part 1) and T.Y.B.Sc. students were taken to Calico Museum, Serenity Library and the Botanical Garden at Ahmedabad for field study.
- vii) M.Sc. Sem 1 students planted a rare plant called Commiphore, which is native to Kutch. The plant was gifted by a visiting faculty member to the Head of Department, and it is now care taken of by the M.Sc. students.

- viii) A plant nursery is developed by the men's Hostel inmates.
- ix) Students were given projects on preparing post-harvest articles likes jams, squash and pickles.
- x) A study tour was organized to visit Dediapada, Gujarat.

# The department of Psychology

The Department of Psychology made the following innovations:

- i) Open-book Exams: In order to enhance analytical reasoning and application of concepts, an open book exam for all UG and PG Psychology students was conducted. Topics for both descriptive and multiple-choice questions were taken for CIA exams as per Module-1/2.
- ii) Video-based assessment: Specific videos, for example, movie clips, and biographical documentaries of various disorders and emotional problems, available online were chosen and sent to students to answer questions based on the same. Their observation skills, subject knowledge and attention to detail could be assessed through these.
- iii) Poster and PowerPoint Presentations, Group Discussion: Undergraduate students are given poster-presentation activities. Postgraduate students are assigned presentations on various topics.
- iv) Surveys, Interviews, Case-study analyses: For internal assessment, students were given surveys, interviews and case-studies for analyses.
- v) Field Visit with Expert interaction: The department took the students on a oneday field trip in connection with specific topics from their syllabus.
- vi) Research paper analysis and Proposal Writing: Published researches relevant to the topics are provided for analysis. The steps of writing a research proposal are taught through these, followed by students themselves learning to write it.

#### The department of Sanskrit

The Sanskrit Department has introduced the seminar-method of learning. Conducting seminars as CIA-2 is very useful to students for their academic improvement. Each seminar carries a weightage of 5 marks.

#### The department of English

The English Department innovated by organizing various field trips during the academic year. Semester 6 students were asked to visit schools and teach English grammar to school children. This was to ensure that the students get practical teaching-training. Additionally, the students were also taken to Sabarmati Jail and an orphanage in order to understand the contexts of some of their texts better.

#### The department of Economics

The Department of Economics conducted surveys as part of their innovative teaching.

#### **Guest Lectures, Expert Lectures**

The Department of Sanskrit organized two Guest Lectures on:

- Guidance for NET/JRF/GSET on 21 January 2023
- Research methodology

The Department of Gujarati and Hindi organized a Seminar on Girasma Ek Dungari (To Survive and to Prevail) on 25 January 2023. The experts invited were Aena Jelnikar, a Slovenian Researcher, and Fr. Myron Pereira S.J.

The Department of Chemistry conducted these lectures:

- Expert Lecture by Dr. Kamala Vasu, Former Assistant Director; Dean of student affairs & Head of Medicinal Chemistry Department, BV Patel PERD Research Centre, Ahmedabad, on 18 August, 2022, on the topic "Spectral analysis of organic compounds & Safety first"
- A guest lecture on Career guidance for Chemistry students, on 14 June 2022 by Dr Dip Joshi, Dr S D Wadekar, Mr H A Maheta.
- A national level expert lecture on "NMR as a tool to understand supramolecular systems and functional materials" on 28 September, 2022, by Dr. Rahul Dev Mukhopadhyaya, Assistant Professor, Ramananda College, Bankura University, West Bengal.

The Department of Physics-Electronics organized the following lectures/workshops:

- A Seminar on Green House gases organised in collaboration with ISRO, Ahmedabad, on 19 December 2022
- A Guest Lecture on "Report on Future Trends in Artificial Intelligence" on 18 January 2023 by Dr Harshal Singvi

- Astronomica (The Astronomy Club of the Physics and Electronics Department)
  organized an observation of the comet named C/2022 E3(ZTF), which had its
  closest approach to the earth on 1 February 2023. To observe this once in a
  lifetime event titled "Comet Gazing Spectacle", an introductory session on
  comets was conducted followed by the observation of the comet at the college
  Cricket Ground.
- A lecture on "Global GHG Emissions, Climate Change & Societal Dimensions" on 19 December 2022
- An educational trip to the Udaipur Solar Observatory (USO) was conducted on 23 March 2023 for the B.Sc. and M.Sc. students of the Physics and Electronics department.

The Department of Biotechnology and Biochemistry organized many guest lectures:

- Expert talk on "Development of Vaccines" on 5 January 5, 2023, by Dr Parimal Sheth, Director, Endovac (USA).
- Expert lecture on "A Treatise on Marine Algae" on 19 January, 2023, by Dr. Vaibhav Mantri of CSIR-CSMCRI, Bhavnagar.
- Expert lecture on "Development and Assessment of Bare and Hybrid Nanomaterials for sensing application" on 27 September, 2022, by Mr. Vaishwik Patel, University of NewCastle, Australia.
- Guest Lecture on "Curiosity, Selection of a Problem and Perseverance:-Autophagy Story" by Dr. Mayur Sahani, Associate Professor at Maharaja Siyajirao University.
- Guest talk on "Challenge the Challenges" on 10 January, 2023, by Ms. Priya Shah, Georgetown University, Washington.
- Lecture on "Existence and Future of Biofields" by Happy Panchasara, Bhoomaa Biotech, Palanpur, Gujarat.
- Talk on "Career in Drug Designing" on 3 October, 2022, by Mr. Siddharth Brahmabhatt, Zydus Cadilla, Ahmedabad, Gujarat.
- Talk on "Familiarizing the Nobel Prize winners of 2022" by alumnus, Nisarg Patil, St Xavier's College, Ahmedabad.
- Guest Lecture on "A Career in Biosciences" on 11 April, 2023, by Dr. Doreen Badheka, Rutgers University, USA.

The Department of Computer Science organized the following lectures and webinars:

- A national level webinar on "Career orientation session on Data Science" on
   2 August 2022 by Hariprasad Ranganathan
- A national level webinar on "Cloud and Visual Analytics" on 8 December 2023
- An expert talk on "Artificial Intelligence in Agriculture" on 16 March 2023 by M. Sumeet Mohanty.
- Ms. Vishwa Saraya of Accenture delivered a guest lecture on 1 April 2023 as part of the Alumni Lecture Series.
- A seminar on Education Overseas by Overseas Education Mr. Arpit Raghvani Seminar on 6 April 2022.

The Department of Commerce organized the following lectures and events:

- An expert session on "Market Structure and Advertising Effect on Consumers" on 23 September, 2023, by Dr. Jignesh Kauangal, Principal, Shree Narayana College of Commerce, Ahmedabad.
- Higher Education Summit on 2 February, 2023, a national level event with experts from Flame University, Welingkar Institute, O.P. Jindal University and Ahmedabad University.

The Department of Botany organized two guest lectures:

- A State level guest lecture on 25 Jan 2023 by Mr. Shardul Bajikar (Director, Adventure sports and Beyond, Mumbai)
- A State level guest lecture on 31 January 2023 by Dr. Alaknanda Vyas (Former Head and Professor, Botany Department, GU) and Dr. Pulastya Avinash Vora (Proprietor, CSM Service, Ahmedabad)

# **BEST PRACTICES**

SXCA has some practices that are unique to the college that show how the college has gone above and beyond the call of duty. These practices are highlighted below:

# Vibrant and visionary IQAC

The Internal Quality Assurance Committee of the college, under the leadership of the Principal and the Coordinator, is a vibrant body that strives to develop the quality of the college actively. Besides working intensely and proactively for the accreditation process this year, and other prescribed functions, the IQAC of SXCA went above and

beyond with some unique practices for the wellbeing of the college and its stakeholders. Some of its best practices this year were:

- i) Post-accreditation Dialogue: After the Peer Team Visit and the accreditation process, the college management suggested a dialogue with the IQAC to evaluate the Challenges and Opportunities of SXCA following Accreditation. For this, the IQAC team members and the members of the governing council retreated to Mount Abu for two days, from 6 to 8 July 2022.
- ii) Expert Session on Strategies for Navigating Uncertain Times: Fr (Dr) Roy Pereira. S.J. is currently a faculty at Loyola Marymount University, Los Angeles, where he teaches Neuroscience in the Post-Doctoral Psychology Program, besides organizing Wellness initiatives for the campus. He offered a combination of his expertise on neuroscience, and his experience of 35 years of lived Ignatian Spirituality in a talk on strategies for navigating uncertain times to all the staff members of the college on 25 July 2022.
- iii) Challenges and Opportunities brought about by the New Education Policy: The IQAC team realized that it is important to understand the NEP so as to better negotiation through its implementation. For this, Dr. Vijaya Sherry Chand, Professor, Ravi J. Matthai Centre for Educational Innovation, IIMA, was invited online 17 September 2022 to explain the differences between the current education policy and the new one, and the aims, objectives and implications of the NEP. As a follow-up to this, the NEP 2020 Webinar was organized on 7 October 2022 with Dr. Sherry Chand as the expert by the Jesuit Educational Apostolate in collaboration with IQAC. Educators from various schools and institutions participated in the webinar. Again, for higher education institutions, a National Level webinar was organized by the IQAC on 12 October 2023 with Dr. Sherry Chand as the expert. In this regard, Dr. Gurudatt Japee, Deputy Director, IQAC, Gujarat University, who is actively involved in preparing the framework of curriculum at the University level, was invited to talk at the college auditorium to all faculty members on "Curriculum Framework as per NEP 2020" on 17 February 2023.
- iv) Participation in the MGNCRE Sustainability Index Success stories: It is an achievement of the college to have been selected to participate this year in the Sustainability index success stories survey called upon by The Mahatma Gandhi National Council for Rural education mission under the Ministry of Education, Government of India. The survey listed out details of efforts made by the

college in terms of solid and liquid waste management, land use management, solar energy usage, water management and other sustainability parameters. The report with all details was submitted on 21 July, 2022.

- v) Feedback: The college IQAC continued with its endeavour of taking feedbacks from various stake-holders. The feedbacks taken directly by IQAC were:
  - Staff feedback from students
  - The Graduate student Exit Survey
  - The Student Satisfaction Survey

Additionally, the IQAC also directed the departments to take feedback of the curriculum from various stakeholders and take steps to modify the curriculum accordingly.

Besides these, the IQAC also conducted

- A Staff Research Seminar on 18-19 March 2023, where twelve staff members presented their research papers, which were published in the Research Annals of Xaviers, Ahmedabad, a multi-disciplinary journal.
- Graduation Day for the Bachelors' and Masters' students
- Expert Lectures and talks
- A two-day Faculty Development Programme on 2-3 September 2022

#### **Examination Reforms**

The Examination Committee of the college ordinarily has a routine task of conducting exams regularly. However, the SXCA Examination Committee performed beyond these and thus uplifted the assessment and examination process. Some of these reformative pursuits are:

- Exam Dashboard: The examination office with the help of Auromeera Technometrix Pvt. Ltd. designed an exam dashboard. The dashboard access was given to all Heads of Departments. Thus, they could assess results quickly and survey the performance of students in their departments at a glance.
- Graduation Ceremony: The college in Ahmedabad hosted its Fourth Graduation Day on 19 March, 2023, for the students who graduated in 2021, and its Fifth Graduation Day on 18 March, 2023 for students who graduated in 2022. Dr. Himanshu Pandya, Vice-Chancellor of Gujarat University, presided over both the ceremonies as the Chief Guest. Prof. Bimal Kumar Roy, director, Indian Statistical Institute, was the guest of honour on 19 March, and Dr. S.

Sundar Manoharan Director general Pandit Deendayal Energy University, was the guest of honour on 18 March 2023. On 19 March, 1182 graduates were awarded certificates, while 24 gold medals were conferred; on 18 March, 1103 graduates were awarded certificates, while 25 gold medals were conferred.

### **Collaborative Engagements and Memoranda of Understanding (MoUs)**

SXCA has made significant strides in forging valuable partnerships with esteemed institutions, industry leaders, and corporate entities, enriching its academic landscape.

The college created MoUs under the aegis of the Xavier Board of Higher Education in India (XBHEI), a national chapter of the International Federation of Catholic Universities (IFCU / FIUC). The MoUs created this year for inter-institutional sharing and student/faculty development were with:

- St Joseph College (Autonomous) Irinjalakuda Kerala signed on 22nd October
   2022
- Loreto College Kolkata West Bengal signed on 19th October 2022
- Maria Stella College (Autonomous) Vijayawada, Andhra Pradesh signed on 14th May 2022
- Nirmala Institute of Education Panjim, Goa signed on 23rd October 2022
- St. Joseph's College, Arakulam, Thodupuzha Kerala signed on 22nd June 2022
- Sophia Girls College (Autonomous) Ajmer Rajasthan signed on 1st October 2022.

Additionally, there have been departmental collaborations too:

- The fifth MoU, inked with the Association of Chemical Technologists India (ACTI) in Ahmedabad on 29th October 2022 has opened new avenues for the Department of Chemistry, fostering collaborative initiatives aimed at enhancing chemical technology.
- The Statistics Department forged an association with Clinthan Research Limited on 23rd April 2023 for real-world applications of statistical methodologies.
- The Department of English has embarked on a partnership with the Center for Disability Research and Training at Kirori Mal College, Delhi University, for the academic year 2022-23. This collaboration witnesses an ongoing initiative for the revision of Disability Policy Documents, reflecting the department's dedication to inclusivity and accessible education.

These strategic alliances and MoUs not only signify the department's dedication to academic excellence but also reinforce their commitment to preparing students for a dynamic and inclusive professional landscape.

#### Alumni involvement

The college takes immense pride in acknowledging the invaluable contributions of its former students and staff members who continue to serve the institution with unwavering dedication. The alumni network stands as a testament to the enduring legacy of the institution. Across departments, their roles have spanned from teaching and mentoring to providing guest lectures and internships. Their impact is felt across departments including Sanskrit, Physics-Electronics, Botany, Psychology, and Statistics. Their selfless efforts have significantly enriched the college environment. The alumni of the college also assist and contribute immensely to the college Culfest and other extracurricular activities.

### Social responsibility and Value Inculcation

Students at SXCA are actively engaged in various social service initiatives, showcasing their commitment to community welfare. These endeavours are greatly influenced and supported by the Jesuit management, which encourages a culture of social responsibility. Through volunteering efforts, students are taught to values of othercentredness, service and nation-building. Even though these may reflect the activities of the NSS unit, SXCA students engage in activities beyond those prescribed. Thus, they learn through organizing charity drives, blood donation camps, and awareness campaigns on critical social issues. Their passion for making a positive impact in society reflects our institution's dedication to producing socially responsible citizens, a value instilled by the management's vision and ethos.

Uniquely, the college also awards prizes to students engaging in social work activities and outreach programmes to encourage them further.

The Campus Ministry of the college contributes to inculcating the values of social outreach through different cells. This year, the main contributions were made through

• Utcarsh: Comprised of 17 members and 76 volunteers from different departments of the college, this Cell works for the differently-abled students of the college. The cell conducts an outreach programme every year. This year, the cell visited Rahelba Vridhashram (an old age home). The visit gave the students an opportunity to share and interact and entertain the inmates with

songs and stories. Again, to celebrate Diwali this year, the Utcarsh members were invited to reflect and share about how they are a light to the family, friends and society at large. Following this, Christmas was also celebrated by the cell members with joy and carol singing. Additionally, 40 members of the housekeeping staff of HDRC, XRF, Gurjarwani, Parish and St Xaviers Residence were invited for a celebration with the cell members.

• Counselling: The campus ministry attends to the counselling of students, staff and parents. It offers support during times of individual difficulty, loss, illness, and bereavement. This year we had the help of Ms Shobha Varghese who offered counselling to a group of students.

### **Prompt faculty replacements**

This year, the college management appointed new faculty and staff to different departments, notwithstanding the lacunae in government appointments. The new inductions into the staff are:

- One full-time Assistant Professor, one Lab Peon and one Lab Assistant have been appointed in the Chemistry Department.
- Two full-time Assistant Professors have been appointed in the Physics Department.
- One Assistant professor has been appointed in the Department of Biochemistry and Biotechnology.
- In the Computer Science Department, one Associate Professor, one Assistant Professor, two post-graduates and one Ph.D. scholar have been invited as Visiting Faculty.
- Four Assistant Professors have been appointed in the Commerce Department.
- The Botany and Statistics Departments have one newly appointed Visiting Faculty each.
- The Economics Department has appointments of one Coordinator, one Assistant Professor, and one Visiting Faculty.

### Personal support to bereaved faculty or their families

A good practice at SXCA is the moral and emotional support offered to the bereaved families of the college staff who have lost loved ones.

### **CONCLUSION**

At the beginning, this report compared education with the lighting of a fire. The only way to assess whether the fire is ablaze is to look at society, the nation and the world, and see if it is a peaceful, just, prosperous place. Until this happens, we believe that the work of the college remains incomplete. So, even though we are proud of what we have accomplished during the academic year 2022-2023, we look forward with renewed vigour and hope to the coming year. For St. Xaviers College, Ahmedabad, the journey towards Tagore's "heaven of freedom" continues.

## **ANNEXURE 1: INDIVIDUAL SPORTS ACHIEVEMENTS**

Sr. No.	Name of Student	Sport	Details of event	Date
1	Dabhi Nevil Pankajkumar- 20-BPS- 024	Basketball	Inter University west zone championship	December 10 2022
2	Divyaraj Champavat- 22-CO-069	Basketball	50 hours nonstop tournament by LJ University	January 20 2023
3	Divyaraj Champavat- 22-CO-069 Vishwa Panchal- 21-BPS-026 Kushwaha Rohit- 20-BPS-043	Basketball	Xavies Cup organized by St Xavier's College ahmedabad	January 02 2023
4	Divyaraj Champavat- 22-CO-069	Basketball	Energy Cup by PDEU	February 14 2023
5	Divyaraj Champavat- 22-CO-069	Basketball	Justice League Cup by GNLU	February 23 2023
6	Vishwa Panchal- 21-BPS-026	Basketball	Augustus Basketball Parents Cup by Oasis sports	February 10 2022 and January 3 2023
7	Vishwa Panchal- 21-BPS-026	Basketball	NBC CHAMPIONSHIP 3X3 Augustus Healthcare LLP	March 26 2022
8	Vishwa Panchal- 21-BPS-026	Basketball	LJ Cup organized by LJ institute of Sports Management	January 30 2023
10	Vishwa Panchal- 21-BPS-026	Basketball	Basketball- 50 hours non stop tournament organized by Oasis sports	May 19 2023
11	Vishwa Panchal- 21-BPS-026	Basketball	Basketball- Memorial cup	December 7 2022
12		Basketball		
13	Vishwa Panchal- 21-BPS-026	Basketball	Basketball- Premier School league organized by Transtadia	August 18 2022
14	Vishwa Panchal- 21-BPS-026	Basketball	Gujarat University inter college	September 8 2022
15	Vishwa Panchal- 21-BPS-026	Basketball	71st Senior National Basketball Championshipat Chennai , Tamil Nadu	April 3 2022
16	Vishwa Panchal- 21-BPS-026	Basketball	71st Junior National Basketball	January 4 2022

_	T	1		
			Championshipat Indore	
			, Madhya Pradesh	
17	Vishwa Panchal- 21-BPS-026	Basketball	All India Inter-	March 3 2022
			university Indore,	
			Madhya Pradesh	
18	Vishwa Panchal- 21-BPS-026	Basketball	36th National Games	September 27 2022
			at Bhavnagar , Gujarat	
19	Vishwa Panchal- 21-BPS-026	Basketball	3x3 Mirzapur Cup	February 23 2023
			organized by St.	
			Xavier's School	
			Mirzapur	
20	Vishwa Panchal- 21-BPS-026	4×100	Gujarat University inter	January 13 2023
		relay race	college	
21	Vishwa Panchal- 21-BPS-026	Basketball	Khel Mahakumbh,	June 1 2022
			Surat	
22	Gautam Bhimani - 21-CO-004	Athletics	Gujarat University	January 12 2023
		400m and	Inter-college events	
		4×400m		
		Relay		
23	Alwin Johnson- 21-BPS-016	Football	Inter College Football	September 28 2022
			Tournament	
24	Alwin Johnson- 21-BPS-016	Football	Inter-parish Football	July 31 2022
			Tournament	

## **ANNEXURE 2: YOUTH FESTIVAL 2022 - 23**

	PARTICIPANTS	
	Name	Roll No.
Carte	ooning	
1	Vishwa Jani	21-PS-549
Class	ical Dance	·
2	Yatree Rameshchandra Joshi	20-PS-537
Class	sical Vocal Solo	·
3	Sheth Karnik Sheth	21-PS-597
Colla	ge	·
4	Shruti Tomar	20-EC-274
Deba	nte	
5	Saumya Pankajkumar Valvai	21-EC-235
6	Hemiksha Gohil	21-BCA-106
Eloci	ution	
7	Makwana Kumar Shashvat Amrutlal	21-PS -108
India	n Group Song	·
8	Abhinav Dixit	21-BO-0609
9	Shashank Swarnkar	21-CH-0011
10	Seta JafarAli JunasBhai	20-EC-026
11	Udit Khalpada	21-BCA-116
12	Priyal Dixit	20-ST-0412
13	Rutanshi Mehta	22-PS-550
India	n Light Vocal	·
14	Neti Vyas	20-EN-354
Meh	endi	
15	Shreshtha Rabadiya	21-BCA-062
Poet	ry Recitation	
16	Neti Vyas	20-EN-354
Post	er Making	·
17	Anjali fataniya	21-EC-245
Quiz		
18	Kuhu Gautam	21-BT-017
19	Harshal Sangawat	20-ST-0525
20	Swaminathan T.	20-ST-0401
Spot	Photography	
21	Gourav Meena	20-EC-239
Poet	ry Completion	
22	Smeet Mishra	21-CH-1018
Garb	a	•

23	Kavisha Madani	20-ST-0429
24	Purva Shah	21-BT-047
25	Nandini Pandya	21-BT-037
26	Diya Chottai	21-BPS-007
27	Yashvi Sandesari	21-BPS-033
28	Aashvi Rawal	21-BT-044
29	Shiny Rao	20-EC-279
30	Vidhi Shah	20-PS-574
31	Shivangi Machhar	21-BC-0864
32	Nandini Pathak	21-BT-042
	Act Play	21 01 042
33	Diya Bakrania	20-EC-204
34	Esha Pancholi	20-PS-121
35	Bhakti Jain	20-EN-315
36	Leepi Pandya	20-PS-598
37	Prachi Morbia	20-PS-550
38	Karnil Pancholi	20-EN-325
39	Shivang Rathod	20-PH-0338
40	Shiv Soni	20-BPS-080
41	Darshan Kacha	21-BC-0875
Skit		
42	Rukhsana Sama	21-BCA-151
43	Aarohi Vaidya	21-EN-342
44	Palash Aslot	21-BT-068
45	Pahel Shah	20-EC-261
46	Saumya Mehta	21-SN-152
47	Charmi Goswami	21-EN-409
Mim	e	
48	Mahek Jani	20-PS-530
49	Mahek Raval	20-BPS-068
50	Nandish Shah	20-BC-0956
51	Dev Patel	21-BT-061
51 52	Dev Patel Krutarth Baladhiya	21-BT-061 20-EC-002
52 53	Krutarth Baladhiya	20-EC-002
52 53	Krutarth Baladhiya Rutva Thakkar	20-EC-002
52 53 <b>Wes</b> 54	Krutarth Baladhiya Rutva Thakkar tern Vocal Solo	20-EC-002 20-GU-067
52 53 <b>Wes</b> 54	Krutarth Baladhiya Rutva Thakkar t <b>ern Vocal Solo</b> Pankhi Brahmbhatt	20-EC-002 20-GU-067
52 53 Wes 54 Wes	Krutarth Baladhiya Rutva Thakkar tern Vocal Solo Pankhi Brahmbhatt tern Instrumental Solo	20-EC-002 20-GU-067 22-PEN-002

57	Priyal Dixit	20-ST-0412
58	Chrissie Christian	21-BPS-008
59	Brendan Xavier	20-PS-596
60	Pari Brahmbhatt	21-EN-337
61	Pankhi Brahmbhatt	22-PEN-002
Folk	Dance	
62	Gamit Krunal	21-EC-006
63	Chaudhry Aryan	21-EL-0205
64	Konkani Dhaval	21-EC-005
65	Rushiyesh Raichand	21-EC-004
66	Gamit Alpesh	21-EC-001
67	Chovre Prarthit	21-EL-307
68	Kokni Dixit	21-PS-101
69	Kokni Niravbhai	21-PS-102
70	Vasava Jonsanbhai	21-PS-104
71	Saurabh Gamit	21-BO-0605
Class	sical Instrumental Solo (Percussion)	
72	Aaron Khambhata	20-BC-0872
Class	sical Instrumental Solo (Non-Percussion)	
73	Laksh Joshipura	22-PBC-004
	On the spot Painting	
74	Shubhanjali Sharma	20-zo-0733

	WINNERS AT INTER-COLLEGE LEVEL					
Sn.	Name	Roll No.				
Classi	cal Vocal Solo					
1	Sheth Karnik Sheth	21-PS-597				
Classi	cal Instrumental Solo (Percussion)					
2	Aaron Khambhata	20-BC-0872				
Classi	cal Instrumental Solo (Non-Percussion)					
3	Laksh Joshipura	22-PBC-004				
Weste	ern Instrumental Solo					
4	Raul Gomes	20-BPS-033				
Weste	ern Vocal Solo					
5	Pankhi Brahmbhatt	22-PEN-002				
Weste	ern Group Song					
6	Himanshu Pandey	20-BCA-096				
7	Priyal Dixit	20-ST-0412				
8	Chrissie Christian	21-BPS-008				
9	Brendan Xavier	20-PS-596				

10	Pari Brahmbhatt	21-EN-337
11	Pankhi Brahmbhatt	22-PEN-002
Indian	Group Song	
12	Abhinav Dixit	21-BO-0609
13	Shashank Swarnkar	21-CH-0011
14	Seta JafarAli JunasBhai	20-EC-026
15	Udit Khalpada	21-BCA-116
16	Priyal Dixit	20-ST-0412
17	Rutanshi Mehta	22-PS-550
Mehe	ndi	
18	Shreshtha Rabadiya	21-BCA-062
Garba		
19	Kavisha Madani	20-ST-0429
20	Purva Shah	21-BT-047
21	Nandini Pandya	21-BT-037
22	Diya Chottai	21-BPS-007
23	Yashvi Sandesari	21-BPS-033
24	Aashvi Rawal	21-BT-044
25	Shiny Rao	20-EC-279
26	Vidhi Shah	20-PS-574
27	Shivangi Machhar	21-BC-0864
28	Nandini Pathak	21-BT-042
Debat	e	
29	Saumya Pankajkumar Valvai	21-EC-235
30	Hemiksha Gohil	21-BCA-106

	WINNERS AT ZONAL LEVEL					
	Name	Roll No.				
Western Instrumental Solo						
1	Raul Gomes	20-BPS-033				
Weste	rn Vocal Solo					
2	Pankhi Brahmbhatt	22-PEN-002				
Weste	rn Group Song					
3	Himanshu Pandey	20-BCA-096				
4	Priyal Dixit	20-ST-0412				
5	Chrissie Christian	21-BPS-008				
6	Brendan Xavier	20-PS-596				
7	Pari Brahmbhatt	21-EN-337				
8	Pankhi Brahmbhatt	22-PEN-002				

Indian Group Song					
9	Abhinav Dixit	21-BO-0609			
10	Shashank Swarnkar	21-CH-0011			
11	Seta JafarAli Junasbhai	20-EC-026			
12	Udit Khalpada	21-BCA-116			
13	Priyal Dixit	20-ST-0412			
14	Rutanshi Mehta	22-PS-550			
Debat	Debate				
15	Saumya Pankajkumar	21-EC-235			
16	Hemiksha Gohil	21-BCA-106			
Classic	cal Vocal Solo				
17	Sheth Karnik Sheth	21-PS-597			
Classic	cal Instrumental Solo (Percussion)				
18	Aaron Khambhata	20-BC-0872			
Classic	cal Instrumental Solo (Non-Percussion)				
19	Laksh Joshipura	22-PBC-004			

# **ANNEXURE 3: EXAMINATION RESULTS 2022 - 23**

PROGRAMME		SEM 1	SEM 2	SEM 3	SEM 4	SEM 5	SEM 6
	FIRST CLASS	78	79	104	98	84	55
	FIRST CLASS WITH DISTINCTION	44	42	50	61	55	51
	HIGHER SECOND CLASS	37	37	36	25	29	7
	OUTSTANDING-EXEMPLARY	65	79	41	74	80	103
ВА	PASS CLASS	6	19	14	14	7	2
	SECOND CLASS	24	24	23	16	17	3
	TOTAL STUDENTS APPEARED	392	353	340	329	295	291
	TOTAL STUDENTS PASSED	254	280	268	288	272	221
	PASS PERCENTAGE	65%	79%	79%	87%	92%	76%
	FIRST CLASS	57	54	69	79	79	71
	FIRST CLASS WITH DISTINCTION	24	23	24	36	35	44
	HIGHER SECOND CLASS	24	20	30	32	29	23
	OUTSTANDING-EXEMPLARY	24	41	34	36	46	90
B.Sc.	PASS CLASS	5	13	10	1	4	4
	SECOND CLASS	11	18	22	15	18	13
	TOTAL STUDENTS APPEARED	308	306	319	307	285	296
	TOTAL STUDENTS PASSED	145	169	189	199	211	245
	PASS PERCENTAGE	47%	55%	59%	65%	74%	83%
	FIRST CLASS	10	12	10	16	10	15
	FIRST CLASS WITH DISTINCTION	4	6	10	9	10	11
	HIGHER SECOND CLASS	7	5	13	6	7	6
	OUTSTANDING-EXEMPLARY	4	3	2	4	2	6
BSc-BT	PASS CLASS	1	1	-	-	2	-
	SECOND CLASS	5	2	3	2	3	2
	TOTAL STUDENTS APPEARED	46	46	50	46	47	41
	TOTAL STUDENTS PASSED	31	29	38	37	34	40
	PASS PERCENTAGE	67%	63%	76%	80%	72%	97%
	FIRST CLASS	26	25	39	41	48	19
	FIRST CLASS WITH DISTINCTION	20	15	19	24	28	28
ВСА	HIGHER SECOND CLASS	14	13	18	12	16	3
	OUTSTANDING-EXEMPLARY	39	34	51	47	37	74
	PASS CLASS	2	4	5	9	8	1

	SECOND CLASS	4	15	9	13	9	1
	TOTAL STUDENTS APPEARED	140	144	182	183	167	152
	TOTAL STUDENTS PASSED	105	106	141	146	143	126
	PASS PERCENTAGE	75%	74%	77%	80%	86%	83%
	FIRST CLASS	18	12	17	18	21	21
	FIRST CLASS WITH DISTINCTION	5	6	10	10	20	18
	HIGHER SECOND CLASS	2	6	6	6	8	-
	OUTSTANDING-EXEMPLARY	16	13	13	6	23	29
B.Com. (BPS)	PASS CLASS	1	4	1	4	1	1
	SECOND CLASS	3	7	3	2	3	2
	TOTAL STUDENTS APPEARED	62	60	57	55	83	86
	TOTAL STUDENTS PASSED	45	48	50	46	76	71
	PASS PERCENTAGE	73%	80%	88%	84%	92%	82%
	FIRST CLASS	19	18	16	12		
	FIRST CLASS WITH DISTINCTION	10	7	3	6		
	HIGHER SECOND CLASS	11	5	4	4		
	OUTSTANDING-EXEMPLARY	8	15	3	4		
B.Com. (GENERAL)	PASS CLASS	-	1	5	2		
(GLIVERAL)	SECOND CLASS	-	4	5	1		
	TOTAL STUDENTS APPEARED	66	61	46	44		
	TOTAL STUDENTS PASSED	48	50	36	29		
	PASS PERCENTAGE	73%	82%	78%	66%		
	FIRST CLASS	4	3	7	6		
	FIRST CLASS WITH DISTINCTION	4	2	1	2		
	HIGHER SECOND CLASS	1	1	1	2		
B.Sc.	OUTSTANDING-EXEMPLARY	3	6	-	1		
(COMPUTER	PASS CLASS	1	2	-	1		
SCIENCE)	SECOND CLASS	-	-	3	1		
	TOTAL STUDENTS APPEARED	20	20	18	18		
	TOTAL STUDENTS PASSED	13	14	12	13		
	PASS PERCENTAGE	65%	70%	67%	72%		
B.Sc. (MATHS)	FIRST CLASS	3	2	5	2		
D.SC. (IVIATIES)	FIRST CLASS WITH DISTINCTION	1	1	3	4		

I		1			Γ.	1	1
	HIGHER SECOND CLASS		1		2		
	OUTSTANDING-EXEMPLARY	3	3	3	4		
	SECOND CLASS	-	-	1	-		
	TOTAL STUDENTS APPEARED	7	7	12	12		
	TOTAL STUDENTS PASSED	7	7	12	12		
	PASS PERCENTAGE	100%	100%	100%	100%		
	FIRST CLASS	9	8				
	FIRST CLASS WITH DISTINCTION	4	7				
	HIGHER SECOND CLASS		1				
BA (ECO-	OUTSTANDING-EXEMPLARY	11	13				
HONS)	SECOND CLASS	1					
	TOTAL STUDENTS APPEARED	35	32				
	TOTAL STUDENTS PASSED	25	29				
	PASS PERCENTAGE	71%	91%				

# **ANNEXURE 4: STUDENT RESEARCH PROJECTS**

Sr no	Name of the Student	Roll No.	Department	Title of the Project	Guide	Scholarship Name	Amount (Rs.)
1	Heenabharati Singh	22-PCH- 028	Chemistry	A study on modified route of synthesis for tio2 nanoparticles, it's characterization and antimicrobial aspects	Dr. Devang Pandya		
2	Harshkumar Panchal	22-PCH- 015	Chemistry	A study on synthesis of TIO2 nanoparticle using different alkali solutions, characterisation and photocatalytic application	Dr. Devang Pandya		
3	Nishta Patel	22-PCH- 019	Chemistry	Characterisation and Photocatalytic	Dr. Mallika Sanyal		
4	Singh Roshni	21-CH- 0010	Chemistry	Photosynthesis and characterization of silver nanoparticles with cissus quadrangularis extract and its applications	Dr. Divya Gangal/Prof. Disha Khetani	Mr. Nilesh Patel	1200
5	Pandya Dhruvbhai	21-CH- 0019	Chemistry	A study on synthesis characterisation and applications of CDS nanoparticles	Dr. Devang Pandya	Mr. Naresh Monga	1200
6	Dodiyar Anjali	21-CH- 0104	Chemistry	Green synthesis of silver nanoparticles using aloe vera	Prof Disha Khetani/Dr. Divya Gangal	Mr. Nilesh Patel	1200

				gel and determining its applications			
7	Kathi Divyraj	21-CH- 0016	Chemistry	A study on effect of allicin acid on CDS nanoparticles through spectral characterization and antimicrobial aspects	Dr. Devang Pandya	Mr. Harshad Shah	1200
8	Prachi	22-PCH- 054	Chemistry	Nanoparticles through spectral	Dr Divya Buha /Dr Angel Mary	Krishnakumar Vijh	1200
9	Sonakshi	22-PCH- 67	Chemistry	Characterization and antimicrobial aspects	Dr Angel Mary/ Dr Divya Buha	Mr. Jayantibhai Patel	1200
10	Ronak Kharchaliya	22-PCH- 010	Chemistry	Green synthesis of copper oxide nano particles using Acacia nilotica seed Pod	Dr. Mallika Sanyal		
11	Sachin Mishra	21-PPH- 014	Physics- Electronics	An Effective Big Data Analytics and Machine Learning model for the prediction of Air Quality Index	Dr. Sanjeev K. Gupta		
12	Anuj Pillai	21-PPH- 029	Physics- Electronics	Enhancing AQI by machine learning models using atmospheric impurities and meteorological data	Dr. Sanjeev K. Gupta		
13	Niel Solanki	21-PPH- 024	Physics- Electronics	Insight of Amyloid protein from MD Simulation for Computational Drug Design	Dr. Sanjeev K. Gupta		

14	Jugal Pandya	20-PH- 0306	Physics- Electronics	`Optimization of power conversion efficiency in a doped FASnI3 perovskite using machine learning techniques	Dr. Sanjeev K. Gupta	Lt. Mr. Peter Gabriel Jadav	1200
15	Aesha Teli	20-PH- 0358	Physics- Electronics	The behaviour of charged particles in presence of electric and magnetic field	Dr. Ritu Dey & Dr. Joydeep Ghosh	Mr. Tushar J Patel	1200
16	Priyansh Sadhu	20-PH- 0371	Physics- Electronics	Fourier transformation spectroscopy	Mr. Ravinder Kumar		
17	Rimjhim Rajput	20-PH- 0331	Physics- Electronics	Electromagnetic wave characteristics of elliptical wave guide	S.K.Pathak	Mr. Nutan Krishnakumar Vijh	1200
18	Sahil Maity	20-PH- 0328	Physics- Electronics	Ü	Ms. P Bharathi		
19	Shivangi Maheshwari	20-EL- 0210	Physics- Electronics	Magnetic field excitation and field analysis	M.Awasthi		
20	Jahanvi Lalwani	21-PPH- 010	Physics- Electronics	Testing and operation of a MOCS diagnosis for Aditya-u tokamak	Santosh Sir		
21	Vivek Vaghela	20-PPH- 027	Physics- Electronics	Radiation impact on the structural properties of insulating material	Dr. Sejal Shah		
22	Ruwaydahzehra Bukhari	22-PPH- 003	Physics- Electronics	Understanding Variation of Land Surface Temperature	Dr. Rajesh lyer	Zaveri & Co	1200
23	Anjali Patel	20-PH- 0304	Physics- Electronics	Understanding the Venusian Atmospheric Profile using	Dr. Rajesh lyer	Mr. Hiten Shah	1200

				Akatsuki Radio Science Data			
24	Anchal Patel	20-PH- 0310	Physics- Electronics	comparison of different model Venusian Temperature Profile with Satellite data observation	Dr. Rajesh Iyer	Mr. Harshad Shah	1200
25	Kishan Solanki	20-PH- 0373	Physics- Electronics	Long term trends in aerosol optical depth	Dr. Rajesh Iyer	Ms. Pinky Dalal	1200
26	Abhishek Pandey	20-PH- 0316	Physics- Electronics	Trends in Carbon Monoxide over Ahmedabad	Dr. Rajesh Iyer		
27	Aliya Kureshi	22-PPH- 012	Physics- Electronics	Study of atmospheric boundary layer and black carbon aerosols	Dr. T. A. Rajesh	Mr. Krishnakumar Vijh	1200
28	Paras Thakker	21-PPH- 025	Physics- Electronics	Searching for dark matter in neutrino experiments	Dr. Srubabati Goswami		
29	Haniksha Shah	21-PPH- 021	Physics- Electronics	Study of atmospheric boundary layer and black carbon aerosols	Dr. T. A. Rajesh		
30	Yogesh Patel	21-PPH- 017	Physics- Electronics	Design and development of open-loop sun tracking instrument	Dr. Harish Gadhavi	Mr. Milan Dalal	1200
31	Triya Belani	21-PPH- 001	Physics- Electronics	Femtosecond laser filamentation	Dr. Rajesh Kumar Kushwaha		
32	Nupur Chotaliya	21-PH- 3386	Physics- Electronics	Modelling and Characterization of Silicon Photomultiplier Detectors	Dr. Shiv Kumar Goyal	Mr. Donald Marks	1200
33	Ronak Maurya	20-PH- 0353	Physics- Electronics	Chemical Separation and Isotope analysis of Chromium in	Dr Yogita Kadlag	Zaveri & Co	1200

				geological reference materials.			
34	Mansi Soni	20-EL- 0216	Physics- Electronics	Modelling and Characterization of Silicon Photomultiplier Detectors	Dr. Shiv Kumar Goyal		
35	Jenil Changela	21-PPH- 003	Physics- Electronics	Design of Curved Prism Based on Imaging Spectrometer	Dr. Vaibhav Dixit	Mr. Manish J Patel	1200
36	Kishan Malaviya	21-PPH- 012	Physics- Electronics	IMAGE SIMULATION OF ASTRONOMICAL RESOURCES	Dr. Shashikiran Ganesh	Mr. Nadeemahmed Jafri	1200
37	Namit Kamani	21-PPH- 009	Physics- Electronics	Simulation of X-Ray emission from Low-Z impurities in High temperature tokamak machine	Dr. Sapna Mishra and Dr. Amit K. Singh		
38	Patel Kinjal	21-PPH- 016	Physics- Electronics	Characteristics of Sudden Stratospheric Warming events over lasr 40 years	Dr. Ravindra Pratap Singh		
39	Bhave Shweta	21-PPH- 002	Physics- Electronics	Code RAMSES: A numerical study - Star Formation	Dr. Kinsuk Acharyya		
40	Vishakha Jawat	21-Bo- 0612	Botany	Study on Cultivation of GM Crop: Mustard in India	Dr. Rashmi Yadav	Mr. Harshad Shah	1200
41	Esha Dave	21-BO- 0632	Botany	A survey on Floricultural scenario of Ahmedabad city, Gujarat State	Dr. Rashmi Yadav	Nutan Vijh	1200
42	Tavishi Parmar	21-PS- 3610	Psychology	Evaluate the correlation between	Dr. Profaina. Christian	Ms. Rupalee Vijh	1200

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				curiosity levels			
				and ADHD in			
				children			
43	Navya Shivani	21-PS-	Psychology	Examining	Dr. Arti oza		
		569		Parental			
				Psychological			
				Well Being: A			
				comparative			
				study betwwen			
				parents of			
				Children with			
				and without			
				intellectual			
				deficiency			
44	Dhwani Daiya	21-PS-	Psychology	A Comparative	Dr. Arti oza	Mr. Shital	1200
		113		study of		Patwa	
				spiritual			
				intelligence in			
				students of			
				classical			
				artforms			
45	Mann Acharya	21-PS-	Psychology	Compassion	Dr. Tatpar		
		551		Satisfaction,	Joshipura		
				Compassion			
				Fatigue And			
				Burnout In 3			
				Different			
				Professions:-			
				Doctors,			
				Psychologists			
				and Corporate			
				Workers			
	Vishwajit	21-PS-		Compassion			
	Parmar	552		Satisfaction,			
				Compassion			
				Fatigue And			
				Burnout In 3			
				Different			
				Professions:-			
				Doctors,			
				Psychologists			
				and Corporate			
				Workers			
46	Palak Khatri	21-PS-	Psychology	A Comparative	Dr Supriya Sioni	Mr. Prabhat	
		565	, J,	Study on the		Vijh	
	Chaitri Desai		Smartphone		Mr. Prabhat		
	3	567		Addiction of		Vijh	
				High School and		, ,,,,	
		1		College			

				Students			
				Residing in			
				Home and			
				Hostel/pg			
47	Gandhi Armin	21-PS-	Psychology	A Study of	Dr. Supriya Sioni	Lt. Mr. Peter	1200
		578		Psychological	. ,	Gabriel Jadav	
				Well-being of			
				Women in			
				Relation to			
				Their Job			
				Condition and			
				Age			
48	Hardi Patel	21-PS-	Psychology	Religion, anxiety	Dr. Tatpar	Zaveri & Co	1200
		559		and life	Joshipura		
				satisfaction in			
				young adults			
				and their			
				parents			
49	Malhar	21-BCA-	Computer	Study Based On	Dr. Dhara Bhatt	Lt. Fr. Donald	600
	Prajapati	058	Science	Image		Dias	
				Steganography			
	Sneha Priya	21-BCA-	Computer	Study Based On	Dr. Dhara Bhatt	Zaveri & Co	600
		059	Science	Image			
		01.00		Steganography			1000
50	Allen Rufus	21-BCA-	Computer	Matrix	Dr. Dhara Bhatt	Zaveri & Co	1200
		067	Science				
51	Roshni Yadav	21 EC 563	Economics	Evaluateing the	Khushi Trivedi	Lt. Madhuben J	600
				impact of		Patel	
				different			
	Dhruvi Dave	21 EC 216		marketing		Lt. Madhuben J	600
	Dill avi Bave	2120210		strategies on		Patel	000
				customers'		1 4 6 6 1	
				online buying			
	AI: II : B	20.67	c	behaviour	5.4		500
52	Nidhi Benny	20-ST-	Statistics	Analysis and	Dr. Aruna	Lt. Fr. Donald	600
		0502		Forecasting of Particulate	Pandya	Dias	
	Dharmi Malde	20-ST-				Lt. Fr. Donald	600
		0508		matter (PM 2.5)		Dias	
				using Time Series ARIMA			
				Model and			
				Random Forest			
				Regression			
				Model			
53	Khushi Jain	20-ST-	Statistics	Predictive	Dr. Sweta Patel	Mr. Dilipbhai	600
		0526	3.00.000	Analysis of	2 3.7.0 7 4101	Parikh	
		5525					

	Praveen Chaudhary	20-ST- 0531		Electric Vehicle in India		Mr. Dilipbhai Parikh	600
54	Tisha Punit Mehta	20-BC- 0910	Biochem- BioTech	Screening and biodegradation	Dr. Sonal Thakur	Mr. Harshad Shah	600
	Vrushali Parag Patel	20-BC- 0924		assay of polethylene degrading bacteria		Mr. Harshad Shah	600
55	Rutvijsinh Parmar	21-SN- 152	Sanskrit	Effects of Vedic and Smriti literature on gender roles in India	Dr. Ishwar Mehra		
56	Rutvijsinh Parmar	21 GU 056	Gujarati- Hindi	Gujarati Lekhikaoni Aatmkathao ane Samprat Sandarbh (Muktivrutant ane Paglu Mandu Hun Avkashma)	Dr.P.U.Makwana		
57	Gajjar Mauli G.	21 EN 321	Gujarati- Hindi	Kavi Shri Naresh Mehta Ke Khandkavy shabri Ki Kathygat Visheshtae Ek Vihangavlokan	Prof.Anil Parmar		
58	Rutvijsinh Parmar	21 GU 056	Gujarati- Hindi	Mahadrvi Varma Ke Rekhachitro Ka Mulyankan Aaj Ke Sandarbh me	Prof.Anil Parmar		
59	Kinjal Vachhta	21 PS 116	Gujarati- Hindi	Mahadevi Varma Rachit Rekhachite Sansmaran me Vyakt Nari Chetna Ek Adhyayan	Prof.Anil Parmar		



# **ANNEXURE 5: JOB PLACEMENTS**

List of Students selected during campus placement

Student Name	Roll No.	Company
Saj Sebastian	20-BPS-002	Bank of America
Hiya Chourasia	20-BPS-016	Bank of America
Nidhi Dalal	20-BPS-025	Bank of America
Rohit Kushwaha	20-BPS-043	Bank of America
Rohan Maheshwari	20-BPS-046	Bank of America
Justin Reji	20-BPS-069	Bank of America
Krisha Singh	20-BPS-078	Bank of America
Alwin Jose	20-BPS-003	TATA Consultancy Services (TCS)
Angela Biju	20-BPS-040	TATA Consultancy Services (TCS)
Anushka Shanker	20-BPS-076	TATA Consultancy Services (TCS)
Dhruvi Panchal	20-BPS-057	TATA Consultancy Services (TCS)
Hiya Chourasia	20-BPS-016	TATA Consultancy Services (TCS)
Joshua Mathew	20-BPS-015	TATA Consultancy Services (TCS)
Justin Reji	20-BPS-069	TATA Consultancy Services (TCS)
Kanthi Buddhadev	20-BPS-011	TATA Consultancy Services (TCS)
Kenisha Fernandes	20-BPS-030	TATA Consultancy Services (TCS)
Khushbu Mukhi	20-BPS-052	TATA Consultancy Services (TCS)
Krisha Singh	20-BPS-078	TATA Consultancy Services (TCS)
Madhav Rathi	20-BPS-067	TATA Consultancy Services (TCS)
Mahek Raval	20-BPS-068	TATA Consultancy Services (TCS)
Nidhi Dalal	20-BPS-025	TATA Consultancy Services (TCS)
Rajita Ghimire	20-BPS-032	TATA Consultancy Services (TCS)
Ranjan Rana	20-BPS-065	TATA Consultancy Services (TCS)
Rutvik Bhatt	20-BPS-010	TATA Consultancy Services (TCS)
Saishankar Rajkumar	20-BPS-085	TATA Consultancy Services (TCS)
Saj Sebastian	20-BPS-002	TATA Consultancy Services (TCS)