



# St. Joseph Vaz College

✉ principal@stjosephvazcollege.in ☎ 0832-2550812

Cortalim - Goa, 403710

Affiliated to Goa University and recognized by the Govt. of Goa



## PROSPECTUS 2023-2024

### B.Sc. Specialisation

Microbiology (Honours) - Affiliation Sought

Chemistry (Honours)

Botany (Honours)

Mathematics

## **ABOUT ST. JOSEPH VAZ COLLEGE!**

Our college is named after St. Joseph Vaz, the first Goan Saint who was canonized by Pope Francis on 14th January 2015, at Galle face in Colombo, Sri Lanka.

St. Joseph Vaz himself was an educator par excellence, who from the years 1655-1711 inspired many as an exemplary teacher. The apostolate of education that he undertook more than three hundred years ago is still relevant even today. His foresight of opening schools and using education for enlightening citizens as well as for proclamation of the Good News is praiseworthy. He believed that through education he could achieve the transformation and progress of individuals as well as of society.

St. Joseph Vaz Educational Society is a sister concern of the Diocesan Society of Education, the largest Educational Society running over 100 educational institutions in the State of Goa and providing quality education to the students enrolled in its institutions. Diocesan Society of Education, established in the year 1974, has been continuously striving to provide spiritual, humanizing, liberating and quality education which has become a gateway to moral, socio-cultural and economic development of persons and thereby of the nation.

St. Joseph Vaz Educational Society, having realized the need of opening an Institution of Higher Education, decided to establish a College of Science named St. Joseph Vaz College to perpetuate the memory of the first Goan Saint for posterity. The College, located in Cortalim, initiated the undergraduate courses in the field of science, in the year, 2017. New job-oriented programmes will be introduced in the years to come to cater to the needs of industries and companies. It aims at providing to the stakeholder's value and skilled based education.

The College is affiliated to Goa University and recognized by Government of Goa. St. Joseph Vaz College will always attempt to provide a platform for young minds to enhance their knowledge and skills and thereby contribute to the growth of education in the State and Country.



## **OUR VISION**

“Education for Empowerment, Science and Skills”

## **OUR MISSION**

“Promoting Quality Education and Character Formation through Proactive Strategies”

## **OUR CORE VALUES**

Competence; Collaboration; Commitment; Creation

## **RULES AND REGULATIONS**

1. All students are responsible to the Administrator, Principal, the Teaching Faculty and other designated persons for their conduct.
2. Insubordination, unbecoming language or behavior are sufficient reasons for the dismissal of a student.
3. Any kind of demonstration in the College premises is prohibited.
4. The time-table of lectures will be displayed on the Notice Board at the beginning of the academic year.
5. Students should be punctual and should be present in college at 8:45 a.m. Absence from lectures/practical's must be justified in writing, and, in the case of illness a medical certificate must be submitted within seven days after joining the College.
6. Absence from ISA/SEE/Practical Examination must be justified in writing, and in the case of illness, by a medical certificate.
7. Students who do not perform the required number of experiments and maintain a Practical Journal/File will be debarred from answering the Practical Examination.
8. Students without identity cards will not be permitted to enter the campus. If they do so, they will be liable for disciplinary action.
9. Serious action will be taken against students found in possession of pornographic materials (Books, CDs, Cameras, Pen Drives, Cell Phones, etc.).
10. A student who causes damage to College property is liable to serious punishment in addition to paying the fine and making up for the cost of damage.
11. The College does not undertake the responsibility of organizing picnics for students.
12. Students applying for certificates, testimonials, etc., and those requiring the Principal's signature on any kind of documents or applications, should contact the College Office.
13. Students should make themselves familiar with the syllabi of their courses of study and the University Regulations given in the University Website, as well as with all other College Regulations and Notices appearing from time to time on the Notice Boards.
14. Parents are required to visit the College to collect results and check progress report of their children and meet the Administrator Principal/respective faculty at least twice a year.
15. Smoking and alcoholic beverages and drugs are strictly prohibited in the College campus.
16. The use of cell phones is strictly prohibited in the campus. No student shall bring or use cell phones within the College campus. If found, appropriate punishment shall follow, including a fine of ₹ 500.
17. Dress code is strictly to be followed. Indecent dressing like, plunging necklines, low

waist/gunshot jeans, short T-shirts/shirts, mini-skirts, slits, sleeveless clothing, shall attract punishment. Boys will not be allowed with long hair and beard.

18. Students joining the College have to observe all the Rules and Regulations of the College, to the satisfaction of the Principal, whose decision shall be final and binding.
19. Ragging is banned in the College and anyone found indulging in “ragging” will be punished appropriately, which may include expulsion from the college. As per the Supreme Court Order, if the individuals committing or abetting “ragging” are not identified, collective punishment will follow to act as a deterrent punishment and to ensure collective pressure on potential “raggers”. Migration/Leaving/Transference certificate shall have an entry apart from that of general conduct and behavior whether a student had indulged in ragging and in particular whether he/she was punished for ragging.
20. If students are found involved in gambling on the campus, strict action would be taken to the extent of suspension from the College.

**Excellent Infrastructure:** Classrooms equipped with LCDs, well equipped Chemistry, Botany and Physics laboratories, Computer laboratory, Library, Committee room, Canteen, Seminar Hall, girl's and boy's common room, Internet-WIFI connection, Sports equipment's etc.

**MoUs:** The College has functional MoUs with:

- 1) Don Bosco College, Panjim
- 2) Goa College of Home Science, Campal, Panjim
- 3) SUSBIO Sustainable Biosolutions Pvt. Ltd., Zuarinagar
- 4) Khazan Society of Goa
- 5) DELNET

**Affiliation:**

- College is Recognised under Section 2(f) of the UGC Act, 1956 and Permanent Affiliation sought with Goa University.

**NAAC Accreditation:**

- The College is preparing for First Cycle of NAAC Accreditation in the year 2024-25.

**Academic Performance at T.Y.:** 100% pass percentage (Years: 2020, 2021, 2022).

**Programmes:** Currently the College offers:

- 1) Honours in Chemistry
- 2) Honours in Botany
- 3) Honours in Microbiology

**Papers offered:** Mathematics and Physics

**Registered Alumni:** 55

**Placement:** 20 students are placed. Remaining pursuing Higher Education and others Self-employed.



## ADMINISTRATOR'S FOREWORD



Education is the process of acquiring knowledge, skill and values. A good Educational Institution not informs and forms but transforms young minds into estimable citizens. It shapes the career and future prospects of an individual and empowers men and women to be the agent of change in our society.

St. Joseph Vaz College, a young College empowers young men and women, especially the underprivileged into responsive citizens through holistic education. The College provides myriad opportunities to students to excel in co-curricular, extra-curricular, sports and other cultural activities. The College provides excellent Student Teacher Ratio that makes each student excel in academics etc. The mentoring programme shapes the academic pursuits and helps students to grow as a human person.

The College provides value-based formation and a good infrastructure that is conducive for teaching learning and helps students to realize their goals.

I am delighted to present to you the youngest upcoming Science College and you will never regret choosing this formidable College.

I am confident that you will fulfill your ambition and realize your dreams at St. Joseph Vaz College.

**Rev. Prof. Simão R. Diniz**  
**Administrator**

## PRINCIPAL'S FOREWORD



**“Colleges are places where pebbles are polished and diamonds are dimmed.” — R.S. Ingersoll**

It is with profound sense of humility and great pleasure that I welcome you to St. Joseph Vaz College. Thank you for taking the time to consider the learning opportunities we have to offer you at this institution.

We have a highly young and skilled group of staff who are committed and genuinely care for each student and will go above and beyond to ensure that their experiences here are positive and meaningful. Every student in this campus is mentored and guided by their teachers, so that the student chooses right path towards career, growth and excellence.

St. Joseph Vaz College is a young upcoming College and as we move forward in the footsteps of our Patron Saint St. Joseph Vaz, we thrive towards the development of our students intellectually, physically, mentally and morally to become strong individuals and better citizens for the welfare of their family and country.

This academic year as we go ahead with the **‘National Education Policy 2020’** WE need to think critically.

NEP 2020 states that *“Education must move towards less content, and more towards learning about how to think critically and solve problems, how to be creative and multidisciplinary, and how to innovate, adapt, and absorb new material in novel and changing fields”*.

Thank you.

**Prof. Maria A.A.R. Fonseca**  
**Principal**



**UNIVERSITY GRANTS COMMISSION****NOTIFICATION**

New Delhi, the 29th June, 2016

**No. F. 1-15/2009 (ARC).**—In exercise of powers conferred under clause (g) of sub-section (1) of section 26 of the University Grants Commission Act, 1956 (3 of 1956), the University Grants Commission hereby makes the following regulations namely:—

- (1) These regulations may be called “Curbing the menace of Ragging in Higher Educational Institutions (third amendment), Regulations, 2016.”
  - (2) They shall come into force on the date of their publications in the Official Gazette.
2. In UGC Regulations on Curbing the menace of Ragging in Higher Educational Institutions, 2009 (herein-after referred to as the Principal regulations), in Para 3 the following shall be added after 3(i) under heading what constitutes Ragging.—
- 3(j). Any act of physical or mental abuse (including bullying and exclusion) targeted at another student (fresher or otherwise) on the ground of colour, race, religion, caste, ethnicity, gender (including transgender), sexual orientation, appearance, nationality, regional origins, linguistic identity, place of birth, place of residence or economic background.

Prof. JASPAL S. SANDHU, Secy. (UGC)

[ADVT. III/4/Exty./149/(113)]

## **ADMISSION PROCEDURE:**

Admission for the current **Academic Year 2023-2024** will be through **ONLINE** Mode commencing from 29<sup>th</sup> May, 2023 after 11:30 a.m. onwards. A Student seeking admission should visit the website of Directorate of Higher Education, Government of Goa: <https://dhe.goa.gov.in/resource/admissiondata/>

The admission form has to be filled **as per the instructions** of **Directorate of Higher Education**.

**All admissions for First Year BSc** will have to submit their application in the prescribed form along with:

**2.Four Identity Card size Photographs**

**3. Leaving Certificate** (Original + 1 photocopy)

**4. Mark Sheet of HSSC/XII** (Original +2 photocopies)

**5. Eligibility Certificate for students from other than Goa University & Goa Board**

**6. SC/ST/OBC Certificates** (If applicable)

**7. Fees in full as per the schedule of fees for the year 2023-2024**

**8.Aadhaar Card Photocopy**

**9. Bank Passbook Photocopy only for SC/ST/OBC Student**

## Course Structure for Semester I & II under NEP with Single Major:

Semester	Major -Core (3+1 credits)	Minor (4 credits)	MC (3 credits)
I	<b>1) CHEMISTRY MAJOR</b> - Major- 1 CHC-100 (Fundamentals of Chemistry)  <b>2) MICROBIOLOGY MAJOR</b> - MIC-100 Basics of Microbiology (4)	<b>1) BOTANY MINOR</b> - BOT-111 Plants in Everyday Life (4)  <b>2) Industrial Chemistry MINOR</b>	<b>1) MATHEMATICS</b> - MC-1 MAT-131 Mathematical Techniques in Competitive Exams  <b>2) ARTS - PSYCHOLOGY</b> - MC-1 PSY - 131: Psychology of Adjustment
II			<b>1) MATHEMATICS</b> - MC-2 MAT-132 Descriptive Statistics  <b>2) ARTS - PSYCHOLOGY</b> - MC-2 PSY 132: Environmental Psychology

### COURSES AND COURSE STRUCTURE

A Course may consist of only theory component, only practical component or theory and practical components. A Course may consist of lectures, tutorials, practicum, seminar, internship, studio activities, field projects, community engagement or a combination of the above forms as recommended by the Board of Studies. For Courses which have theory and practical components, the ratio of 75% theory and 25% practical's shall be maintained with separate heads of passing.

A Programme shall comprise of the following categories of Courses:

#### (a) Disciplinary/Interdisciplinary Major (Core)

A Major Course will provide a student the opportunity to pursue in-depth study of a particular subject or Discipline.

#### (b) Disciplinary/nary Minors

Students may opt for Minor Courses from Disciplinary/ Interdisciplinary areas including skill- based Courses relating to a chosen Vocational Education and Training. Students, who successfully complete the requisite number of courses (as specified in the OA-XX 12.2 & 12.3) in a Disciplinary or an Interdisciplinary area of study other than the chosen Major, shall qualify for a Minor in that Discipline or in the chosen Interdisciplinary area of study. To qualify for a Minor, a student shall have to earn a minimum of Twelve Credits in the chosen Minor. A student shall declare at the end of Semester II the Courses s/he wishes to opt for under Minor.

#### (c) Multidisciplinary Courses (MC)

UG students are required to undergo three introductory-level Courses relating to any Broad Discipline that they have not undergone at the HSSC level as given below:

Natural and Physical Sciences, Mathematics, Statistics and Computer Applications Library, Information and Media Sciences, Commerce and Management, Humanities and Social Sciences.

#### (d) Ability Enhancement Courses (AEC)

Students shall achieve competency in a Modern Indian Language (MIL) and in the English Language with special emphasis on communication, reading and writing skills. Foreign students may opt additional English language Courses or any other foreign language Courses, instead of MIL.

**(e) Skills Enhancement Courses (SEC)**

SECs shall focus on practical skills, hands-on training, soft skills and such other Courses to enhance the employability of the students.

**(f) Summer Internship / Apprenticeship (I)**

Students shall be provided with opportunities for Internships in the summer term. Students shall undergo Internships in a Firm, Industry, Organizations, Laboratory with Faculty and Researchers (in their own or other HEIs), Health and allied areas, Local.

**(g) Dissertation (D)**

A student opting for a Four-Year Bachelor's Degree (Honours with Research) is required to take up a Research Project under the guidance of a Faculty member.

**(h) Value-Added Courses (VAC)**

The following are the VAC common to all UG students:

Understanding India, Environmental Science/Education, Digital and Technological Solutions, Health & Wellness, Yoga Education, Sports, Fitness, Courses related to National Service Scheme (NSS), National Cadet Corps (NCC) and such other Courses.

# DEPARTMENT OF CHEMISTRY



## Our Vision

The Department of Chemistry at St. Joseph Vaz College is dedicated to the instruction, training, and intellectual growth of undergraduate students.

## Our Mission

To advance the intellectual, cultural, and economic condition of the state, and nation through the discovery and development of new knowledge in the field of chemistry.

## Our Objectives

- To consider the latest scientific advances and to impart new concepts in the department's undergraduate curricula
- To develop the next generation of academic, industrial, and government laboratory chemists who will be called upon to solve new problems
- Increase the depth and breadth of outreach activities and opportunities for technology transfer from the faculty and staff to the people of the state, and nation
- Practice of Green Chemistry and facilitate interdisciplinary research



## **FACILITIES:**

**Water Distillation unit, advanced laboratory, hot air oven, fume hood, thermostat, chemsketch and other basic laboratory equipments.**



Chemistry lab

## **FACULTY:**



Ms. Angela Serrao



Dr. Melwin D'souza

## **DEPARTMENT ACTIVITIES:**

Science Day - Plate painting competition



Medical camp





# DEPARTMENT OF BOTANY



## Our Vision

“To prepare blossoms for better tomorrow through the manure of enlightenment, determination and to harvest enriched lives”

## Our Mission

To foster an environment of excellence, ignite minds, develop skills and impart scientific knowledge

## Our Objectives

- To develop a holistic academic excellence and effectively contribute towards understanding botany
- To correlate botany with different disciplines of science
- To uplift the diverse applications of plants and their products
- Prepare students to undertake research that serves the community

## **FACILITIES:**

**Microscope (simple, compound, stereo), centrifuge, digital pH meter, UV-Spectrophotometer, mushroom cultivation, natural mangrove nursery, Algae herbarium, composting unit, botanical garden (marigold, medicinal, hydrophyte and vertical garden), Angiosperm seed bank.**



Aquatic plants



Medicinal Plant Gallery



## FACULTY:



Prof. Maria Fonseca



Dr. (Fr.) Bolmax Pereira



Ms. Karen Cabral



Dr. Cineola Fernandes

## DEPARTMENT ACTIVITIES:



Herbal wine making



Science Day – Flower decoration

# DEPARTMENT OF MICROBIOLOGY

Microbiology has consistently proved to be one of the most significant fields in biology, making it possible to define how some microorganisms cause diseases, discover treatments for such diseases and even use a few microbes for industrial applications etc.

As we stand at the convergence of genomics, public concerns about bioterrorism, global outbreaks of infectious diseases, unprecedented computational power, and the possibility of large-scale ecological disasters, there lies an opportunity in microbiology.

## **Our Vision:**

To introduce the concepts of application & research in Microbiology and enrich students' With sense of scientific responsibilities and social and environment awareness.

## **Our Mission:**

To produce technically skilled graduates and to achieve academic excellence in all aspects of Microbiology.

## **Our Objectives:**

- To equip our students with fundamental & advanced microbiological and analytical skills in Microbiology.
- To expose students to the field of microbiology and other allied life science subjects for promising career options in research, industries and academics
- To develop graduates with a strong professional ethics and moral duties that will positively affect their profession, community, society and Nation at large.

## **Outcomes:**

- Students will be equipped with fundamental and basic knowledge of microbiology.
- Students will be well equipped with advanced microbiological techniques and analytical skills.
- Develop Interest in research and industry.
- Students will be responsible and ready to contribute their knowledge to the society.

# DEPARTMENT OF PHYSICS



## **Our Vision**

Developing high level of competence and nurturing the interest and passion in the field of physics and making vital contribution in the areas of emphasis

## **Our Mission**

To awaken young minds and enthusiastically promote the highest ethical principles in scientific developmental activities, critical thinking and technological education

## **Our Objectives**

- To develop broad understanding and interest in physical and social environment
- To strengthen quantitative reasoning and problem-solving skills
- To empower creative and inventive mind with strong foundation in Physics which can be applied to wide areas of Science and Technology

## **FACILITIES:**

**Well-equipped laboratory with apparatus for all experiments in the physics curriculum.**



Instruments

## **FACULTY:**



Mr. Seliston Gama

## **DEPARTMENT ACTIVITIES:**



Science Day – Quiz competition



# DEPARTMENT OF MATHEMATICS



## **Our Vision**

To strive for excellence in Mathematics by providing quality teaching that support effective student learning

## **Our Mission**

Nurture mathematically inclined students by providing them a supportive environment that fosters intellectual growth

## **Our Objectives**

- Equip students with the conceptual understanding and computational skills required for effective reasoning
- Create a platform for students for exploring their creative potential and nurturing the spirit of critical thinking
- Provide opportunities for close interaction between students and faculty, both within and beyond the classroom, including student mentoring.

**Facilities: Python software to enhance learning.**

**FACULTY:**



Ms. Viona Correia

**DEPARTMENT ACTIVITIES:**



Science Day – Present your Math

# DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS

## FACULTY:



Dr. Elroy Pinto  
College Director of Physical  
Education & sports

At St Joseph Vaz College, Cortalim we provide a wide range of opportunities for the students to explore and develop their skills, talents and aspirations alongside their academic subjects. This enables the students to gain confidence, enjoy learning and broaden their experiences. We also provide students with scientific training in various sports to prepare them for various inter collegiate, state and national level competitions. The aim of the college is to ensure holistic development of the student and the department of physical education and sports is an integral part of this process.

The college encourages the students to represent the State and Goa University in various games. Many of our students have represented Goa in football, taekwondo and karate. The students also participate in various inter collegiate events. Training and coaching is provided for the same.

The college has a vibrant and a dynamic intra mural programme wherein the students compete against each other in various games. Games like chess, carom, table tennis, futsal badminton are organised as a part of the intramural.





3rd Place for Cycling organized by Goa University



Silver medal in Inter college  
Taekwondo championship



Manager and captain of West Zone  
Inter - University Football Team (Men)

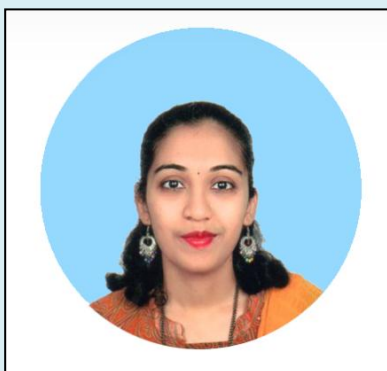
## Fee Structure

Fee Particulars	F.Y.B.Sc
Tuition Fee Sem. I & II	₹ 2,000
Registration Fee	₹ 660
Library Fee	₹ 500
Gymkhana Fee	₹ 500
Other Fee	₹ 500
Student Aid Fund	₹ 130
Library Deposit	₹ 70
Caution Money Deposit	₹ 70
Laboratory Deposit	₹ 90
Laboratory Practical Fee	₹ 950
I. Tech Charges	₹ 820
Integrated Academic Information Management System Software (IAIMS) Fee	₹ 225
ID Card	₹ 150
PTA	₹ 500
Magazine/Academic Diary/Placement brochure	₹ 500
Academic Restructuring and Development	₹ 1,500
Examination Fees	*
<b>TOTAL FEES</b>	<b>₹ 9,165</b>

\*as per fee structure given by Goa University

# FACILITIES IN THE INSTITUTION

## LIBRARY



Mrs. Manali Acharya  
Librarian

A library is the backbone of any educational institution. Besides supporting the curriculum and research it equips students with lifelong learning skills. We have a developed library with a good collection of text and reference books based on the subjects offered in the undergraduate courses.

The college library has books on subjects including botany, biology, chemistry, physics and mathematics and operates on an open access system. The library possesses more than 1,000 books, subscribes to six journals of national and international origin, six magazines, eight newspapers, 50+ e-books, and engages in activities under NDLI (National Digital Library). The Library has also subscribed to DELNET database. The library is open from 9:00am to 4:30pm. The library collection is enriched every year by adding new books and e-resources. The library is using KOHA software version 21.11.01.000.

The library room can accommodate 30 patrons for reference. The library provides reference service, referral service, virtual library service, photocopying facility, printing service, Current Awareness Service (CAS). Library orientation is conducted at the beginning of the academic year to acquaint the students with the functioning of the library. Book exhibitions are conducted every year and various activities are carried out for students as well to render the library user friendly. In order to inculcate reading habits among the students, the library has come up with various activities like Virtual library where readers can read e-books during their leisure time. Also, the library keeps informing the patrons about the new arrivals. Students are also given the fundamental knowledge they would need to succeed in competitive tests following graduation.



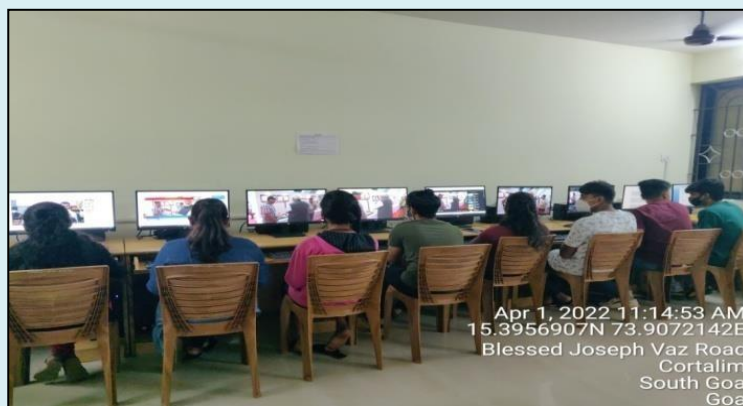


### **Library and Reading Hall**

The Knowledge Portal section allows readers to quickly access websites that will help them expand their knowledge acquisition through independent study.

In order for students to write scholarly articles, research article writing is encouraged. The library also provides the students to online access of question papers since inception.

### **INFORMATION COMMUNICATION AND TECHNOLOGY LAB**



Information technology is the vital subsection of Information Communication Technology (ICT). Academic excellence in an educational institution is invariably based on use of ICT in teaching and learning process. The college Information Technology Laboratory computers are connected with Wi-Fi facility and also equipped with software's required for academics.

**IMPORTANT COMMITTEES/CLUBS/CELLS**

INTERNAL COMMITTEE	GRIEVANCE REDRESSAL CELL
ANTI-RAGGING COMMITTEE	LOCAL MANAGING COMMITTEE
STUDENTS COUNCIL	PURCHASE COMMITTEE
INTERNAL QUALITY ASSURANCE CELL	WOMEN DEVELOPMENT CELL
COLLEGE EXAMINATION COMMITTEE	EXAMINATION GRIEVANCE REDRESSAL CELL
LIBRARY COMMITTEE	PROMOTION COMMITTEE
TIME TABLE COMMITTEE	CANTEEN COMMITTEE
COLLEGE UNFAIR MEANS INQUIRY COMMITTEE	DISCIPLINE COMMITTEE
MENTOR/MENTEE PROGRAMME COMMITTEE	SPORTS COMMITTEE
VALUE EDUCATION COMMITTEE	ATTENDANCE COMMITTEE
SEMINAR COMMITTEE	ADMISSION COMMITTEE

# Glimpses of the Academic year 2022-23



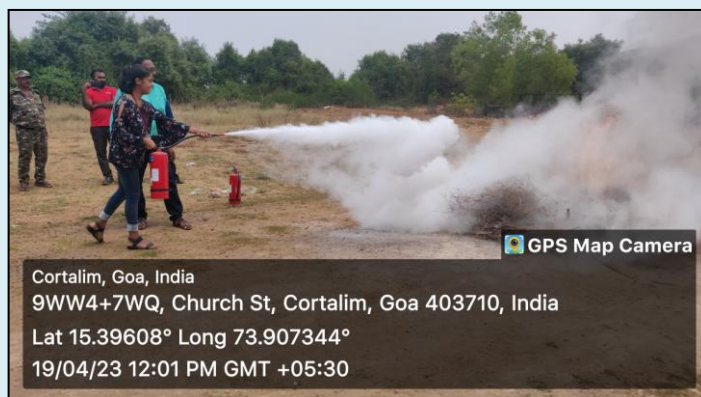
Blind Date with the Book



Book Exhibition



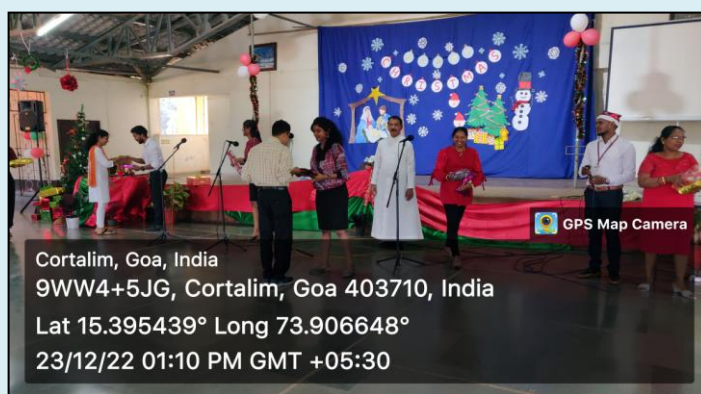
Talk on Cyber safety



Fire extinguisher drill



Aids awareness Programme



Christmas family day celebration





Football tournament at Goa University



Goa Liberation Day



Healthify lecture series



Intramural Futsal and tie breaker



Lecture by Khazan society of Goa



Workshop on Millets





Patriotic singing competition



Lecture by Goa State Research Foundation



College event – Sci-Pi



JCI Vasco – talk on Interview skills



Teacher's Day celebration



TY Farewell 2022-2023

“Don’t compare yourself with anyone in this world...if you do so, you are insulting yourself.”

- Bill Gates

**ALL THE BEST**