### **CONTENT**

| Section<br>No. |      | Description                                    | Page Nos.   |
|----------------|------|------------------------------------------------|-------------|
| 1              | COLL | EGE GOVERNANCE                                 | 1 to 7      |
|                |      | College Vision-Mission Statement               | 1           |
|                | 1.1  | Governing Body                                 | 2           |
|                | 1.2  | Governing Body of the College (under Autonomy) | 2           |
|                | 1.3  | Academic Council                               | 2<br>3<br>3 |
|                | 1.4  | Finance Committee                              | 3           |
|                | 1.5  | Internal Quality Assurance Cell (IQAC)         | 4           |
|                | 1.6  | College Development Committee (CDC)            | 5<br>6<br>7 |
|                | 1.7  | College Administration and Services            | 6           |
|                | 1.8  | College Address                                |             |
|                | 1.9  | Right To Information Queries                   | 7           |
|                | 1.10 | Institutes that Co-Exist on the Campus         | 7           |
| 2              | COLL | EGE PROFILE                                    | 8 to 11     |
|                | 2.1  | College History                                | 8           |
|                | 2.2  | Recent Achievements of the College             | 9           |
|                | 2.3  | Undergraduate Courses                          | 9           |
|                | 2.4  | Postgraduate Courses                           | 10          |
|                | 2.5  | Disciplines in Arts                            | 10          |
|                | 2.6  | Disciplines in Science                         | 10          |
|                | 2.7  | Disciplines in Commerce                        | 11          |
|                | 2.8  | Disciplines in Management Studies              | 11          |
|                | 2.9  | Disciplines in Mass Media                      | 11          |
| 3              | COLL | EGE FACILITIES                                 | 12 to 24    |
|                | 3.1  | Core Infrastructure                            | 12          |
|                | 3.2  | Core Forums                                    | 14          |
|                | 3.3  | Additional Academic Facilities                 | 18          |
|                | 3.4  | Co-Curricular and Extra-Curricular Facilities  | 19          |
|                | 3.5  | College Associations                           | 21          |

| Section<br>No. |       | Description                                                  | Page Nos. |
|----------------|-------|--------------------------------------------------------------|-----------|
| 4              | COLLE | GE ADMISSION PROCESS                                         | 25 to 31  |
|                | 4.1   | Admission Policy                                             | 25        |
|                | 4.2   | Admission Procedures                                         | 27        |
|                | 4.3   | Eligibility Certificate                                      | 28        |
|                | 4.4   | Fees for Senior College                                      | 29        |
|                | 4.5   | Fee Concession for BC Students                               | 30        |
|                | 4.6   | Additional Information on Scholarships, Freeships and Awards | 30        |
| 5              | ACADE | EMIC GUIDELINES UNDER AUTONOMY                               | 32 to 42  |
|                | 5.1   | Background of College Autonomy                               | 32        |
|                | 5.2   | Assessment                                                   | 32        |
|                |       | <b>5.2.1.</b> Theory (Continuous Internal Assessment)        | 32        |
|                |       | <b>5.2.2.</b> Theory (End Semester Examinations)             | 33        |
|                |       | 5.2.3. Practicals                                            | 34        |
|                | 5.3   | Passing Norms                                                | 35        |
|                | 5.4   | Gracing Norms                                                | 36        |
|                | 5.5   | Results                                                      | 36        |
|                | 5.6   | Attendance                                                   | 37        |
|                | 5.7   | Rules for Extra-Curricular Credit (ECC)                      | 39        |
|                | 5.8   | Social Involvement Programme Credit (SIP)                    | 39        |
|                | 5.9   | Internship / Fieldwork Experience Credit                     | 40        |
|                | 5.10  | Transfer of Credits                                          | 40        |
|                | 5.11  | Letters of Recommendation by College Department              | 41        |
|                | 5.12  | Parents' Collaboration                                       | 42        |
|                | 5.13  | Addendum                                                     | 42        |

6

| Section<br>No. | Description                                                                                                                                                                                                                                                                                            | Page Nos.                                     |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 7              | <ul> <li>U.G. (SELF-FINANCED) COURSES</li> <li>7.1 Bachelor of Management Studies</li> <li>7.2 Bachelor of Arts (Mass Communication &amp; Journalism)</li> </ul>                                                                                                                                       | <b>62 to 73</b> 62 66                         |
|                | 7.3 Bachelor of Science (Information Technology)                                                                                                                                                                                                                                                       | 70                                            |
| 8              | <ul> <li>P.G. (AIDED) COURSES – SCIENCE</li> <li>8.1 M.Sc. Programme: An Overview</li> <li>8.2 M.Sc. Degree in Botany</li> <li>8.3 M.Sc. Degree in Geology</li> <li>8.4 M.Sc. Degree in Life Science</li> <li>8.5 M.Sc. Degree in Microbiology</li> </ul>                                              | <b>74 to 85</b> 74 76 78 81 83                |
| 9              | <ul> <li>P.G.(AIDED) COURSES – ARTS</li> <li>9.1 M.A. in Ancient Indian History, Culture &amp; Archaeology</li> </ul>                                                                                                                                                                                  | <b>86 to 87</b><br>86                         |
| 10             | <ul> <li>P.G. (SELF-FINANCED) COURSES - SCIENCE</li> <li>10.1 M.Sc. in Big Data Analytics</li> <li>10.2 M.Sc. in Biotechnology</li> <li>10.3 M.Sc. in Physics (Astrophysics)</li> </ul>                                                                                                                | 88 to 96<br>88<br>90<br>93                    |
| 11             | <ul> <li>P.G. (SELF-FINANCED) COURSES - ARTS</li> <li>11.1 M.A. in Public Policy</li> <li>11.2 M.A. in Psychology: Lifespan Counselling</li> </ul>                                                                                                                                                     | <b>97 to 101</b><br>97<br>99                  |
| 12             | <ul><li>Ph.D. PROGRAMMES</li><li>12.1 Ph.D. Programme Details</li></ul>                                                                                                                                                                                                                                | <b>102 to 104</b><br>102                      |
| 13             | <ul> <li>COLLEGE SHORT-TERM COURSES</li> <li>13.1 PG Diploma in Bioinformatics</li> <li>13.2 Diploma Course in Clinical Research</li> <li>13.3 Diploma in Forensic Science and Criminal Law</li> <li>13.4 On-Line Certificate Course in Forensic Science</li> <li>13.5 Diploma in Gemmology</li> </ul> | 105 to 116<br>105<br>106<br>107<br>108<br>109 |

| Section<br>No. | Description |                                                                                       | Page Nos.  |
|----------------|-------------|---------------------------------------------------------------------------------------|------------|
|                | 13.6        | Certificate Course in Practical Gem Appreciation and Identification                   | 110        |
|                | 13.7        | Certificate Course In Plantsmanship With Basic Garden Hardscaping Materials And Tools | 110        |
|                | 13.8        | Certificate Course In Basic Python                                                    | 110        |
|                | 13.9        | Post Graduate Diploma In Counselling Psychology (XICP)                                | 111        |
|                | 13.10       | Certificate Course In Personal Counselling                                            | 112        |
|                | 13.11       | Post Graduate Diploma: Expressive Arts Therapy                                        | 113        |
|                | 13.12       | Certificate Courses In Ancient Indian History, Culture And Archaeology                | 114        |
|                | 13.13       | Diploma In Inter-Religious Traditions                                                 | 115        |
|                | 13.14       | For Courses conducted by XIC                                                          | 116        |
| 14             |             | ING FACULTY                                                                           | 117 to121  |
|                | 14.1        | Faculty of Arts                                                                       | 117        |
|                | 14.2        | Faculty of Science                                                                    | 118        |
|                | 14.3        | Faculty of Commerce                                                                   | 120        |
|                | 14.4        | Research Departments                                                                  | 120        |
|                | 14.5        | Department of Inter-Religious Studies                                                 | 121        |
|                | 14.6        | Language Lab.                                                                         | 121        |
| 15             | NON-T       | EACHING STAFF                                                                         | 122 to 125 |
|                | 15.1        | General Office                                                                        | 122        |
|                | 15.2        | Treasurer's Office                                                                    | 122        |
|                | 15.3        | Library Staff                                                                         | 122        |
|                | 15.4        | Laboratory Assistants                                                                 | 123        |
|                | 15.5        | Laboratory Attendants                                                                 | 123        |
|                | 15.6        | Peons                                                                                 | 123        |
|                | 15.7        | Multi-Media Operators / Technicians                                                   | 123        |
|                | 15.8        | Examination Centre                                                                    | 124        |
|                | 15.9        | Knowledge Centre                                                                      | 124        |
|                | 15.10       | Campus Maintenance Staff                                                              | 124        |
|                | 15.11       | Research Laboratory Support Staff                                                     | 124        |

| Section<br>No. |        | Page Nos.                                                                 |            |
|----------------|--------|---------------------------------------------------------------------------|------------|
|                | 15.12  | Social Involvement Programme Staff                                        | 124        |
|                | 15.13  | Hostel                                                                    | 124        |
|                | 15.14  | Heras                                                                     | 124        |
|                | 15.15  | Xavier's Resource Centre for the Visually Challenged and Inclusion Centre | 125        |
|                | 15.16  | Indian Music Group                                                        | 125        |
|                | 15.17  | Xavier's Development Programme                                            | 125        |
| 16             | GENER  | AL RULES AND QUALITY MECHANISMS                                           | 126 to 133 |
|                | 16.1   | Introduction                                                              | 126        |
|                | 16.2   | Government Regulations                                                    | 126        |
|                | 16.3   | College Identity Card (IDC)                                               | 126        |
|                | 16.4   | Use of Facilities                                                         | 127        |
|                | 16.5   | Use of Unfair Means at Exams                                              | 128        |
|                | 16.6   | Mobile Phones & other Electronic Gadgets                                  | 128        |
|                | 16.7   | College / Department's Fests / Programmes                                 | 128        |
|                | 16.8   | Women Students                                                            | 128        |
|                | 16.9   | Right to Dissent and Right of Resolve Conflict                            | 129        |
|                | 16.10  | Dress Code                                                                | 129        |
|                | 16.11  | Class Picnics                                                             | 129        |
|                | 16.12  | Undertakings                                                              | 129        |
|                | 16.13  | Library Rules                                                             | 129        |
|                | 16.14  | Quality Mechanisms and Best Practices                                     | 130        |
|                | 16.15  | Enquiry & Project-based Learning Process                                  | 131        |
|                | 16.16  | Soft-Skill Development and Collateral Programmes                          | 132        |
|                | 16.17  | Annual Theme                                                              | 133        |
| 17             | COLLEC | GE CALENDAR FOR ACADEMIC YEAR 2020-21                                     | 134 to 136 |
| 18             | COLLEG | GE STUDENT ACHIEVERS                                                      | 137 to 138 |

#### Vision - Mission Statement of St. Xavier's College (Autonomous), Mumbai

Celebrating over 151 years of *Provocans ad Volandum* ("Challenging to Fly")

**Vision:** An academic community dedicated to the holistic education of future leaders who will Demonstrate innovation in their professional competencies, integration in their personal lives and inclusion in their social contribution.

**Key Values:** Innovation, Integration, Inclusion



#### Mission

#### A. Training for PROFESSIONAL INNOVATION:

- 1. Ensuring competence, and provoking excellence and brilliance
- 2. Stimulating critical and creative thinking
- 3. Promoting multi-disciplinary learning, research and publication
- 4. Linking studies with contemporary industry developments and applications
- 5. Making core competencies socially and environmentally beneficial

#### **B.** Cultivating **PERSONAL INTEGRATION**:

- 1. Fostering confidence, motivation and vision
- 2. Upholding honesty, transparency and accountability
- 3. Facilitating emotional, interpersonal, social and spiritual intelligence
- 4. Developing organizational and leadership skills
- **5.** Encouraging creative and collaborative engagement in curricular and co/extra-curricular activities

#### **C.** Advocating **SOCIAL INCLUSION**:

- 1. Respecting the dignity of others and practicing compassion and concern
- 2. Appreciating cultural pluralism and diversity
- 3. Striving for social justice, harmony and solidarity
- 4. Caring and providing for the marginalized and disadvantaged
- 5. Strategizing to protect the natural environment

### 1.1. GOVERNING BODY

## Name of Trust: The Bombay St. Xavier's College Society

| Dr. (Fr.) Arun deSouza S.J.       | Provincial, Chairperson and Trustee  |
|-----------------------------------|--------------------------------------|
| Dr. (Fr.) Keith D'Souza S.J.      | Rector, Vice Chairperson and Trustee |
| Dr. (Fr.) Conrad Pesso S.J.       | Member                               |
| Fr. Francis de Melo S.J.          | Member                               |
| Dr. (Fr.) John Rose Santiago S.J. | Member                               |
| Fr. Dean Fernandes S.J.           | Member                               |

## 1.2. Governing Body of the College (Under Autonomy)

| Dr. (Fr.) Keith D'Souza S.J.      | Chairperson               |
|-----------------------------------|---------------------------|
| Dr. (Fr.) Conrad Pesso S.J.       | Management Representative |
| Mr. V. V. Dalvie                  | Management Representative |
| Fr. Francis de Melo S.J.          | Management Representative |
| Fr. Learoy Rodrigues S.J.         | Management Representative |
| Prof. Dinesh Pajwani              | Vice Chancellor's Nominee |
| Dr Kiran Mangaonkar               | Vice Chancellor's Nominee |
| Prof. (Ms.) Shweta Shenoy Devraj  | UGC Representative        |
| Joint Director (Higher Education) | Government Representative |
| Dr. (Ms.) Nandita Mangalore       | Faculty Representative    |
| Dr. (Ms.) Madhuri Hambarde        | Faculty Representative    |
| Prof. (Ms.) Vivien Amonkar        | Educationist              |
| Dr. Rajendra Shinde               | Ex-Officio Secretary      |

### 1.3. ACADEMIC COUNCIL

| Names                     | Department                              | Names                        | Department                      |
|---------------------------|-----------------------------------------|------------------------------|---------------------------------|
| Dr. R. Shinde             | Chairperson                             | Ms. M. Kolkar                | Mathematics                     |
| Dr. A. Rane-Kothare       | A.I.H.C.A.                              | Ms. M. Stewart               | Microbiology                    |
| Dr. S. Pirani             | Commerce (for Arts)                     | Dr. J. Singh                 | Physics                         |
| Dr. A. Sawant             | Economics                               | Ms. M. Fernandes             | Statistics                      |
| Dr. P. Pastakia           | English                                 | Dr. S. Krishnan              | Zoology                         |
| Ms. A. Palkhiwale         | French                                  | Dr. K. Gokarn                | Biotechnology, Member Secretary |
| Dr. B. Upadhyay           | Hindi                                   | Mr. T. Roy                   | Information Technology          |
| Dr. A. Jadhav             | History                                 | Dr. H. Samant                | Nominated Faculty               |
| Dr. P. Naitthani          | Political Science                       | Dr. (Ms.) Annapurna<br>S.    | Nominated Faculty               |
| Ms. R. Pavri              | Psychology                              | Dr. Pushpa Sinkar            | Nominated Faculty               |
| Dr. A. Menezes            | Public Policy                           | Dr. J. Gaikwad               | Nominated Faculty               |
| Dr.Pranoti Chirmuley      | Sociology &<br>Anthropology             | Dr. Nandita<br>Mangalore     | Principal's Nominee             |
| Dr. J. B. Mistry          | Dean, Xavier Institute of Communication | Prin. (Dr.) D.M<br>Doke      | University Nominee              |
| Ms. S. George<br>Tharakan | Management Studies                      | Prin.(Dr.) V.S Adigal        | University Nominee              |
| Ms. S. Periyanayagi       | Mass Media                              | Prin. (Dr.) Avinash<br>Patil | University Nominee              |
| Dr (Fr) C. Pesso S.J.     | Commerce                                | Dr (Sr) Ananda<br>Amritmahal | GB Nominee;<br>Education        |
| Mr. A. Gude               | Botany                                  | Dr Rahul Verma               | GB Nominee; Medicine            |
| Dr. P. Henriques          | Geology                                 | Dr Soumyajit<br>Mukherjee    | GB Nominee; Research            |
| Mr. M. Kotwal             | Chemistry                               | Mr. Srinivas<br>Garimella    | GB Nominee; Industry            |
| Dr. S. Das                | Life Sci &<br>Biochemistry              | Mr. Kishu Daswani            | GB Nominee; Law                 |

#### 1.4. FINANCE COMMITTEE

| Dr. Rajendra Shinde         | Chairperson               |
|-----------------------------|---------------------------|
| Dr. Pradeep Kamthekar       | University Representative |
| Dr. (Fr.) Conrad Pesso S.J. | College Treasurer         |
| Dr. (Ms.) Annapurna S.      | Faculty                   |
| Dr. Hrishikesh Samant       | Faculty                   |

## 1.5. INTERNAL QUALITY ASSURANCE CELL (IQAC)

| Dr. Rajendra Shinde          | Chairperson                      |
|------------------------------|----------------------------------|
| Dr. (Ms.) Nandita Mangalore  | Director                         |
| Dr. Hrishikesh Samant        | Vice-Principal (Science)         |
| Dr. (Ms.) S. Annapurna       | Vice-Principal (Arts)            |
| Ms. Alpana Palkhiwale        | Senior Teacher                   |
| Mr. Marazban Kotwal          | College Controller of Exams      |
| Dr. Jehangir Mistry          | Senior Teacher (Retired)         |
| Mr. Kishu Daswani            | Senior Teacher                   |
| Dr. (Ms.) Karuna Gokarn      | Senior Teacher (V. P. Academics) |
| Dr. (Fr.) Keith D'Souza S.J. | Management Representative        |
| Fr. Francis De Melo S.J.     | Administration                   |
| Dr. (Fr.) Conrad Pesso S.J.  | Treasurer & Secretary            |
| Dr. (Ms.) Geeta Ibrahim      | Alumnus                          |
| Mr. Ashish Bhasin            | Industry Expert                  |
| Dr. (Ms.) Madhuri Hambarde   | Parent                           |
| Mrs. Elizabeth Mehta         | Founder Muktangan (Society)      |
| Ms. Ruhi Jain                | Student Council Representative   |

## 1.6. COLLEGE DEVELOPMENT COMMITTEE (CDC)

| Chairperson of the Management                               | Dr. (Fr.) Keith D'Souza S.J.                                                 |  |  |
|-------------------------------------------------------------|------------------------------------------------------------------------------|--|--|
| Secretary of the Management                                 | Dr. (Fr.) Conrad Pesso S.J.                                                  |  |  |
| Field of Education                                          | Fr. Ambrose Machado S.J.                                                     |  |  |
| Industry                                                    | Mr. Ranjan Bandopadhyay<br>(Tata Electronic Pvt. Ltd.)                       |  |  |
| Research                                                    | Prof. Dr. Soumyajit Mukherjee<br>(IIT, Mumbai)                               |  |  |
| Social                                                      | Ms. Reny Rajan (Nirmala Niketan)<br>Alumna                                   |  |  |
| One HOD nominated by the Principal                          | Ms. Ruby Pavri                                                               |  |  |
| Three teachers (Elected): 1. Women Category 2. Two Teachers | Dr. (Ms.) Karuna Gokarn<br>Dr. (Ms.) Madhuri Hambarde<br>Dr. (Ms.) Seema Das |  |  |
| One Non-Teaching Staff (Elected)                            | Mr. Anthony Thomas                                                           |  |  |
| Four Local Members Nominated by the Management:             |                                                                              |  |  |
| IQAC Coordinator                                            | Dr. (Ms.) Nandita Mangalore                                                  |  |  |
| General Secretary of S.U.C.                                 | To be elected                                                                |  |  |
| Treasurer of S.U.C.                                         | To be elected                                                                |  |  |
| Principal (Member Secretary)                                | Dr. Rajendra Shinde                                                          |  |  |

### 1.7. COLLEGE ADMINISTRATION AND SERVICES

| Principal                          | Dr. Rajendra Shinde           |
|------------------------------------|-------------------------------|
| Vice-Principal (Academics)         | Dr. Karuna Gokarn             |
| Vice-Principal (Arts)              | Dr. (Ms.) Annapurna S.        |
| Vice-Principal (Science)           | Dr. Hrishikesh Samant         |
| Vice-Principal (Commerce)          | Dr. (Fr.) Conrad Pesso S.J.   |
| Controller of Examinations         | Mr. Marazban Kotwal           |
| Registrar                          | Mr. Achut Joshi               |
| College and Trust Treasurer        | Dr. (Fr.) Conrad Pesso S.J.   |
| I/C Librarian                      | Ms. Sonali Paradkar           |
| Director, Sports                   | Dr. Thomas Pires              |
| Student Counsellor                 | Fr. Francis de Melo S.J.      |
| Director, S.S.L.                   | Bro. Vivian Almeida S.J.      |
| Director, International Programmes | Dr. (Ms.) Rashmi Lee George   |
| Director, Heras                    | Dr. (Ms.) Joan Dias           |
| Director, Knowledge Centre         | Mr. Kevin D'Cruz              |
| Director, X.D.P.                   | Dr. (Fr.) Keith D'Souza, S.J. |
| Director, D.I.R.S.                 | Dr. (Fr.) Keith D'Souza S.J.  |
| Language Lab-in-Charge             | Ms. Jyoti More                |
| Administrative Officer             | Mr. Alvin Mendonsa            |
| Hostel Warden                      | My Space Personnel            |
| Hostel Management Representative   | Dr. Agnelo Menezes            |

#### 1.8. COLLEGE ADDRESS

The Principal

St. Xavier's College (Autonomous),

5, Mahapalika Marg,

Mumbai 400-001, Maharashtra, India.

Phone: 91-22-22620661 / 2 / 5 or 91-22-22625195 Fax: 91-22-22617677 or 91-22-22659484

Email: webadmin@xaviers.edu Website: www.xaviers.edu

#### 1.8.1. CONTACT NUMBERS OF OTHER FACILITIES ON CAMPUS

Administrator: 22632024 Caius Laboratory: 22622799 Counseling Centre: 22625195 General Office (Direct): 22613358

Hostel: 22621785 Library: 22703522 I.M.G.: 22634558 X.R.C.V.C.: 22623298

#### 1.9. RIGHT TO INFORMATION (RTI) QUERIES

**1.9.1.** Public Information Officer (PIO): Ms. Grizel Menezes

1.9.2. Assistant Public Information Officer: Mr. Bipin Patil

**1.9.3.** Appellate Authority: Principal

**1.9.4.** For details please refer to the College Website (**RTI Manual**)

#### 1.10. INSTITUTES THAT CO-EXIST IN THE CAMPUS

1.10.1. Xavier's Institute of Management and Research (XIMR) Tel. No. 22650608 / 09

### 1.10.2. Xavier's Institute of Counselling Psychology (XICP)

Tel. No. 9324084592; xicp.xaviers.edu

**1.10.3.** Please contact them directly for information about their Courses and the like, either through the link entitled '**INSTITUTES**', on the Homepage of our Website or through the respective Institute's given Telephone Number(s).

#### 2.1. COLLEGE HISTORY

ST. XAVIER'S COLLEGE was founded in 1869 by the Society of Jesus, a Christian Religious Organization started by St. Ignatius of Loyola. Since its very inception, the Society has significantly contributed to the field of education throughout the world, inspired by a vision of the human, drawn from the life, teachings and personality of Jesus Christ. In India, it was St. Francis Xavier, after whom the College is named, who began the educational work of the Society of Jesus. At present, in India, the Society runs 36 Pre-Primary/Primary/Middle Schools, 130 High Schools, 20 Technical Institutes and 33 Colleges. All these institutions form a part of the effort of the Catholic Church to share in the vital task of education.

St. Xavier's College is a Christian institution, started with the purpose of educating the Christian community in India. It extends its services to members of other communities as an effort at building a truly inter-religious and inter-cultural human community in the country. On January 30, 1869, it was affiliated to the University of Mumbai. It became a Constituent College of the University, as a result of the Mumbai University Act 1953. It is entrusted by the University with the task of preparing students for degrees in Arts, Science, Commerce, Mass Media, Management Studies and Information Technology.

St. Xavier's College looks upon itself as an academic community where scholars, both students and teachers, have the freedom and responsibility to communicate, evaluate and enlarge humankind's store of knowledge. The College stands for academic excellence and endeavors to create an environment, which generates a love of learning, a habit of critical thinking and the ability for accurate expression. It strives after character formation based on the love of God and the service of humanity, with a view to training citizens, who will be remarkable for all-round development and a sincere commitment to God and Country.

St. Xavier's College, thus, endeavors to contribute to the necessary transformation of the prevailing social conditions. This transformation, envisages that the principles of social justice, equality of opportunity, genuine freedom and respect for religious and moral values enshrined in the Constitution of India, shall be upheld, and that all men and women shall live in keeping with their human dignity and self-respect. The environment and inclusive education are of special concern to St. Xavier's College. Hence, the College strives towards making a committed and significant contribution towards these issues.

The Society of Jesus exercises its responsibility over St. Xavier's College through a Governing Body, whose Chairman is the Provincial of the Mumbai Province of the Society, Vice-Chairman is the Rector of the College and the Secretary is the Governing Body's Chief Executive. St. Xavier's College – Autonomous, affiliated to the University of Mumbai, conducts the B.A., B.Sc., and B.Com. Government Aided Degree Courses on campus along with the B.A.-M.C.J., B.M.S. and B.Sc. I.T. Degree Courses on a Self-Financing Basis. Masters Courses (Aided) in Botany, Geology, Life Sciences, Microbiology and Ancient Indian History, Culture and Archaeology, M.Sc. (Self-Financing) in Biotechnology, Physics, Big Data Analytics and M.A. (Self-Financing) in Public Policy, Psychology are also conducted. The University of Mumbai awards Degrees for the above-mentioned courses.

Diploma / Certificate courses on Bioinformatics, Clinical Research, Forensic Science and Criminal Law, Gemology & Gem Appreciation, Applied Philosophy and Ethics, Counselling Psychology, Expressive Arts Therapy and Aspects of Ancient Indian History, Culture and Archaeology are also held in collaboration with other Institutions or groups.

#### 2.2. RECENT ACHIEVEMENTS OF THE COLLEGE

- **2.2.1.** Education World Higher Education Ranking 2020-21 : 1st among top private autonomous colleges in India.
- **2.2.2.** MHRD's National Institute Ranking Framework (NIRF) (2019): 96<sup>th</sup> Rank (College Category) at the National level.
- **2.2.3.** St. Xavier's College has been recognized as the **Best Education Brand** 2018-19 by the Economic Times.
- **2.2.4.** The College has been conferred the **Nipman Foundation Microsoft Equal Opportunity Awards 2018** in the Enabler Category of Inclusive Schools Higher Education.
- **2.2.5.** The University of Mumbai notified St. Xavier's College as the first **Autonomous College** of the University, from June 2010. An **Extension of Autonomy** from January 20<sup>th</sup>, 2017 was granted in April 2017 till 2022.
- **2.2.6. Department of Biotechnology (DBT) Star Status** (2014) to Botany, Chemistry, Life Science, Microbiology, Physics & Zoology. **DBT Star Scheme Grant** to Mathematics (2015) & Statistics (2016).
- **2.2.7. Heritage Grant** (2015) awarded by the UGC, under the MHRD, Government of India.
- **2.2.8. 'College of Excellence' Award** (April 2014) by the UGC, under the MHRD, Government of India.
- **2.2.9.** Certificate of Excellence by the Associated Chambers of Commerce & Industry of India (ASSOCHAM) for **Best Institute Serving a Social Cause** (February 2014).
- **2.2.10.** College secured an **A Grade (GPA: 3.63 / 4)** in the third cycle of accreditation (2013) by NAAC.

#### 2.3. UNDERGRADUATE COURSES

| 2.3.1.          | Aided Courses    |                       |  |
|-----------------|------------------|-----------------------|--|
| Arts            | Science Commerce |                       |  |
| B.A.            | B.Sc.            | B.Com.                |  |
| 8 am to<br>2 pm | 8 am to<br>4 pm  | 5.50 pm to<br>9.20 pm |  |

**Note:** Classes of the Commerce Faculty are conducted in the late evening, primarily to encourage working students of a disadvantaged background to enroll.

| 2.3.2. Self-Financed Courses                                                |  |                 |
|-----------------------------------------------------------------------------|--|-----------------|
| Management Studies  Mass Communication & Information  Journalism Technology |  |                 |
| B.M.S. BA (MCJ)                                                             |  | B.Sc. (I.T.)    |
| 8 am to 1 pm                                                                |  | 8 am to 4.20 pm |

#### 2.4. POST-GRADUATE COURSES

| ARTS                                                             |                                                                | SCIENCE                 |                  |
|------------------------------------------------------------------|----------------------------------------------------------------|-------------------------|------------------|
| M.A.                                                             | Ph.D.                                                          | M.Sc.                   | Ph.D.            |
| Ancient Indian History<br>Culture & Archaeology<br>(A.I.H.C.A.)* | A.I.H.C.A.                                                     | Botany *&**             | Botany           |
| Public Policy * & #                                              | Avesta-Pahlavi                                                 | Chemistry **            | Chemistry        |
| Psychology – Lifespan<br>Counselling *                           | History                                                        | Geology * & **          | Geology          |
|                                                                  |                                                                | Life Sciences * & **    | Life<br>Sciences |
|                                                                  |                                                                | Microbiology *          | Zoology          |
|                                                                  |                                                                | Physics * & #           |                  |
|                                                                  |                                                                | Big Data Analytics* & # |                  |
|                                                                  |                                                                | Biotechnology * & #     |                  |
| <b>Note:</b> '*' = By P                                          | Note: '*' = By Papers; '**' = By Research; '#' = Self-Financed |                         |                  |

| 2.5. DISCIPLINES IN ARTS |              |            |                   |            |
|--------------------------|--------------|------------|-------------------|------------|
| A.I.H.C.A.               | Anthropology | Commerce   | Economics         | English    |
| French                   | Hindi        | History    | Political Science | Psychology |
| Public Policy            | Sociology    | Statistics |                   |            |

| 2.6. DISCIPLINES IN SCIENCE |                        |              |             |
|-----------------------------|------------------------|--------------|-------------|
| Biochemistry                | Biotechnology          | Botany       | Chemistry   |
| Geology                     | Information Technology | Life Science | Mathematics |
| Microbiology                | Physics                | Statistics   | Zoology     |

- 2.7. DISCIPLINES IN COMMERCE: Accountancy
- 2.8. DISCIPLINES IN MANAGEMENT STUDIES: Marketing, Finance & Human Resource (HR)
- **2.9. DISCIPLINES IN MASS COMMUNICATION & JOURNALISM:** Advertising, Journalism

#### 3.1. CORE INFRASTRUCTURE

- 3.1.1. Library (1887-88): The College Library provides print & electronic resources for all academic and related activities of the students and staff, services for the retrieval and use of these resources and adequate infrastructure and spaces for their use. An online database of the books and journals is maintained and access to these is provided through five OPAC (On-line Public Access Catalogue) terminals in the library and a link on the College website. The library has initiated an Institutional Repository by digitalizing rare books and college publications. The library is open from 9.00 a.m. to 8.00 p.m. on all working days only.
  - 3.1.1.1. Reference Library (RL) (1937): The heritage structured RL has Reserve Counters with text books, current issues and bound volumes of journals, reference books, special collections, two peer-learning cubicles for group discussions and study, separate study area for staff, electric charging points, Wifi along with six terminals for internet access and CD / DVD viewing (of which two are reserved for Staff). A photocopying facility exists near the RL.
  - **3.1.1.2.** Lending Library (LL) (1977): The open access LL with a mezzanine floor, houses about 60,000 books. The LL has a paperback collection, newspapers and magazines reading facilities, the Issue & Return Counters as well as reading spaces.
- 3.1.2. Computer Center (2006): It is called the 'Xavier Knowledge Centre'. It is solar-powered and is situated on the first floor of the Hostel Building and includes 5 Computer Laboratories having about 125 computers in all. One of the Computer Labs has a Video Conferencing facility. The Centre supports all the curricula computer courses. It also holds courses in collaboration with other organizations.
- **3.1.3. Gymkhana (1954):** It is called the Fell Gymkhana (after its founder Fr. Fell S.J.) It has facilities for Body-Building, Badminton, Table-Tennis, Carrom and Chess. The College has full-size Basketball and Volleyball Courts. The College has leased from the BMC the use of a cricket pitch on Azad Maidan.

#### 3.1.4. Multi-Media Centres:

- **3.1.4.1.** The Smith Centre for Audio-Visual Instruction (SCAVI), was inaugurated in December 1979. It has audio-visual instruments and techniques at the service of staff and students. It has been renovated under grants from the Sir Dorabjee Tata Trust.
- **3.1.4.2. The Multi-Media Room (MMR)** is a centralized facility for Multimedia-based instructions and presentations for our staff and students. It has been renovated under grants from the Sir Dorabjee Tata Trust.

- **3.1.4.3. The Onward Hall** was inaugurated in February 2020, with a grant from the Onward Foundation, in memory of Shaila Mehta, an alumna. It is an auditorium style hall, with audio-visual equipment for regular class use as well as special occasions.
- **3.1.5. Common Rooms:** There are separate common rooms for male and female students as well as for the teaching and non-teaching staff members.
- **3.1.6. Canteen and Foyer:** This is a spacious area with a view of greenery. A variety of refreshments and meals are available here. It is a place on the campus not only for leisure and refreshment but also for students to bond, discuss and even work on assignments and projects.
- **3.1.7. Hostel:** The Campus Hostel can accommodate 104 male students. Only First and Third Years UG students and PG (I & II) students are admitted into the Hostel. Apart of the College Canteen functions as the Hostel Mess and it serves subsidized meals and refreshments to hostelites and guests. The rooms in the hostel are either for 2, 3 & 4 occupants. Applications are accepted only after admission to the College has been secured.

The College has an additional hostel facility at *Seva Niketan* (Byculla) which is also run by the Jesuits in collaboration with the Management of the College. It houses another 75 male students of the College.

Many of our women students stay at *Regina Pacis* Hostel (Byculla), Missionary Settlement for University Women (Mumbai Central) and Savitribhai Phule Hostel (Charni Road). Besides this, the college has approached the 'Your Space' hostel agency to run dedicated hostels for the women students of our college.

- 3.1.8. Counselling Centre (1954): It provides: Personal Counselling Interviews for better Personal and Social Adjustment; Personality Evaluation Tests for Self-Improvement; Vocational Testing; Information on Careers, Professions and Specialized Studies in India and abroad; Information on Scholarships and Financial Assistance Schemes. It also helps in organizing Orientation Programmes for the newly admitted students. Since 2018, its scope has been expanded and it is now called the Wellness Centre
- **3.1.9.** Placement Centre: This Centre endeavours to bring reputed companies for campus placement of our students. It also trains students to write their CV and get acquainted with the selection process of corporates. A Staff-Student Committee operates this Centre.
- 3.1.10. First-Aid Centres: Basic 'First-Aid' is available with the College General Office (CGO) (Ms. Grizel Menezes) and the S.I.P. Office. The CGO personnel will facilitate the calling of a doctor in case of an emergency or the shifting of the concerned person to either G.T. Hospital or Bombay Hospital. A stretcher and wheelchair are available with the Gate-Security. Bombay Hospital and Ziqitza

Healthcare Limited (Ambulance Service Providers) will be assisting our college in case we require guick medical help as well as ambulance facility.

- **3.1.11. Administrator's Office and Workshop:** This Office coordinates all the maintenance services on the campus.
  - **3.1.11.1. Disaster Management:** In case campus mishaps have to be reported, contact the College Administrator (Ex. 108) or the College Receptionist (100) or the Principal (101). College authorities could also be contacted on phone lines: 22620661 or 22620665 through the use of mobile phones.
- **3.1.12. St. Xavier's Villa (Khandala)**: It is spacious set up in the midst of the Khandala hills and dales. It is about 20 minutes' walk from the Khandala Railway Station. It is open to the College staff and students for retreats, seminars and educational conferences. It includes a small chapel, a dining room, two conference halls and about 40 rooms (with single, double or triple occupancy). A caterer provides regular meals. Bookings have to be done through the Treasurer's Office of the College.
- **3.1.13.** The **Xavier's Merchandise Shop (XMS)**, on the ground floor of the Administration Building, is an outlet of the Xavier's Development Programme (XDP).

#### 3.2. CORE FORUMS

- **3.2.1. Students' Council:** The College has a long tradition of student participation in decision-making. Students on the Council serve as representatives of the students of each class. This year, the Student Council members will be elected as per the Government of Maharashtra, Higher Education Department's Order dated 26<sup>th</sup> October, 2018 or as advised otherwise by the Maharashtra Government.
- **3.2.2. Extra-Curricular Committee (ECC):** It consists of faculty and students. It coordinates all the cultural and other extra-curricular activities on campus. It also monitors the extra-curricular involvement of each student in his / her attempt at completing the requisite hours of such activities to earn the mandatory Extra-Curricular Non-Academic Credits. It is advisable for students to check the College website for the ECC data submission procedure.
- 3.2.3. Grievance Redressal Mechanism: As per the University of Mumbai Circular No. DSD/05/of 2019 and GR dated 27/02/2019, the College Grievance Redressal Cell (CGRC) consists of the Principal (Chairperson of the CGRC), one Senior Faculty Member Dr. Annapurna S, Vice Principal (Arts) and Member Secretary Dr. Prashant Ratnaparkhi. The CGRC looks into formal complaints (in a gender-neutral manner) made by students or faculty and

recommends action to the Principal. Complaints may be made either to the Principal or directly on the online portal: grc.xaviers.edu.

- **3.2.3.1.** For academic grievances, the student should first approach the Head of the Department concerned, if the teacher in question is not open to dialogue. The student may then use the online portal mechanism to lodge the complaint using the link grc.xaviers.edu.
- **3.2.3.2.** For personal matters or regarding facilities on campus, students are encouraged to meet their teachers or the concerned Vice Principal or even the Principal.
- **3.2.3.3.** The Students' Council is also a channel for issues listed in 3.2.3.2.
- **3.2.3.4.** Suggestions (feedback / feed-forward) to improve the quality of life on campus are welcome.
- **3.2.3.5.** The College authorities assure confidentiality when complaints are lodged.
- 3.2.3.6. The College has created a Caste-Based Discrimination Grievances Mechanism for any caste-based discrimination grievances. The aggrieved person(s) may approach the Principal on any such grievances. Alternatively, the person(s) can lodge the complaint through the online portal grc.xaviers.edu/caste based discrimination.
- **3.2.4.** Women's Development Cell (WDC): It coordinates programmes for awareness and action on women's issues. It also constitutes the Gender Grievance Redressal Cell for complaints of sexual harassment or discrimination.
- **3.2.5. Internal Complain Committee (ICC):** It addresses issues pertaining to sexual harassment.
- 3.2.6. Inclusive Education (Provisions for Students with Disabilities):
  - 3.2.6.1. Inclusive Education Policy

The College offers support services to students with disabilities through the Enabling Committee. This Committee looks at concerns and solutions for effective Inclusive Education practices. If a current or prospective student with disability has any queries please contact Dr. Sam Taraporevala or Neha Trivedi, XRCVC, neha@xrcvc.org or sam@xrcvc.org: 022-22623298 / 022-22626329.

#### 3.2.6.2. Inclusive Education Accommodation Request Process:

It is imperative for students with disabilities who seek to have any accommodations during their course of study to complete the process of submitting the Accommodation Intake Form within the first 15 days from having secured admission (for new students) and the Accommodation Continuation Form within 15 days from the start of the new academic year (for students continuing in College). Any delays in not meeting the deadline to submit the form will be taken as the student not needing any

- accommodation. It should be kept in mind that in the event that the student has not filled the Accommodation Intake Form, the college is then not mandated to provide any accommodation services.
- **3.2.6.3.** Any student seeking accommodation needs to seek an appointment with Ms. Neha Trivedi, Co-ordinator, Students with Disability, XRCVC as soon as possible on grant of admission/beginning new academic year.
- 3.2.6.4. After the meeting with the Co-ordinator the student is to fill the Intake / Continuation Form within 15 days of granting of admission / start of academic year. The same has to be downloaded from the college website under the Inclusive Education Tab and submitted to Ms. Neha Trivedi, XRCVC.
- **3.2.6.5.** Last date for submitting the forms for 2020-21:
  - **3.2.6.5.1.** F.Y.J.C and First Year Degree College: 15 days from the date of being admitted into the College.
  - **3.2.6.5.2.** S.Y.J.C/Second Year & Third Year Degree College: 15<sup>th</sup> July, 2020 (SY & TY), 8<sup>th</sup> July, 2020 (SYJC).
- **3.2.6.6.** The students will be granted their Accommodation Letter after being passed by the Enabling Committee.
- **3.2.6.7.** The students are then expected to give a copy of this letter with all lecturers teaching them. The student is also expected to share the letter with any new lecturer who starts teaching them during the course of the year. The students are expected to do this within 7 days of being issued the letter or within 7 days of a new lecturer starting to teach. If the student fails to share this letter with respective lecturers, the college may not be in a position to provide the support granted.
- **3.2.6.8.** For details of provisions (Academic and Examination) available for students with disabilities please read the Intake Form / Continuation Form.
- **3.2.6.9.** In case of any grievances with the accommodations granted the students may approach the Principal.
- **3.2.6.10.** In case of any Special Request not included in the Intake / Continuation Form the student must make a direct application to the Principal.
- 3.2.6.11. In order to support students who are economically disadvantaged and thereby get them included into the academic flow of the College Campus, the College has established the Student's Beneficiary Fund. It is from this corpus that students college fees, canteen bills and even hostel charges are paid. Dr. Geeta Kotian is currently in-charge of this facility and she acts as the liaison between the deserving students and the SBF. Students have to apply for these facilities by handing in an application to Dr Kotian along with the family Salary Slip. She will then present these cases to the

Principal, who along with the Treasurer of the College, makes the allocation decision.

#### 3.2.6.12. Inclusive Education Facilities on Campus

- 3.2.6.12.1. Xavier's Resource Centre for the Visually Challenged (XRCVC): This centre, for visually impaired persons (VIPs), is supported by individuals, Trusts and Corporates. It is technologically equipped with various screen readers, screen magnifiers, text to speech converters, tactile graphical creation systems, Braille machines, et al. The XRCVC is involved with:
  - **i. Student Activities:** Student training (computer, mobility and Braille) and volunteer co-ordination.
  - **ii. Social Advocacy:** Addressing accessibility issues of VIPs at local, regional and national levels.
  - **iii. Awareness Generation** on the lives of persons with disability among all stakeholders and people at large.

Dr. Sam Taraporevala is the moving force behind the Centre (website www.xrcvc.org).

**3.2.6.12.2. Enabling Committee:** This Staff-cum-Student Representative Committee looks into all inclusion and accessibility needs and initiatives on campus. Grievances by students with disability can be addressed to this Cell or to principal@xaviers.edu. The Cell is headed by the Principal.

For students with disabilities seeking admission to the college please refer to Section 3.2.6 (page 15) for details on procuring provisions during the course of study. It is mandatory for the students to complete the Intake Form process listed under the said section within 15 days of receiving admission.

For examination accommodations available for students with disabilities and the process to avail the same please refer to Section 3.2.6 (page 15) and the college website www.xaviers.edu tab of Inclusive Education.

As per Government of Maharashtra GR dated 04/03/2017, the following provisions are available during exams (on request and subject to the Principal's approval) for Cancer Patients: Use of Typewriter / Different type of pencil, pen, gripper / Use of Writer (based on requirement only) / Use of Computer /Permission to have a person, in whom the student has faith, remain present near the examination hall.

3.2.6.12.3. Student Inclusion Cell (SIC): The SIC is a student body that works at inclusion and accessibility on campus. The SIC is headed by an Overall Co-ordinator and works with a team selected on an annual basis. The SIC works on diverse projects and events to promote awareness amongst the

student community on inclusion as also provide support to the College to ensure effective delivery of the inclusion ethos on campus. The SIC can be reached at sic.xaviers@gmail.com.

#### 3.3. ADDITIONAL ACADEMIC FACILITIES

- **3.3.1. Blatter Herbarium:** It was started at the end of the 19<sup>th</sup> century. By 1918 a very large number of plants were gathered by Fr. E. Blatter S.J., his associates and students. The Herbarium was named after Fr. Blatter in 1941. It contains the largest collection of plants in Western India. It provides facilities for the study of Plant Systematics and has a well-stocked library on Systematic Botany. The Herbarium has received the Sir Ratan Tata Trust Grant for upgradation and digitization of the plant database. Dr. Rajendra Shinde is the Director.
- 3.3.2. Caius Research Laboratory for Inter-Disciplinary Studies (1947): It was established to carry out drug research and was named after Fr. J. F. Caius S.J. It has been restructured and equipped with new instruments. It functions as a research and coordination centre for all the Science Departments. In this Lab a strain of *Streptomyces* was identified. It has been supported by grants from industry, UGC, UNDP, etc. This laboratory also provides facilities for faculty and students from within the College as well as from other Colleges/ Institutes to carry out research projects and internships. The fee for Interns would be Rs. 10000per month. Dr. Priya Sudarajjan is the Director.
  - **3.3.2.1.** Central Instrumentation Facility (CIF) (2006): This facility (part of the Caius Research Lab) has sophisticated equipment acquired mainly through a DST-FIST Grant and UGC's 'College of Excellence Scheme'.
- 3.3.3. Heras Institute of Indian History and Culture (1926): Initially, it was called the Indian Historical Research Institute, by Fr. Henry Heras S.J., and on his death in 1955, it was renamed after him. The Heras Institute, with its well-stocked Research Library and Museum, provides guidance and facilities for Post-Graduate research in Ancient, Medieval & Modern Indian History, Indian Art & Literature, Indian Religions & Culture. Its Research Journal is called INDICA (since 1964).
- 3.3.4. Nadkarny–Sacasa Research Laboratory (1972): It provides modern research facilities in Chemistry and connects research with industry. It can support 20 Post-Graduate research students in Chemistry. This laboratory has produced several doctorates, one international and two national patents. Dr. (Ms.) Ashma Aggarwal is the Director.
- **3.3.5. Xavier's Visual Arts Studio (2014):**It is equipped with professional quality digital cameras (still and moving), lighting equipment and an A.V. editing set up. This facility is open to all our College students. Students from the Arts & Science

- faculties use this studio to enhance their course projects with the basic techniques of visual presentation. The Head of the BMM Department, Ms. S.P. Periyanayagi is in-charge of this studio.
- **3.3.6. St. Xavier's Language Laboratory**: It is equipped with the latest in Language Acquisition Technology. It caters to both new and advanced learners in English, Hindi, French and Marathi. It also helps students to develop their Soft-Skills (e.g., Presentation Skills and Public Speaking Skills).
- 3.3.7. The Xavier Institute of Communications (XIC; 1969): This professional media center is an autonomous curricular unit of St. Xavier's College. More than 250 students enroll each year in courses like Journalism & Mass Communication, Advertising & Marketing Communication, Public Relations & Corporate Communication, Film, TV & Digital Video Production, Advanced Integrated Communications Programme and Event Planning and Experiential Marketing. A variety of specialized, short-term certificate courses are also offered to media professionals, and others seeking media training. The alumni of this Institute are well placed in the media sphere.
- 3.3.8. Xavier Institute of Counselling Psychology (XICP): Addressing the dearth of mental health professionals and to equip psychologists with the necessary knowledge and skills to enhance therapeutic counselling Fr. Berchmans D'Souza SJ, founded the Xavier Institute of Counselling Psychology (XICP) in 1992. The mission to augment the psychological well-being of humanity continues to be upheld and currently there are two courses run by XICP: (1) The Post Graduate Diploma in Counselling Psychology for those having a Masters in Psychology and related fields, and (2) the Certificate Course in Personal Counselling for people from fields other than Psychology. Though the Certificate Course was conceived by Fr. J.M. Fuster SJ, it is now run under the XICP banner as the vision remains consistent with that of enhancing the mental health of society as a whole. The courses are unique in their practical and hands on approach to truly understand the helping profession and reaching out to others.

#### 3.4 CO-CURRICULAR AND EXTRA-CURRICULAR FACILITIES

3.4.2 Department of Inter-Religious Studies (DIRS) (1987): It fosters an understanding and appreciation of religions as a potent force for communal harmony, social justice and ecological sustainability. Its aim is to motivate people of all faiths as well as those who profess none to strive together for integral compassion (intrapersonal, interpersonal, societal, global and cosmic). It organizes sensitivity programmes, discussions and public lectures on relevant issues in religion, culture and philosophy. It collaborates with the AICUF to organize meaningful Interfaith Prayer Services and Masses on special occasions. Dr. (Fr.) Keith D'Souza S.J. is the Director.

- **3.4.1.1 Chapel-cum-Prayer Hall:** The Chapel is open during college hours to students and staff of all faiths who would want time for quiet and prayer. The Eucharist is held 4 times a week for Catholic students and staff, during the class break timings.
- 3.4.2 Council of International Programmes (CIP): It enables an osmotic educational link between St. Xavier's College and Universities across continents. It has incessantly bolstered the visibility of St Xavier's College on the global map. While CIP looks forward to fostering new alignments with the leading universities across the globe, it harks back to the rich legacy of globalization that has been an inherent facet of Jesuit education at St. Xavier's College. CIP facilitates both short-term and long-term programmes for its inhouse and foreign students.
  - 3.4.2.1 Short-term programmes for in-house students can be availed of in the April-May period. Summer programmes are available in some of the leading universities of the world. Credits earned through these programmes cannot be transferred.
  - **3.4.2.2** Long-term programmes include:
    - 3.4.2.2.1 A semester abroad during the fourth semester with full-transfer credits. Admission to this programme is subject to the approval of the core departments that the student is currently studying in.
    - 3.4.2.2.2 One year exchange programme after completing the second or third year. If the student chooses to go after the second year, the student has to return to college to complete the third year of the degree course in order to graduate from St Xavier's College.
  - 3.4.2.3 All students availing of foreign exchange programmes have to abide by the norms and guidelines stipulated in the College Handbook. Dr. Rashmi George is the Director of this programme.
- **3.4.3 Study Abroad Counselling Centre (SACC) (2012):** It helps students get admission into PG programmes in various foreign Universities; in selecting Universities, preparing for TOEFL / GRE, completing Visa and pre-departure formalities. Ms. Rashida Haidermota is in-charge of the Centre.
- 3.4.4 Honours Programme: It aims at providing an intellectual challenge to students. It seeks to go beyond the regular syllabi, to provide scope for greater student participation and to promote creativity in the learning process. Through assignments, seminars, projects and displays, it makes learning an exciting academic pursuit. Over three years, students must accumulate a minimum of 7 credits, of which: 5 must be from the Hub (formerly Department) in which the student has registered; 2 Transfer Credits from any other discipline / Hub.

Individual e-credit cards are awarded to students who complete their Honours activities. A Certificate of Merit is awarded to students who successfully complete the Programme. The office of the Vice-Principal (Academics) is incharge of this Programme.

- 3.4.5 Learning for Life Programme: It seeks to enlarge the scope of learning to other areas of accomplishment. It includes courses in Personality Development, Public Speaking, Self-Defence, Photography, Calligraphy, etc. The ECC handles this Programme.
- 3.4.6 College and Departmental Fests / Conferences: The College encourages the holding of Fests / Conferences as it trains students in organizing and leadership skills. Nearly every department organizes such activities at the intra and / or inter college levels.
  - **3.4.6.1 Malhar** is an annual inter-collegiate 3-day festival held in August. Along with the cultural component, it also holds 'Conclave' as its intellectual component.
  - **3.4.6.2 Xynergy** is an inter-collegiate Science Festival held in November. It includes a conference, an exhibition and other academic events.
  - **Jan-Fest** is a 2-day festival that celebrates Indian Classical Music in January. This is a finale of a series of musical concerts that IMG organizes (refer 3.5.1., page 21).
  - **3.4.6.4** For the Department Fests and other extracurricular programmes please refer to 3.5.7. , pages 23 & 24.
- 3.4.7 Social Involvement Programme (SIP) (1996): It aims at making education socially relevant. Students are made to learn through direct social involvement as' when the heart is touched by direct experience, the mind is challenged to change'. Students work with economically and physically underprivileged children as well as with mentally challenged individuals, domestic workers, hospital patients and senior citizens. Under the guidance of two qualified Social Workers, students are required to offer a minimum of 45 hours of service with an NGO and 5 hours of social activities connected with any of the academic disciplines that college offers. For the academic year 2020-21, this programme has been tweaked a bit to adapt to the COVID-19 situation.

#### 3.5 COLLEGE ASSOCIATIONS

3.5.1 The Indian Music Group (IMG) (1973): It aims at promoting Indian Classical Music in the city. It organizes concerts, lecture-demonstrations and music appreciation courses. Jan-Fest, its annual Indian classical music festival, is very highly rated. In 1984, an air conditioned library was set up with an enviable collection of LP's and tapes, inclusive of several thousand hours of recorded live performances. Dr. Bhaskar Saha is the IMG Convenor.

- 3.5.3 The Social Service League (SSL): This started more than 50 years ago. It caters to the altruistic sensibilities of students. Its activities include an exhibition on a socially relevant theme, an annual Rural Work Camp, Project Care (a two-day programme for children who are economically and/or differently challenged), visits to homes for the disadvantaged and similar activities. Br. Vivian Almeida S.J. is the Faculty-in-Charge.
- 3.5.4 All India Catholic University Federation (AICUF): Inspired by Gospel values, the AICUF, a national youth organization, gives students an opportunity to develop an all-round personality through leadership training, social outreach, spiritual integration and cultural activities. Conscientized on burning issues like women empowerment and ecological imbalance, its members are geared to taking a stand for the liberation of marginalized groups and Mother Earth. The AICUF facilitates the College Choir and with the DIRS organizes the Inter-Faith Prayer Services and Masses. Its national slogan is 'We are born into an unjust society and we are determined not to leave it as we have found it'. True to the concept of 'Catholic' which means 'Universal', the approach of the AICUF is inclusive. Fr. Dean Fernandes S.J. is the Faculty-in-Charge.
- **3.5.5 St. Xavier's Alumni Association (1903):** It caters to alumni/ae who would like fellowship and contact with their Alma Mater, the Association has seen illustrious ex-students involved in its activities. It is handled by the XDP.
- **3.5.6 Xavier's Development Programme (XDP):** It aims at connecting with alumni for various alumni-centric events and keeping alive the Xavier's family via the alumni website alumni.xaviers.edu, social media and personal contact. It also looks to collect funds for the college: staff endowment, academic facility enhancement, heritage restoration and infrastructure development. Fr. Keith D'Souza SJ is the Director of XDP.

# 3.5.7. Activities of Departments / Associations / Bodies in College Table No. 3.5.7.

| Department                                   | Association                                          | Publication                 | Fest / Programme                                   |
|----------------------------------------------|------------------------------------------------------|-----------------------------|----------------------------------------------------|
| Fest / Programmes<br>organized by<br>College |                                                      | _                           | Malhar; Ted <sup>x</sup> ;<br>Xynergy;<br>Jan-Fest |
| Faculty Research Journal                     |                                                      | XPLORE                      |                                                    |
| A.I.H.C.A.                                   |                                                      | RCA                         | Vividha                                            |
| Biotechnology                                |                                                      | Palindrome                  | Palindrome                                         |
| Botany                                       |                                                      |                             | Acta Botanica                                      |
| Chemistry                                    | Xavier's Association of Chemistry – XAC              | Elemental                   | XAC Fest                                           |
| Commerce Section                             |                                                      | Trends                      |                                                    |
| Dept. of Inter-<br>Religious Studies         |                                                      | Tarang                      | The Harmony<br>Project                             |
| Economics                                    | Eco-Circle                                           | Arthniti                    | Econundrum                                         |
| English                                      | English Association                                  | Ithaka                      | Ithaka                                             |
| Extra-Curricular<br>Credit Committee         |                                                      |                             | ECC Carnival                                       |
| French                                       |                                                      | A La Francaise              |                                                    |
| Geology                                      |                                                      | Terra                       |                                                    |
| Heras Institute                              |                                                      | Indica; The Bombay Explorer |                                                    |
| Hindi                                        | Hindi <i>Sahitya, Sangeet</i> & <i>Natya</i> Academy | Ankur                       | Antas                                              |
| History                                      | History Group                                        | Aitihasik                   |                                                    |
| Life Science & Biochemistry                  |                                                      | Lignum Vitae                |                                                    |
| Mass Media                                   | Media Circle                                         | The Catch Phrase            | Zeitgeist                                          |
| Mathematics                                  | Mathematics Association of Xavier's (MAX)            | The Proof                   |                                                    |
| Microbiology                                 | Undergraduate<br>Microbiology Association<br>(UMAX)  | Michronicle                 |                                                    |
| Physics                                      | Physics Circle                                       | Celeritas                   | PROBE                                              |
| Political Science                            | Political Science<br>Association                     | Samvad                      |                                                    |

Table No. 3.5.7. (Continued)

| Department                  | Association                            | Publication                          | Fest / Programme         |
|-----------------------------|----------------------------------------|--------------------------------------|--------------------------|
| Psychology                  | Psychology Association                 | Uncommon Sense                       |                          |
| Public Policy               |                                        | Niti Samvaad                         | Niti Samvaad             |
| Sociology &<br>Anthropology | Academy of Sociology &<br>Anthropology | Eidos                                |                          |
| Statistics                  | Stats Society                          | The Plot                             | Confluence               |
| Zoology                     | Xavier's Zoology<br>Association        | Imprint                              |                          |
|                             | AICUF                                  | AlCUFer                              | <i>Ujali</i> , AICUF Day |
|                             | DIRS                                   | Tarang                               |                          |
|                             | Film Club                              |                                      | Countdown                |
|                             | Jagruti                                | Pukar                                |                          |
|                             | Marathi Vangmaya<br>Mandal             | Tejomaya (Diwali<br>issue); Pakharan | Aamod                    |
|                             | Student Council                        | Xpress                               |                          |
|                             | The Debate Society                     |                                      |                          |
|                             | The Photography Society                |                                      |                          |

#### 4.1. ADMISSION POLICY

- **4.1.1.** Admission of students into the Autonomous Degree Courses will be on the basis of the aggregate marks in the qualifying examination or its equivalent, for both the Undergraduate (UG) and the Postgraduate (PG) courses, unless specified otherwise.
- 4.1.2. For the Bachelor in Arts (Mass Communication & Journalism MCJ)& Bachelor in Management Studies (B.M.S.) Courses, students come from all 3 faculties (Arts, Science & Commerce) where the marking systems are very different. Hence, an Entrance Test for these courses is conducted. Admission for B.M.S.& BA (MCJ). is based on:
  - **4.1.2.1.** 60 % weightage to Entrance Test (Objective Question Paper) & 40 % weightage to Class XII aggregate marks.
  - **4.1.2.2.** A candidate can apply in only one category (refer Table 4.1.9 (B) on page 26).
- **4.1.3.** Admissions to B.Sc. (I.T.) will be based on the marks scored in Mathematics at the Class XII Board Exam. Hence, there is no Entrance Test for B.Sc. (I.T.) admissions.
- **4.1.4.** For all PG courses, admissions are based only on the merit secured by the candidates as per the selection criteria of the respective PG Departments. The respective PG selection criteria can be found on:
  - **4.1.4.1.** M.Sc. in Botany, Geology, Life Sciences & Microbiology: 8.1.5 (Pg. 74)
  - **4.1.4.2.** M.Sc. in Big Data Analytics: 10.1.4(Pg. 88)
  - **4.1.4.3.** M.Sc. in Biotechnology: 10.2.4 (Pg. 91)
  - **4.1.4.4.** M.Sc. in Physics: 10.3.4 (Pg. 93)
  - **4.1.4.5.** M.A. in Ancient Indian History Culture and Archaeology:9.1.5 (Pg.86)
  - **4.1.4.6.** M.A. in Public Policy: 11.1.6 (Pg. 97)
  - **4.1.4.7.** M.A. in Psychology: 11.2.4 (Pg. 99)
- **4.1.5.** All applications for admissions to any UG or PG degree course should be submitted by the date notified by the College. Late applications may not be accepted.
- 4.1.6. Admissions will be considered to be completed only when the full fees for the academic year are paid (against an official receipt) and the name of the applicant appears on the relevant rolls. Only the Principal can condone payment in full or allow payment in part.
- **4.1.7.** All UG and PG admissions are valid only for one year and are therefore to be renewed for each subsequent year of study.
- **4.1.8.** A student will not be re-admitted to the College if he / she has:
  - **4.1.8.1.** Had three unsuccessful attempts at the same examination.
  - **4.1.8.2.** Been debarred twice within the first four semesters.
  - **4.1.8.3.** Had serious complaints of indiscipline against him / her in the previous year.
- **4.1.9.** The College is a Catholic Minority College, administered under the provisions of the Indian Constitution, to promote the welfare of the Minority community.

- **4.1.9.1.** As per the Judgement dated 12<sup>th</sup> October 2017 of the Honourable Bombay High Court vide Writ Petition No. 1726 of 2001, Minority Colleges do not need to set aside seats for Backward Classes. This is reiterated by the University of Mumbai Circular (No.Aff ./ Recog.I / Admission/(2018-19)/10/of 2018), dated 30<sup>th</sup>May, 2018.
- 4.1.9.2. This Judgement renders null & void the Directives regarding Reservation of Seats given by the University of Mumbai vide Circular No. Spl. Cell / (68) / 218 / 2005 dated 3rd June, 2005 [i.e., SC (13%) / ST (7%) / DT(A) (3%) / NT(B) (2.5%) / NT(C) (3.5%) / NT(D) (2%) / OBC (19%) / SBC (2%)].
- **4.1.9.3.** Hence, the admission in-take in St. Xavier's College (Autonomous), Mumbai is as shown in Table 4.1.9 (A) and Table 4.1.9. (B) on pages 26 and 27 respectively.

Table 4.1.9. (A)

| F.Y.B.A. (360 seats), F.Y.B.Sc. (360 seats)& F.Y.B.Co                                                                                                                                                                                    | m. (240 seats)      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Category                                                                                                                                                                                                                                 | Criteria            |
| TOTAL SEATS 100% (Arts & Science: 360; Com                                                                                                                                                                                               | merce: 240 )        |
| Management Quota Arts & Science: 15% of 100 % of 360 seats Commerce: 15% of 100 % of 240 seats                                                                                                                                           | Case A              |
| BALANCE SEATS 85%                                                                                                                                                                                                                        | <u>.</u>            |
| Christian Minority Arts & Science: 50% of 85% of 360seats Commerce: 50% of 85% of 240 seats                                                                                                                                              | Case B.<br>. Case C |
| General Category Arts & Science: 42% of 85% of 360seats Commerce: 42% of 85% of 240 seats                                                                                                                                                |                     |
| Others i. Persons with Disability Category: Arts & Science: 5 % of 85% of 360 seats Commerce: 5 % of 85 % of 240 seats ii. Special Category**(refer 4.1.10.): Arts & Science: 3 % of 85% of 360 seats Commerce: 3 % of 85 % of 240 seats | Case B.<br>. Case C |

#### Key:

Case A: Only for those the College is obliged to admit and without any guid pro quo.

Case B: First preference to all In-house students.

**Case C:** Vacant seats will be filled in by candidates applying from other Colleges / Boards in order of merit.

#### Table 4.1.9. (B)

| F.Y.B.M.S. (60 seats); F.Y.BA (MCJ) (60 seats) & F.Y.B.Sc. (I.T.) (60 seats)                                                     |          |  |
|----------------------------------------------------------------------------------------------------------------------------------|----------|--|
| Category                                                                                                                         | Criteria |  |
| TOTAL SEATS 100% (60)                                                                                                            |          |  |
| Management Quota: 15% of 60 seats                                                                                                | Case A   |  |
| BALANCE SEATS 85% (51)                                                                                                           |          |  |
| Christian Minority: 50% of 85% of 60 seats                                                                                       | Case D   |  |
| General Category: 42% of 85% of 60 seats                                                                                         | Case D   |  |
| Others i. Persons with Disability Category: 5 % of 85% of 60 seats ii. Special Category** (refer 4.1.10.):3 % of 85% of 60 seats | Case D   |  |

#### Key:

- **Case A:** Only for those the College is obliged to admit and without any quid pro quo.
- **Case D:** Admitted on the basis of their Merit Rank which is based on performance at the Entrance Test and XII marks, as described in 4.1.2. on page 23
  - **4.1.10.** \*\* Special Category refers to:
    - **4.1.10.1.** Wards of Transferred State / Central Govt. and Private Sector employees, employees of Defence Department / Ex-Servicemen.
    - **4.1.10.2.** Wards of Freedom Fighters.
    - **4.1.10.3.** Award Winners at the District / State / National Levels in Sports or Cultural Activities.

#### 4.2. ADMISSION PROCEDURES

- **4.2.1.** Applications for admissions to the BA (MCJ) and B.M.S. courses are to be submitted online, and the admission process includes an Entrance Test. Please look up the details on the Home Page of the College website.
- 4.2.2. For: B.A. / B.Sc. / B.Com. / BA (MCJ). / B.M.S. / B.Sc. (IT); and, the First Year Masters Courses which include M.Sc. in Botany, Biotechnology, Big Data Analytics, Geology, Life Sciences, Microbiology and Physics (Astrophysics) and M.A. in AIHCA, Public Policy and Psychology the College has an Online Application System through a facility on its website. This facility is made available from the second half of May. An incomplete application will not be considered for admission.
- **4.2.3.** Admission to B.Com. is through the College Office (Commerce Section), by filling up and submitting a form and through an interview with the Vice Principal (Commerce) or his representative.

- **4.2.4.** The University of Mumbai has made it mandatory for all candidates seeking admission to the First Year courses in the Degree Colleges to fill in the 'Pre-Admission Online Registration Form which is available on (http://mum.digitaluniversity.in).
- **4.2.5.** Actual admissions to all courses will be on the announced days, through a meeting with the candidate and a Parent/Guardian. The offer of admission will be notified on the College website and on the College Notice Board. On being admitted, the student will have to submit the following documents (**Original** plus attested photocopies):
  - 4.2.5.1. Class XII Statement of Marks
  - **4.2.5.2.** Baptism Certificate (for Minority Christian community only)
  - **4.2.5.3.** Caste Certificate (wherever applicable)
  - **4.2.5.4.** Documentary Evidence for Special Category Status (Refer Section 4.1.10. from 4.1.10.1. to 4.1.10.3., page 26)
  - **4.2.5.5.** Passing Certificate (required for getting the Eligibility Certificate)
  - **4.2.5.6.** Migration Certificate (required for getting the Eligibility Certificate)

#### 4.3. ELIGIBILITY CERTIFICATE

- 4.3.1. Candidates passing Class XII Examinations from Foreign Boards and students passing from International Baccalaureate or 'A' levels examinations General Certificate of Education / Cambridge International School Exam of Cambridge or University of London must first obtain a 'PRIMA FACIE' Eligibility Letter from the University of Mumbai for the purpose of admissions to all First Year Degree Courses, namely B.A. / B.Sc. / B.Com. / BA (MCJ). / B.M.S. / B.Sc. (IT).
  - **4.3.1.1.** The address of the Eligibility Department is:

The University of Mumbai, Eligibility Section, Kalina Campus, Ground Floor, Ambedkar Bhavan Santacruz (East), Mumbai – 400 098

- **4.3.1.2. Note:** For Foreign Boards, the Class XII Examination has to be cleared in one sitting only.
- 4.3.2. Students passing the Class XII from Boards other than Maharashtra State Board and seeking admissions to First Year B.A. / B.Sc. / B.Com. / BA (MCJ. / B.M.S. / B.Sc. (IT) are required to apply for a Provisional Eligibility Certificate through the College at the time of admission. The application form is available in the College Office. It should be duly filled, submitted with an attested copy of the Class XII marksheet and a passport size photograph along with the prescribed fees of Rs.320 and verification of document fees of Rs.500 (Total Rs.820) to the College Office. Post admission, confirmation of eligibility is initiated by the College Office, with the documents listed in 4.2.5.(page 28).

#### 4.4. FEES FOR SENIOR COLLEGE:

**4.4.1.** Tables 4.4.1. (A) (page 29) & 4.4.1.(B)(page 29) lists the total fees to be paid for Self-Financed And Aided courses respectively. These fees include Deposit and Lab. Fees, as sanctioned by the Board of Management, of the College:

Table 4.4.1. (A)

| Class          | Fees(approx.) |
|----------------|---------------|
| F.Y.BA (MCJ)   | Rs. 37,259    |
| S.YBA (MCJ)    | Rs. 31,006    |
| T.YBA (MCJ)    | Rs. 30,275    |
| F.Y.B.M.S.     | Rs.37,259     |
| S.Y.B.M.S.     | Rs. 27,225    |
| T.Y.B.M.S.     | Rs. 29,144    |
| F.Y.B.Sc. (IT) | Rs.48,781     |
| S.Y.B.Sc. (IT) | Rs. 42,713    |
| T.Y.B.Sc. (IT) | Rs. 47,769    |

Table 4.4.1. (B)

| Class      | Fees (approx.) | Salient Course Feature               |
|------------|----------------|--------------------------------------|
| F.Y.B.A.   | Rs. 5,537      | (Without Statistics)                 |
| F.Y.B.A.   | Rs. 6,537      | (With Statistics)                    |
| F.Y.B.Sc.  | Rs. 7,187      |                                      |
| S.Y.B.A.   | Rs. 4,917      | (Without Statistics)                 |
| S.Y.B.A.   | Rs. 5,917      | (With Statistics)                    |
| S.Y.B.Sc.  | Rs. 6,173      |                                      |
| T.Y.B.A.   | Rs. 6,115      | (Without Statistics)                 |
| T.Y.B.A.   | Rs. 7,115      | (With Statistics / Psychology)       |
| T.Y.B.Sc.  | Rs. 7,147      |                                      |
| T.Y.B.Sc.  | Rs. 8,197      | (With Computer Prog. / Neuroscience) |
| F.Y.B.Com. | Rs. 5,537      |                                      |
| S.Y.B.Com. | Rs. 4,917      |                                      |
| T.Y.B.Com. | Rs. 6,115      |                                      |

- **4.4.2.** For Fees for PG Courses refer:
  - 8.1.10. (page 78) for M.Sc. in Botany, Geology, Life Science, Microbiology
  - 9.1.4. (page 90) for M.A. in AIHCA
  - 10.1.6 (page 92) for M.Sc. in Big Data Analytics
  - 10.2.6 (page 95) for M.Sc. in Biotechnology
  - 10.3.6 (page 98) for M.Sc. in Physics
  - 11.1.4. (page 101) for M.A. in Public Policy
  - 11.2.6. (page 104) for M.A. in Psychology
  - 12.1.7. (page 107) for Ph.D.

#### 4.5. FEE CONCESSION FOR BC STUDENTS

- **4.5.1.** Under the Government of India Scholarship or Government of Maharashtra Freeship schemes for BC students (SC/ST/DT/NT/OBC/SBC), certain Scholarships/Freeships are provided to the students who have the certificate issued by the Maharashtra Government.
- **4.5.2.** Annual Family Income (AFI) Eligibility conditions for Scholarship / Freeship:
  - **4.5.2.1.** SC students: AFI <Rs.2 lakh p.a. (Scholarship)
  - **4.5.2.2.** SC students: AFI>Rs. 2 lakh p.a. (Freeship)
  - **4.5.2.3.** VJ/NT / SBC/OBC students refer: G.R.Kr.EBC-2014/Pr.Kr.96/Shikshan dt 20/08/2016
- **4.5.3.** NT / VJ /SBC / ST and OBC categories students will have to submit the Non-Creamy-Layer Certificate for such fee concessions.
- **4.5.4.** Candidates with necessary documents who qualify for the aforementioned Scholarship / Freeship are required to pay, along with the Exam Fees, a nominal fee of Rs.445 (for FY & SY) and Rs. 795 (for TY)at the time of admission. They are exempted from all other fees.

## 4.6. ADDITIONAL INFORMATION ON SCHOLARSHIPS, FREESHIPS AND AWARDS

- **4.6.1.** Deserving / Eligible students are encouraged to take advantage of the financial aid in terms of Scholarships / Freeships as shown below:
  - **4.6.1.1.** Government of India Scholarships / Freeships for SC students
  - 4.6.1.2. Government of India Scholarships / Freeships for OBC students
  - **4.6.1.3.** Government of India Scholarships / Freeships for VJ / NT students
  - **4.6.1.4.** Government of India Scholarships / Freeships for SBC students
  - **4.6.1.5.** Government of India Scholarships / Freeships for ST students
  - **4.6.1.6.** Government of India Minority Scholarship
  - **4.6.1.7.** Open Merit scholarship for Junior and Senior College
  - 4.6.1.8. PTC Freeship

- **4.6.1.9.** STC Freeship
- **4.6.1.10.** EBC Freeship
- **4.6.1.11.** Ex-Servicemen Freeship
- **4.6.1.12.** PG Merit Scholarship / Freeship
- 4.6.1.13. Rajashri Shahu Maharaj Scholarship
- 4.6.1.14. University Financial Assistance
- **4.6.1.15.** Other State Scholarship / Freeship
- **4.6.1.16.** College Graded Scholarship
- **4.6.1.17.** Students' Beneficiary Fund (provided by the College)
- 4.6.1.18. Students of the Year Awards (offered by the College)
- **4.6.2.** Students are also advised to check **www.scholarships.gov.in** for the scholarships listed below:
  - **4.6.2.1.** Post-Matric Scholarship Schemes for Minorities
  - **4.6.2.2.** Post-Matric Scholarship Schemes for SC Students (U.T. only)
  - **4.6.2.3.** Maulana Azad National Fellowship for Minority Students
  - **4.6.2.4.** Post-Matric Scholarship for Persons with Disabilities
  - **4.6.2.5.** Scholarships for Top Class Education for Students with Disabilities
  - **4.6.2.6.** Central Sector Scheme of Scholarships for College and University Students
  - **4.6.2.7.** PG Indira Gandhi Scholarship for Single Girl Child.
  - **4.6.2.8.** Students belonging to SC / SBC / OBC / VJ / NT are required to fill up the online form on **http://mahaeschol.maharashtra.gov.in**, in order to avail the fee concession.
  - **4.6.2.9.** Students who apply through these portals do not get any fee concessions while taking admission. They have to directly apply for the benefit. The awardees get the financial benefits deposited directly into their personal bank accounts.

#### 5.1. BACKGROUND OF COLLEGE AUTONOMY

- 5.1.1. The Indian higher education has mainly been under the affiliating system, wherein all colleges are linked to a University which prescribes its syllabi and organizes, controls and oversees the evaluation system. However, with a view to improve the quality of higher education, the Government of India, through the UGC, has recommended the delinking of academically well-established colleges from the affiliating system with a view to promote academic excellence. Hence, the emergence of an autonomous college, which is mandated to:
  - **5.1.1.1.** Determine its own course of study and syllabi.
  - **5.1.1.2.** Prescribe rules for admission in consonance with the Reservation Policy of the State Government.
  - **5.1.1.3.** Evolve methods of assessing students' performance, conduct examinations and declare the examination results along with the corresponding marksheets.
  - **5.1.1.4.** Use modern tools of educational technology to achieve higher standards, incentivize creativity and promote best practices for the benefits of the students and society at large.
- 5.1.2. Recognizing the academic excellence of St Xavier's College, Mumbai, the UGC, State Government and University of Mumbai, have conferred on it the status of an academically Autonomous College from June 2010. Although St Xavier's College, Mumbai, is academically autonomous, the Graduation Degree is conferred by University of Mumbai.

#### 5.2. ASSESSMENT

The College conducts continuous assessments for all theory and practical courses in each semester.

### 5.2.1. Theory: Continuous Internal Assessment (CIA)

- **5.2.1.1.** Usually 2 CIAs are held during a semester per course:
  - **5.2.1.1.1.** 15 and 25 marks respectively in the 1<sup>st</sup> Semester only. However, due to COVID-19 situation, only one CIA of 25 marks will be held in Semester I and the marks secured will be extrapolated to 40.
  - **5.2.1.1.2.** 20 marks per CIA in the remaining Semesters.
  - **5.2.1.1.3.** It is possible that a course (in consultation with the Principal) may club the two CIAs into one (40 marks). In this case the lecturer concerned has to give to the Principal the breakup of the continuous marking scheme.
  - **5.2.1.1.4.** It is also possible that (in consultation with the Principal) the 20 marks of CIA II could be broken down into assignments running throughout the concerned Semester.

- **5.2.1.2. There will be no retests for the CIAs.** Any student who misses either CIA I or CIA II or both can acquire the 40% required to pass the course through the 60 mark ESE.
- **5.2.1.3. Special CIA Clause:** The Principal will request the concerned Department(s) to hold a Special CIA Test (of one or more courses) for a student, within the same semester, under the following circumstances:
  - **5.2.1.3.1.** If the Principal allows a student to represent the College at or to participate in some event (academic / cultural / sports) and this causes the student to miss a CIA Test (of one or more courses) (Note: The concerned event could be either a couple of weeks prior to or during the CIA period).
  - **5.2.1.3.2.** If just prior to or during the CIA a bereavement (of an immediate family member) occurs. (Note: In this case the Death Certificate of the departed and the Parent's note will have to be given to the College within 2 days of returning to College, for this clause to hold).
  - **5.2.1.3.3.** For the same student, the Principal will exercise this discretionary power for only one of the two CIAs of a semester.
- 5.2.14. If a student fails to score 40 % in the overall total of a course, such a student will have to appear for the Additional 100 marks Examination (in the subsequent semester) for that course and forego all the CIA marks earned in the on-going semester in that course.

### 5.2.2. Theory: End Semester Examination (ESE)

- **5.2.2.1.** The ESE is for a maximum of 60 marks of 2 hours duration.
- **5.2.2.2.** There will be barcoding (for TYs) and masking (for FYs and SYs) of the answer sheets prior to assessment.
- **5.2.2.3.** For the F.Y / S.Y. courses there will be a Single Evaluation with Moderation for all courses as shown below:
  - **5.2.2.3.1.** The assessed papers of the top 4 scores of the course per division.
  - **5.2.2.3.2.** 20% of the rest of the assessed papers (per division) on a random basis.
- **5.2.2.4.** If a moderator finds issues (e.g., inconsistency, inflated / deflated marks) with the markings of the Internal Examiner, from the set given for moderation, the option to increase the number of answer booklets to be moderated in that Course could be exercised in consultation with the Principal.
- **5.2.2.5.** If 30% or more of the moderated papers assessed by a particular examiner of a Course have a change of more than 15% of total marks assigned to the course, a blind moderation will be required by a second moderator. If the change is upheld, all the answer booklets of that group will have to be re-evaluated blind by the second moderator. The re-evaluated marks will be the final score awarded.

**5.2.2.6.** At the Third Year, there will be a **Double-Blind Evaluation** by the teacher of the course and an external examiner. The average of the two scores will be the marks awarded. If in 30 % or more of the total answer booklets evaluated per course there is a marking discrepancy between the two evaluations of more than 15% of the total marks assigned to that course, a third blind evaluation will be required. The average of the 3<sup>rd</sup> Blind Evaluation and the marks of the evaluator closest to it will be the ultimate score awarded.

#### 5.2.3. Practicals

- **5.2.3.1.** Practical component per course is for 50 marks, of which 5 marks is for the Journal and 45 marks for the ESE or 15 marks for CIA and 30 marks for ESE.
- **5.2.3.2.** Science subjects have a Practical component per course as:
  - **5.2.3.2.1.** F.Y.B.Sc. (except Mathematics) (2 courses / semester)
  - **5.2.3.2.2.** S.Y.B.Sc. (except Mathematics) (3 courses / semester)
  - **5.2.3.2.3.** T.Y.B.Sc. (including Mathematics)(4 courses / semester)
- **5.2.3.3.** For Mathematics in:
  - **5.2.3.3.1.** F.Y.B.Sc. there are no Practicals.
  - **5.2.3.3.2.** S.Y.B.Sc. the Practical component is for Courses 3.03 and 4.03
  - **5.2.3.3.3.** T.Y.B.Sc. there is a Practical component in all the Courses.
- **5.2.3.4.** For Statistics for Arts:
  - **5.2.3.4.1.** F.Y.B.A.(1 course / semester)
  - **5.2.3.4.2.** S.Y.B.A.(2 courses / semester)
  - **5.2.3.4.3.** T.Y.B.A.(3 courses / semester)
- **5.2.3.5.** For Psychology (Courses: APSY0505 and APSY0605) a 100 marks Practical Course per semester is held. The breakup of the 100 marks is: Journal 20; *vivavoce* 20 and ESE 60.
- **5.2.3.6.** All practical journals have to be signed by the Faculty-in-Charge (FIC) at each of these Practicals. The HoD along with the FIC will certify these Journals. No marks are allocated for attendance at practicals, but journals will be certified only against the completion of at least 75% attendance at the Practicals.
  - **5.2.3.6.1.** A student whose Journal is not certified in a Course will be given ZERO marks for the Journal in that Course.
  - **5.2.3.6.2.** The Journal Marks will be carried forward if a student fails or is absent for the corresponding practical of the Course.
- 5.2.3.7. The End Semester Practical Examination (45 marks) of any Course need not be held only at the end of that semester; it could be held (in consultation with the Principal) through the semester. In such a case, the Department is expected to ultimately submit to the Examination Department the Consolidated Marks (per Course).

- **5.2.3.8.** No Additional ESE for Practicals will be held within the on-going semester, unless permitted by the Principal.
- 5.2.3.9. If, for the Practicals, a student is absent or fails to get 40% of the total practical marks (i.e., 40/100 or 60/150 or 80/200) then an Additional Practical ESE will be held when the concerned Practical Examination is held for the next batch of students in the subsequent academic year(s). However, for Mathematics and Statistics, the Additional Exams will be held in the subsequent semester.
- **5.2.3.10.** A student will have to appear for the Practicals of all the Courses of the subject that he / she has chosen.
- **5.2.3.11.** If a T.Y.B.Sc. / T.Y.B.A.student fails in or is absent for one or more of the Practicals in Semester V, he / she will be allowed to appear for the Additional Examination in Semester VI of the concerned academic year.
- **5.2.3.12.** If a T.Y.B.Sc. / T.Y.B.A. student fails in or is absent for the Practicals in Semester VI, he / she will have to appear for these practicals in the subsequent Semester V of the following academic year.
- 5.2.3.13. The Practical marks per Course in the subject (i.e., CIA marks from those Departments who hold CIA for Practicals and ESE) would be recorded & maintained by the Department and submitted at the end of the semester to the Examination Department.

#### 5.3. PASSING NORMS

- **5.3.1. To Pass a Theory Course** a student is required to obtain a minimum of 40% of the total marks allotted to that Course, which includes: CIA I, CIA II and the ESE.
  - **5.3.1.1.** A student will have to re-appear for the Additional 3-hours 100 marks Examination at the end of the subsequent semester if he / she fails to secure the required minimum 40 % of the total marks at the Regular Examination.
  - 5.3.1.2. When a student appears for an Additional 100 marks Examination, only the marks secured by a student at that Additional Examination will be the marks ultimately awarded.
- **5.3.2. To Pass a Practical Course** a student is required to secure a minimum of 40% of the total marks allotted for the concerned Course.
  - **5.3.2.1.** If a student appears for an Additional Practical Examination, the Practical Marks obtained earlier, except the journal marks, are annulled.
  - **5.3.2.2.** The marks obtained at the Additional Practical Examination will be the marks ultimately awarded.

#### 5.4. GRACING NORMS

- **5.4.1. Grace marks for passing:** Upto a maximum 1% of the Grand Total per semester can be added to any Course(s) to fulfill the passing norms.
- **5.4.2. Grace marks for Award of Class:** Upto 1% of the overall marks of that class will be added to the Grand Total to obtain a 1stClass or 2nd Class provided that the student has not obtained Grace Marks for passing in any Course (Note: this applies only to the final Consolidated Marksheet).
- 5.4.3. A student will be entitled for 10 Grace Marks, which will be added to his / her Even Semester Marksheet in the academic year when he / she represented the College in sports, NCC or cultural activities and were among the winners (1st, 2nd or Runners-up) or have reached the quarter finals of any competition held by the University of Mumbai.
  - **5.4.3.1.** Only students who have passed in all subjects will be eligible for the Grace Marks as indicated in 5.4.3. In this case these Grace Marks will be distributed over 3 subjects so that the benefit is reflected in such a student's GPA.
- **5.4.4.** Grace Marks (as in 5.4.1. to 5.4.3.1) are not awarded for Additional Examination.
- **5.4.5.** For Degree Class Improvement, the candidate has to appear for the examinations of all the 6 semesters for UG and all the 4 semesters for PG.
  - **5.4.5.1.** There is no scheme for performance improvement of any semester individually.

#### 5.5. RESULTS

- **5.5.1. A 10-Point Grade System** for all courses has been adopted it involves calculations for a Semester Grade Point Average (SGPA) and the final Cumulative Grade Point Average (CGPA).
- **5.5.2.** Marksheets / Gradesheets are issued per Semester & per Additional Examination.
- 5.5.3. Those students who do not register for the Additional Examination within the stipulated period displayed on the Examination Notice Board will not be permitted to appear for the concerned examination(s).
- **5.5.4.** Those students who fail in Courses adding up to 12 credits or less, across both semesters in an academic year, will be 'Allowed to Keep Terms' (ATKT) and appear for the Additional Examination(s) in the subsequent Semester.
- **5.5.5.** Those students who fail in Courses adding up to more than 12 credits across both semesters in an academic year will be declared failed in that academic year.
- **5.5.6.** To be admitted into the TY, one of the following conditions must be fulfilled:
  - **5.5.6.1.** The student passes both the FY and SY classes.
  - **5.5.6.2.** The student passes both the FY Semesters but fails in courses adding upto12 or less credits at the SY.

- **5.5.6.3.** The student passes both the SY Semesters but fails in courses adding upto 12 or less credits at the FY.
- **5.5.7.** Students who have not cleared any one of Semester I, II, III, IV will not be allowed to appear for the Semester VI examination.
- **5.5.8.** The Semester VI results of any student will not be declared until that student has cleared all the Courses of Semester V.
- **5.5.9.** A student who is not satisfied with the evaluation of his / her paper in any Course, can apply (by the date notified on the Examination Notice Board), for a photo-copy and / or a re-evaluation of the answer paper. If the re-evaluation reveals a (+ / -) 15% or greater difference, an average of the first evaluation and of the re-evaluation will be the final score awarded. If the re-evaluation reveals a less than (+ / -) 15% then the original marks obtained will be retained.
- 5.5.10. Error(s) in the hard or soft copies of the marksheet (viz., name of student, marks, SGPA, CGPA, grades, UID No., etc.) have to be brought to the notice of the General Office via the Principal / Vice-Principal within 20 days of the distribution / uploading of the marksheets in the Odd Semesters and within 7 days in the Even Semesters. No changes will be entertained after the lapse of these 20 or 7 days.

#### 5.6. ATTENDANCE

- **5.6.1.** The College expects 100% attendance at all lectures / practicals per chosen course. As there are legitimate reasons why 100% attendance is not possible, a minimum of 75% attendance per course is made mandatory.
- **5.6.2.** A student with less than 75% attendance in a course (including tutorials) will not be allowed to appear for the ESE in that course.
- **5.6.3.** A condonation of up to 50% of lectures / practicals per course could be made at the discretion of the Principal, in the following cases:
  - **5.6.3.1.** Serious illness authenticated by a Doctor's Certificate and Medical Records & submitted within 2working days of resuming classes.
  - **5.6.3.2.** Other serious reasons, with validating documents (acceptable to the Principal) & submitted within 2 working days of resuming college. Such documents will not be accepted after these 2 working days.
  - **5.6.3.3.** No condonation is possible if a course's attendance, for whatever reason(s), is below 50% of the said course's lectures / practicals.
- **5.6.4.** For students who are sent by the Principal to represent the College, the total attendance will be reduced by the number of days spent representing College. However, such students will have to login at least 75 % attendance of the lessened total.

- **5.6.5.** Unless unavoidable, students are not allowed to miss lectures, practicals, CIAs or ESE without the prior permission of the Principal. Absence without prior permission will make students liable to disciplinary action, including denial of Terms.
- **5.6.6.** Absence from any Test / Exam must have documentary justification which must be presented to the concerned Vice-Principal within 2 working days of resuming classes, as per the procedure mentioned on the Class Notice Boards.
  - **5.6.6.1.** In case of illness, a Medical Certificate and Medical Records must be produced.
  - **5.6.6.2.** In case of bereavement, the Death Certificate will have to be submitted.
  - **5.6.6.3.** No documents will be accepted after the 2 working days.
- **5.6.7.** The Leave Application / Medical Papers must be accompanied by:
  - **5.6.7.1.** The duly filled College Absence Record Form (which is available in the College Hostel Office).
  - **5.6.7.2.** A covering letter from the Parent or Guardian of the student.
- **5.6.8.** Serious illness or other circumstances are valid reasons for absence from lectures, practicals and exams. However, if the College is not provided with sufficient evidence of academic participation by the concerned student, the College may not grant such student terms for the concerned Course(s) in that Semester. Such students would have to repeat the concerned Course in the next academic year. Note: 5.6.3.3. is also applicable here.
- **5.6.9.** Attendance Grades (AG) (as shown in Table 5.6.9.; page 37) for each course will be displayed in the semester Marksheets.

Table 5.6.9.

| Attendance<br>Range (%) per<br>Course | 100 to<br>95 | < 95 to<br>90 | <90 to<br>85 | <85 to<br>80 | <80 to 75 | < 75 | Debarred Students who pass Additional Exams |
|---------------------------------------|--------------|---------------|--------------|--------------|-----------|------|---------------------------------------------|
| Grades                                | A+           | Α             | B+           | В            | С         | TNG  | D                                           |

Note: TNG = Terms Not Granted (i.e., Debarred for ESE in that Course)

- **5.6.10.** The AG for those students appearing for the Additional 100 marks Examinations and were not debarred for the ESE of that Course, will be the same as that secured during the concerned semester.
- **5.6.11.** The AG 'D' will be given to students who were debarred and have passed the Additional Examination of the concerned Course.
- **5.6.12.** Students, who have been debarred twice within the 1st four semesters, will not be readmitted in the subsequent academic year.

## 5.7. RULES FOR EXTRA-CURRICULAR CREDIT (ECC) ACTIVITIES

- **5.7.1.** Two mandatory (Non-Academic) ECC will be required to be earned by a student to obtain a Degree.
- **5.7.2.** Each student has to log-in (over the 3-years of UG studies) a minimum of EC activities hours as follows:
  - **5.7.2.1.** For Arts, Management, Mass Media and Voc (T) students: 50 hours. These 50 hours will be accumulated as: 20 hours in FY, 20 hours in SY and 10 hours in Semester V This new stipulation is only for the current FYs & SYs.
  - **5.7.2.2.** For Science, Information Technology and Voc (SD) students: 40 hours. These 40 hours will be accumulated as:15 hours in FY, 15 hours in SY and 10 hours in Semester V This new stipulation is only for the current FYs & SYs.
- **5.7.3.** If by Semester VI, a student fails to earn these mandatory hours as stipulated in 5.7.2., he / she will have to do 10 additional monitored SIP hours in Semester VI.
- **5.7.4.** The students' EC progress, in terms of hours & quality of participation is monitored and recorded by the EC Committee (ECCom), under the supervision of the EC Faculty-in-Charge. The ECC Grade awarded will be either' A+' or 'A'.
- **5.7.5.** The following activities are eligible for EC credits:
  - **5.7.5.1.** Representing College at ECCom. approved competitions / NCC.
  - **5.7.5.2.** Engaging in the co-& extra-curricular activities of the College Associations / Departments. These activities have to be certified by the Association's Faculty-in-Charge or HoD.
  - **5.7.5.3.** Being a member of the College Magazine Committee or Students' Council or any approved College Student Body.
  - **5.7.5.4.** Involving in Malhar/Synergy /Jan-Fest as organizer / volunteer.
  - **5.7.5.5.** Enrolling in activities organized by the Student Council, SSL, AICUF, I.M.G. and other such bodies approved by College.
  - **5.7.5.6.** Participating in Sports, certified by the College Sports Director.
  - **5.7.5.7.** Involving in the International programmes of the College.
  - **5.7.5.8.** Providing on campus services to students with disabilities on campus (through the XRCVC).
- **5.7.6.** Students are advised to check the College website for the ECC data submission procedure.

## 5.8. SOCIAL INVOLVEMENT PROGRAMME (SIP)

- **5.8.1.** Two mandatory (Non-Academic) SIP Credits will be required to be earned by each student to obtain a degree.
- **5.8.2.** These credits have to be completed over semesters I or II by working with an NGO assigned by the SIP Department as well as with a College Department.
- **5.8.3.** The SIP Credits is based on 50 hours of logged-in activity as shown below:
  - **5.8.3.1.** 45 hours of actual social activity with the assigned NGO. This service with the assigned NGO is monitored by the SIP Department of the College.

**5.8.3.2.** 5 hours of service through a Department of the College. This service must be discipline-centric and so monitored by the concerned Department.

#### 5.9. INTERNSHIPS /FIELDWORK EXPERIENCE CREDIT

- **5.9.1.** Internships / Fieldwork experiences are encouraged by the College so that students gain practical experience in their sphere of study.
- **5.9.2.** For this activity to be awarded the one Non-Mandatory Credits on the Consolidated Marksheet, the following protocol should be followed:
  - **5.9.2.1.** The internship activity cannot be a part of either a CIA or of an ES Examination.
  - **5.9.2.2.** It must be undertaken only during the breaks between Semesters:
    - 5.9.2.2.1. For UG students: III & IV or IV &V or V & VI.
    - 5.9.2.2.2. For PG students: VII & VIII or VIII & IX or IX & X.
  - **5.9.2.3.** A minimum of 60 hours of experience, and only 6 hours per day.
  - **5.9.2.4.** It has to be first approved by the Department's HoD(s) through which the student would graduate (Single Major for UG and PG / Double Majors for UG).
  - **5.9.2.5.** International Exchange students cannot avail of this Credit. Hence, College Departments should not entertain applications from such students.
- **5.9.3.** The concerned Department would have to monitor this activity as under:
  - **5.9.3.1.** The HoD, on behalf of the student, would issue a request letter to the organization in which this activity will be undertaken.
  - **5.9.3.2.** The Department would collect from the student the certification given to him / her by the concerned organization, post the internship.
  - **5.9.3.3.** The Department would then conduct a *viva voce* to verify the quality of the tasks undertaken by the student in the concerned organization.
  - **5.9.3.4.** On certifying that the activity is acceptable, the Department would then submit a report to the Examination Department, not later than the end of February of that student's Semester VI.

#### 5.10. TRANSFER OF CREDITS

#### 5.10.1. Transfer of Credits from Other Institutions

- **5.10.1.1.** The College will accept the transfer of credits for one semester from another institution within India (limited to A Grade Colleges or otherwise of repute) or from a foreign University of repute.
- **5.10.1.2.** The student will be expected to earn as many credits to complete the semester as demanded by the host institution.
- **5.10.1.3.** The College will transfer only the number of credits that it normally has for the semester missed, even if the number of credits that the host institution grants is greater than the number required by the College.
- **5.10.1.4.** Students can go to:

- **5.10.1.4.1.** An Indian institution only during Semester III or IV.
- **5.10.1.4.2.** A foreign institution (whose academic year begins in August / September), only during Semester IV.
- **5.10.1.5.** Only students who fulfil the following qualifications in the first 3 semesters are permitted to avail of this facility:
  - **5.10.1.5.1.** a minimum CGPA of 7.5; and
  - **5.10.1.5.2.** a minimum average attendance of 75%.
- 5.10.1.6. To encourage a choice based credit system, these students will be allowed to choose any academic courses at the host institution in addition to at least two courses (in the semester pattern) in the subject that he / she is going to major in or a minimum of one each for a double major student.
  - **5.10.1.6.1.** It is therefore necessary that the student gets a prior clearance regarding the type of mandatory courses required, from the college Head(s) of Department(s) in which he/she hopes to major in.
  - **5.10.1.6.2.** The onus of fulfilling these requirements lies with the student. The Department will conduct an evaluation of the Course-work done by the student in the other academic institution, prior to accepting the concerned Courses into the academic programme of the College.

#### 5.10.2. Transfer of Credits to the Honours Programme (HP)

- **5.10.2.1.** Students doing short term academic courses in India or abroad can apply to count them as Interdisciplinary Transfer Credits for the HP.
- **5.10.2.2.** The CIP can assist the HP Co-ordinatorin determining whether one or two credits can be given for a foreign programme.
- **5.10.2.3.** A Department can offer a HP Credit for the faculty-guided work done within ambit of the subject, either within college or in some other institutions during the breaks between semesters.

### 5.11. LETTERS OF RECOMMENDATION (LoR) BY COLLEGE DEPARTMENTS

- **5.11.1.** This set of instructions applies only to LoRs (hard or soft copies) that are being used for admission into Universities for further studies.
- **5.11.2.** Students who need such LoRs are required to fill in an Application Form which is available with the concerned Department from where the LoR is solicited.
- **5.11.3.** A Processing Fee of Rs. 500 / Application / University / Recommending Teacher would have to be paid, prior to starting the LoR process. The fees thus collected will be directed towards that Department's Improvement Fund.
- **5.11.4.** For more detailed instructions, please approach the concerned Teacher in the Department.
- **5.11.5.** Economically disadvantaged students, who find it difficult to pay the LoR Fees, can approach the Principal for financial assistance through the SBF.

#### 5.12. PARENTS' COLLABORATION

- **5.12.1.** Parents are invited to make inquiries about their child's attendance and performance either:
  - **5.12.1.1.** At the General Office or the concerned Department(s).
  - **5.12.1.2.** Through the college website: **www.xaviers.edu**. (Click on 'Parent Login', current Class serves as Username and the student's UID No. as Password).
- **5.12.2.** If a student takes ill suddenly during college hours, preliminary first aid will be administered by the College. However, it is advisable that the Parent / Guardian come personally to the College to take their child / ward home or for further medical treatment / advice.
- 5.12.3. In case a student suffers from a chronic medical condition (either physical / mental), self-disclosure (with supporting medical documents) by the parents would help the College in administering the appropriate medical assistance, in case of an emergency.
  - **5.12.3.1.** Parents are advised to promptly bring such medical details to the attention of the Teacher-Mentor / concerned Vice-Principal.
  - **5.12.3.2.** Confidentiality, of both the student as well as the nature of the illness, is assured by the College.
- **5.12.4.** A student suffering from a contagious illness should not come to college (for lectures / tests / exams), as it puts other students at risk.
  - **5.12.4.1.** A medical letter will have to be submitted by the Parents / Guardian to the Principal reporting the illness so that the absence of the student is noted.
  - **5.12.4.2.** Such a student will be allowed to return to college if and only if a 'Fitness Certificate' issued by a Medical Practitioner is submitted to the Principal.
  - **5.12.4.3.** Serious action will be taken against any student who flouts Rules 5.12.4.1 and 5.12.4.2.
- **5.12.5.** The College will attempt to notify Parents of debarred students via postal mail and email prior to the commencement of the examinations.
- **5.12.6.** Parents, of debarred students, can discuss this matter with the concerned Vice-Principal or through a letter to the Principal.

#### 5.13. ADDENDUM

5.13.1. Wherever an issue has not been covered by these Autonomy Rules and Guidelines of the College, the Rules and Statutes of the University of Mumbai would apply, as long as the latter does not go against the spirit of the College Autonomy arrangements.

### 6.1. BACHELOR OF ARTS (B.A.)

A student for the B.A. degree examination will be required to complete 40 courses as shown in Table 6.1.

Table 6.1.

| Mandatory Requirements                                                                                                                                                                | No. of Courses |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 3 Core Subjects at FY and SY. 1 Core Subject for Single Majors or 2 Core Subjects for Double Majors, including 4 courses of an applied nature, related to the Core Subjects at the TY | 30             |
| Language Group (English & an Indian or Foreign language)                                                                                                                              | 4              |
| Special Course Group                                                                                                                                                                  | 4              |
| General Applied Component                                                                                                                                                             | 2              |
| Total Courses                                                                                                                                                                         | 40             |

#### 6.1.1. FIRST YEAR

Table 6.1.1.

| Course Requirements                                                                                                | Sem.  | Sem.2   | Total |
|--------------------------------------------------------------------------------------------------------------------|-------|---------|-------|
| Special Courses                                                                                                    | 1     | 1       | 2     |
| Critical Reading, Thinking & Writing: (Prose EES 1.01; Literature EES 2.01)                                        | 1     | 1       | 2     |
| Languages (other than English): Literature in a Modern Indian Language OR a Classical OR a Modern Foreign Language | 1     | 1       | 2     |
| Courses from the Social Sciences Group OR                                                                          | 3     | 3       | 6     |
| Social Science Group + Languages Group <b>OR</b>                                                                   | 2 + 1 | 2 + 1   | 6     |
| Social Science Group + Languages Group                                                                             | 1+2   | 1+2     | 6     |
|                                                                                                                    | Total | Courses | 12    |

- **6.1.1.1.** Students who do not have Mathematics at the HSC or equivalent Exams are advised against opting for Statistics.
- **6.1.1.2.** Change of subjects will be allowed till a week after College begins subject to availability of seats. However, subjects (compulsory / optional), which do not have the minimum enrolment required by Government / University, will not be offered.
- **6.1.1.3.** Students are expected to choose any three subjects, one from each Group of Table 6.1.1.3., in order of preference, **for the first two years.**

Table 6.1.1.3.

| Group A             | Group B                  | Group C         |
|---------------------|--------------------------|-----------------|
| Economics (A) *     | Ancient Indian Culture * | History *       |
| Political Science * | English *                | Economics (B) * |
| Psychology *        | Sociology (A) *          | Statistics **   |
| Sociology (B) *     | Commerce **              | Anthropology ** |
|                     |                          | French ***      |
|                     |                          | Hindi ***       |

#### Note:

- **6.1.1.3.1.** Economics (A) or (B) and Sociology (A) or (B) only represent only divisions in that subject, in the First & Second Year, and can be selected in only **one** group.
- **6.1.1.3.2.** Interpretation of indicators in Table 6.1.1.3.

| Key | Nature of Majors at Third Year        | No. of Courses       |
|-----|---------------------------------------|----------------------|
| *   | Single or Double Majors at Third Year | 12 or 6 in each      |
| **  | Only Double Majors at Third Year      | 6 in each            |
| *** | No Majors at Third Year               | 2 (FY);4 (SY)& 0(TY) |

#### 6.1.2. SECOND YEAR

Table 6.1.2.

| Course Requirements                    | Sem.3 | Sem.4 | Total |
|----------------------------------------|-------|-------|-------|
| Special Courses + Cross Faculty Course | 1     | 1     | 2     |
| Subject 1                              | 2     | 2     | 4     |
| Subject 2                              | 2     | 2     | 4     |
| Subject 3                              | 2     | 2     | 4     |
| Applied Component                      | 1     | 1     | 2     |
| Total Courses                          |       |       | 16    |

**6.1.2.1.** The choice of major/s will be decided only at the end of Semester IV, by the Heads of Department/s of the concerned subject/s, based entirely on merit (total of concerned subjects' marks across the preceding 4 semesters) and the availability of seats.

#### 6.1.3. THIRD YEAR

Table 6.1. 3.

| 100000000000000000000000000000000000000 |               |           |       |         |           |        |  |
|-----------------------------------------|---------------|-----------|-------|---------|-----------|--------|--|
| Course<br>Requirements                  | Sem.5         | Sem.6     | Total | Sem.5   | Sem.6     | Total  |  |
|                                         | Single        | Major Stu | dents | Double  | Major Stu | udents |  |
| Applied Components                      | 2             | 2         | 4     | 1+1     | 1+1       | 4      |  |
| Major Subject 1                         | 4             | 4         | 8     | 2       | 2         | 4      |  |
| Major Subject 2                         | XX            | XX        | XX    | 2       | 2         | 4      |  |
|                                         | Total Courses |           | 12    | Total C | ourses    | 12     |  |

## 6.1.4. Syllabi per Semester

### SEMESTER – I F.Y.B.A.

| Code     | Course Title                                                           | L/W | Credits |
|----------|------------------------------------------------------------------------|-----|---------|
| ASPC0101 | Special Course: Giving Voice to Values                                 | 3   | 3       |
| AEES0101 | Critical Reading Thinking & Writing: English Prose                     | 3+1 | 3       |
| AFRC0101 | French Compulsory Basic                                                | 4   | 3       |
| AHIC0101 | Hindi Language Skills                                                  | 4   | 3       |
| ALIB0101 | Intro to Library Science - I Only for Students with Disabilities (SWD) | 4   | 3       |
| AAIC0101 | Cul. Hist.& Arch'gy of Ancient India From Early Times till A.D 320     | 4   | 4       |
| AANT0101 | Introduction To Anthropology - I                                       | 4   | 4       |
| ACOM0101 | Organization of Commerce & Industry                                    | 4   | 4       |
| AECO0101 | Microeconomics - Demand And Production Theories                        | 4   | 4       |
| AENG0101 | The Elements of Fiction                                                | 4   | 4       |
| AFRA0101 | French for Tourism & Hotel Industry                                    | 4   | 4       |
| AHIS0101 | World History from the Renaissance to c. 1870                          | 4   | 4       |
| AHIA0101 | Introduction To Hindi Literature (Short Stories)                       | 4   | 4       |
| APOL0101 | Introduction to Politics                                               | 4   | 4       |
| APSY0101 | Introduction To Psychology - I                                         | 4   | 4       |
| ASOC0101 | Introduction To Sociology - I                                          | 4   | 4       |
| ASTA0101 | Descriptive Statistics (A)                                             | 3   | 3       |
| ASTA01PR | Statistics Practicals                                                  | 3   | 1       |

### SEMESTER – II F.Y.B.A.

| Code     | Course Title                                                           | L/W | Credits |
|----------|------------------------------------------------------------------------|-----|---------|
| ASPC0201 | Special Course: Environmental Studies                                  | 3   | 3       |
| AEES0201 | Critical Reading, Thinking And Writing: English Literature             | 3+1 | 3       |
| AFRC0201 | French Compulsory Advanced                                             | 4   | 3       |
| AHIC0201 | Critical Reading And Thinking: Hindi                                   | 4   | 3       |
| ALIB0201 | Intro to Library Science - I Only for Students with Disabilities (SWD) | 4   | 3       |
| AAIC0201 | Elements Of Archaeology In India                                       | 4   | 4       |
| AANT0201 | Introduction To Anthropology - II                                      | 4   | 4       |
| ACOM0201 | Forms of Business Organizations                                        | 4   | 4       |
| AECO0201 | Microeconomics - Pricing Theories                                      | 4   | 4       |
| AENG0201 | The Elements of Drama                                                  | 4   | 4       |
| AFRA0201 | Le corpus thematique                                                   | 4   | 4       |
| AHIS0201 | World History from the Industrial Revolution to World War II           | 4   | 4       |
| AHIA0201 | Introduction To Hindi Literature (Novels)                              | 4   | 4       |
| APOL0201 | Political Theory                                                       | 4   | 4       |
| APSY0201 | Introduction To Psychology - II                                        | 4   | 4       |
| ASOC0201 | Introduction To Sociology –II                                          | 4   | 4       |
| ASTA0201 | Statistical Methods (A)                                                | 3   | 3       |
| ASTA02PR | Statistics Practicals                                                  | 3   | 1       |

#### SEMESTER - III S.Y.B.A.

| Code     | Course Title                                                   | L/W | Credits |
|----------|----------------------------------------------------------------|-----|---------|
| ASPC0301 | Special Course : Human Rights                                  | 3   | 3       |
| AAIC0301 | Cul. Hist.& Arch'gy of India in Deccan & Early Medieval Period | 3   | 3       |
| AAIC0302 | Elements of Museology in India                                 | 3   | 3       |
| AANT0301 | Ethnography: Themes And Issues I                               | 3   | 3       |

| AANT0302               | Anthropology Of Religion                                                                                                                                                                                                                                                                                                             | 3 | 3 |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| ACOM0301               | Principles of Management – I                                                                                                                                                                                                                                                                                                         | 3 | 3 |
| ACOM0302               | Business Accounts & Finance - I                                                                                                                                                                                                                                                                                                      | 3 | 3 |
| AECO0301               | Macro Economics – I                                                                                                                                                                                                                                                                                                                  | 3 | 3 |
| AECO0302               | Introduction to Econometrics – I                                                                                                                                                                                                                                                                                                     | 3 | 3 |
| AENG0301               | The Elements of Poetry                                                                                                                                                                                                                                                                                                               | 3 | 3 |
| AENG0302               | Pre- and Post-Independence Indian Writing in English                                                                                                                                                                                                                                                                                 | 3 | 3 |
| AFRA0301               | Introduction to Poetry                                                                                                                                                                                                                                                                                                               | 3 | 3 |
| AFRA0302               | Translation, Essay, Précis Writing                                                                                                                                                                                                                                                                                                   | 3 | 3 |
| AHIA0301               | Introduction To Hindi Literature (Plays)                                                                                                                                                                                                                                                                                             | 3 | 3 |
| AHIA0302               | Mass Media And Communication (Radio And Advertising)                                                                                                                                                                                                                                                                                 | 3 | 3 |
| AHIS0301               | An Outline History of Early India – I (3500 BCE-200 BCE)                                                                                                                                                                                                                                                                             | 3 | 3 |
| AHIS0302               | History of China and Japan (1900-1960)                                                                                                                                                                                                                                                                                               | 3 | 3 |
| APOL0301               | Indian Constitution- Theory and Practice                                                                                                                                                                                                                                                                                             | 3 | 3 |
| APOL0302               | Introduction to Public Administration                                                                                                                                                                                                                                                                                                | 3 | 3 |
| APSY0301               | Social Psychology - I                                                                                                                                                                                                                                                                                                                | 3 | 3 |
| APSY0302               | Developmental Psychology - I                                                                                                                                                                                                                                                                                                         | 3 | 3 |
| ASOC0301               | Sociology: Classical Theories                                                                                                                                                                                                                                                                                                        | 3 | 3 |
| ASOC0302               | Indian Sociology                                                                                                                                                                                                                                                                                                                     | 3 | 3 |
| ASTA0301               | Descriptive Statistics (B)                                                                                                                                                                                                                                                                                                           | 3 | 2 |
| ASTA0302               | Operations Research                                                                                                                                                                                                                                                                                                                  | 3 | 2 |
| ASTA03PR               | Statistics Practicals                                                                                                                                                                                                                                                                                                                | 6 | 2 |
| AAC0301n<br>n = 1 to 9 | Applied Components:  1. Direct and Indirect Taxation – I 2. Elementary Statistical Techniques - I 3. General Introduction to Law 4. Intro to Market Research (Concepts & Approaches) - I 5. Investment Analysis – I 6. Leisure Studies - I 7. Media Studies & Cinema - I 8. Psychology of Adjustment - I 9. Psychology of Gender – I | 4 | 3 |

### SEMESTER – IV S.Y.B.A.

| Code       | Course Title                                             |                  | L/W | Credits |
|------------|----------------------------------------------------------|------------------|-----|---------|
|            | Cross Faculty Courses:                                   |                  |     |         |
|            | The Art of Mathematics                                   | (Maths)          | 3   | 3       |
|            | 2. Physics behind Astronomy, Photography & Technological | ogy (Physics)    | 3   | 3       |
|            | 3. Chem. in Context: Applying Chem. to society           | (Chemistry)      | 3   | 3       |
| ASPC0401n  | Descriptive Statistics                                   | (Statistics)     | 3   | 3       |
| n = 1 to 9 | 5. Garden Art                                            | (Botany)         | 3   | 3       |
|            | 6. Infectious Diseases : Staying Ahead                   | (Microbiology)   | 3   | 3       |
|            | 7. Nutrition and Reproductive Health                     | (Life Science)   | 3   | 3       |
|            | Secret Lives of Animals                                  | (Zoology)        | 3   | 3       |
|            |                                                          | formation Tech.) | 3   | 3       |
| AAIC0401   | Social Organization in Ancient India                     |                  | 3   | 3       |
| AAIC0402   | Development of Heritage Management & Tourism             | n In India       | 3   | 3       |
| AANT0401   | Ethnography: Themes And Issues - II                      |                  | 3   | 3       |
| AANT0402   | Cultural Studies                                         |                  | 3   | 3       |

| ACOM0401   | Principles of Management– II                               | 3 | 3 |
|------------|------------------------------------------------------------|---|---|
| ACOM0402   | Business Accounts and Finance - II                         | 3 | 3 |
| AECO0401   | Macro Economics – II                                       | 3 | 3 |
| AECO0402   | Introduction to Econometrics – II                          | 3 | 3 |
| AFRA0401   | Introduction to 20th Century Theater & 20th Century Novel  | 3 | 3 |
| AFRA0402   | Introduction To French Painting                            | 3 | 3 |
| AENG0401   | American Literature                                        | 3 | 3 |
| AENG0402   | Indian Writing in English (1980 to the Present)            | 3 | 3 |
| AHIA0401   | Introduction To Hindi Literature (Poetry)                  | 3 | 3 |
| AHIA0402   | Mass Media And Communication (Television And Film)         | 3 | 3 |
| AHIS0401   | An Outline History of Early India (200 BCE- 1200 CE) - II  | 3 | 3 |
| AHIS0402   | Contemporary Issues in Indian Society and Politics         | 3 | 3 |
| APOL0401   | Indian Government & Politics                               | 3 | 3 |
| APOL0402   | Public Administration in India                             | 3 | 3 |
| APSY0401   | Social Psychology - II                                     | 3 | 3 |
| APSY0402   | Developmental Psychology - II                              | 3 | 3 |
| ASOC0401   | Sociology: Themes & Issues – I                             | 3 | 3 |
| ASOC0402   | Sociology: Themes & Issues – II                            | 3 | 3 |
| ASTA0401   | Statistical Methods (B)                                    | 3 | 2 |
| ASTA0402   | Data Analysis                                              | 3 | 2 |
| ASTA04PR   | Statistics Practicals                                      | 6 | 2 |
|            | Applied Components:                                        |   |   |
|            | Basics of Indian Laws                                      |   |   |
|            | Direct and Indirect Taxation – II                          |   |   |
|            | Elementary Mathematical Technique                          |   |   |
| AAC0401n   | 4. Intro to Market Research – (Concepts & Approaches) – II | 4 | 3 |
| n = 1 to 9 | Investment Analysis – II                                   | 7 | 3 |
|            | 6. Leisure Studies – II                                    |   |   |
|            | 7. Media Studies & Cinema - II                             |   |   |
|            | Psychology of Adjustment - II                              |   |   |
|            | Psychology of Gender - II                                  |   |   |

# SEMESTER – V T.Y.B.A.

| Code     | Course Title                                                         | L/W | Credits |
|----------|----------------------------------------------------------------------|-----|---------|
| AAIC0501 | Political Institutions in Ancient India                              | 4   | 5       |
| AAIC0502 | Evolution of Art & Architecture of Early India – I                   | 4   | 5       |
| AAIC0503 | Study of Protection, Conservation & Preservation of Indian Monuments | 3   | 4       |
| AAIC0504 | A Study of Culture, History of World Civilization                    | 4   | 5       |
| AAIC0505 | Brief Survey of Religio-Philosophical Traditions in India – I        | 4   | 5       |
| AAIC0506 | Brief Survey of Ancient Indian Literary Tradition                    | 3   | 4       |
| AANT0501 | Anthropology: Perspectives, Theories & Frameworks I                  | 4   | 5       |
| AANT0502 | Anthropology of Development - I Option with Socio 5.08               | 4   | 5       |
| AANT0503 | Applied Anthropology - I (Applied Component)                         | 3   | 4       |
| ACOM0501 | Introduction to Marketing – I                                        | 4   | 5       |
| ACOM0502 | Organizational Behaviour                                             | 4   | 5       |
| ACOM0503 | Entrepreneurship & Management of Small and Medium Enterprises – I    | 3   | 4       |
| AECO0501 | Advanced Microeconomics                                              | 4   | 5       |
| AECO0502 | Principles of Microeconomics                                         | 4   | 5       |
| AECO0503 | Growth & Development: Theoretical Analysis                           | 4   | 5       |
| AECO0504 | Approaches to Growth & Development                                   | 4   | 5       |

| AECO0505 | Evolution of Economic Thought                                              | 3 | 4 |
|----------|----------------------------------------------------------------------------|---|---|
| AECO0506 | International Economics: Theory & Policy Option with Eco 5.08              | 3 | 4 |
| AECO0507 | Statistical Techniques for Economics                                       | 4 | 5 |
| AECO0508 | Advanced Econometrics – I Option with Eco 5.06                             | 4 | 5 |
| AECO0509 | Corporate Finance – I (Applied Component)  OR                              | 3 | 4 |
| AECO0510 | Indian Financial Systems And Institutions (Applied Component)              | 3 | 4 |
| AENG0501 | Fiction from Richardson to Hardy                                           | 4 | 5 |
| AENG0502 | Modernism and 20C English Poetry                                           | 4 | 5 |
| AENG0503 | Literature and the Self in Modernist European Writing                      | 3 | 4 |
| AENG0504 | English Poetry (1550-1750)                                                 | 4 | 5 |
| AENG0505 | Literary Theory & Criticism                                                | 4 | 5 |
| AENG0506 | Narratives of Conflict : Ideology & Resolution                             | 3 | 4 |
| AFRA0506 | Introduction to Tourism & Hotel Industry (Applied Component)               | 3 | 4 |
| AHIS0501 | Hist. of India (c.1200 - 1707): Political, Administrative & Social aspects | 4 | 5 |
| AHIS0502 | Hist. of Modern India (1750-1950)                                          | 4 | 5 |
| AHIS0503 | Introduction to Museum Studies and Institutional Archives                  | 3 | 4 |
| AHIS0504 | Hist. of the Marathas (Part 1 1600-1707)                                   | 4 | 5 |
| AHIS0505 | World History (1945-2000) – I                                              | 4 | 5 |
| AHIS0506 | Introduction to Cinema in 20th Century Mumbai                              | 3 | 4 |
| APOL0501 | Political Process in Maharashtra – Historical Background                   | 4 | 5 |
| APOL0502 | Western Political Thinkers                                                 | 4 | 5 |
| APOL0503 | Issues in Indian Polity                                                    | 3 | 4 |
| APOL0504 | American Political System- Constitutional Framework                        | 4 | 5 |
| APOL0505 | International Politics Major Developments                                  | 4 | 5 |
| APOL0506 | Major Issues in Contemporary Politics - International Economic Issues      | 3 | 4 |
| APSY0501 | Psychometrics and Statistics – I                                           | 4 | 5 |
| APSY0502 | Abnormal Psychology – I                                                    | 4 | 5 |
| APSY0503 | Industrial Organizational Psychology – I                                   | 3 | 4 |
| APSY0504 | Cognitive Psychology – I                                                   | 4 | 5 |
| APSY0505 | Psychology Practicals - I                                                  | 6 | 5 |
| APSY0506 | Insight Oriented Counseling                                                | 3 | 4 |
| ASOC0501 | Modern Sociological Theories - I OR                                        | 4 | 5 |
| ASOC0502 | Urban Sociology J                                                          | 4 | 5 |
| ASOC0503 | Popular Culture OR                                                         | 4 | 5 |
| ASOC0504 | Sociology of Work and Management - I                                       | 4 | 5 |
| ASOC0505 | Media, Culture & Society - I (Applied Component) OR                        | 3 | 4 |
| ASOC0506 | Gender Studies - I (Applied Component)                                     | 3 | 4 |
| ASOC0507 | Research Methods in Sociology - I                                          | 4 | 5 |
| ASOC0508 | Popular Subaltern Movements – I <b>Option with Anthro 5.02</b>             | 4 | 5 |
| ASOC0509 | Introduction to Human Resource Dev (Applied Component)                     | 3 | 4 |
| ASTA0501 | Probability & Sampling Distribution (A)                                    | 3 | 3 |
| ASTA0502 | Sampling Techniques                                                        | 3 | 3 |
| ASTA0503 | Applied Statistics (A)                                                     | 3 | 3 |
| ASTA05PR | Statistics Practicals                                                      | 9 | 5 |

| SEMESTER - VI | T.Y.B.A.                                                              |     |         |
|---------------|-----------------------------------------------------------------------|-----|---------|
| Code          | Course Title                                                          | L/W | Credits |
| AAIC0601      | Economic Institutions in Ancient India                                | 4   | 5       |
| AAIC0602      | Evolution of Art & Architecture of India – II                         | 4   | 5       |
| AAIC0603      | Intro of Ethno-Archaeology & Ethno Zoo-Archaeology in India           | 3   | 4       |
| AAIC0604      | Study of Protection, Conservation & Preservation of Antiquities       | 4   | 5       |
| AAIC0605      | Brief Survey of Religio-Philosophical Thoughts in India – II          | 4   | 5       |
| AAIC0606      | Brief Survey of Science & Technology in Ancient India                 | 3   | 4       |
| AANT0601      | Anthropology: Perspectives, Theories & Frameworks– II                 | 4   | 5       |
| AANT0602      | Anthropology of Development - II Option with Socio 6.08               | 4   | 5       |
| AANT0603      | Applied Anthropology – II (Applied Component)                         | 3   | 4       |
| ACOM0601      | Introduction to Marketing – II                                        | 4   | 5       |
| ACOM0602      | Human Resource Management                                             | 4   | 5       |
| ACOM0603      | Cost Accumulation Accounting                                          | 3   | 4       |
| AECO0601      | Advanced Macroeconomics                                               | 4   | 5       |
| AECO0602      | Macroeconomics: Theory And Practice                                   | 4   | 5       |
| AECO0603      | Economic Development: Policy & Applications (1)                       | 4   | 5       |
| AECO0604      | Economic Development: Policy & Applications (2)                       | 4   | 5       |
| AECO0605      | An Introduction to Political Economy                                  | 3   | 4       |
| AECO0606      | International Finance: Theory & Policy Option with Eco 6.08           | 3   | 4       |
| AECO0607      | Mathematical Techniques for Economics                                 | 4   | 5       |
| AECO0608      | Econometrics – II Option with Eco 6.06                                | 4   | 5       |
| AECO0609      | Corporate Finance – II (Applied Component) OR                         | 3   | 4       |
| AECO0610      | Indian Financial Markets (Applied Component)                          | 3   | 4       |
| AENG0601      | English Poetry (1750 – 1900)                                          | 4   | 5       |
| AENG0602      | Twentieth Century Fiction and Drama                                   | 4   | 5       |
| AENG0603      | Satire                                                                | 3   | 4       |
| AENG0604      | English Drama from Marlowe to Sheridan                                | 4   | 5       |
| AENG0605      | Approaches to Popular Culture                                         | 4   | 5       |
| AENG0606      | Tales of the City                                                     | 3   | 4       |
| AFRA0606      | Civilization Française (Applied Component)                            | 3   | 4       |
| AHIS0601      | History of India (c.1200-1707): Political, Administrative, Economic & | 4   | 5       |
| Al IIO000 I   | Cultural aspects                                                      |     | -       |
| AHIS0602      | A History of India after Independence (1947-1984)                     | 4   | 5       |
| AHIS0603      | Urban Heritage of Mumbai.                                             | 3   | 4       |
| AHIS0604      | History of the Marathas - II (1708-1818)                              | 4   | 5       |
| AHIS0605      | World History : 1945 – 2000 - II                                      | 4   | 5       |
| AHIS0606      | Introduction to Travel and Tourism in India.                          | 3   | 4       |
| APOL0601      | Political Process in Maharashtra- Contemporary Issues                 | 4   | 5       |
| APOL0602      | Political Thinkers – Indian                                           | 4   | 5       |
| APOL0603      | Issues in Indian Polity-Rights of Citizens of India                   | 3   | 4       |
| APOL0604      | American Government and Politics                                      | 4   | 5       |
| APOL0605      | International Politics Major Issues                                   | 4   | 5       |
| APOL0606      | Major Issues in Contemporary Politics - International Social Issues   | 3   | 4       |
| APSY0601      | Psychometrics and Statistics – II                                     | 4   | 5       |
| APSY0602      | Abnormal Psychology – II                                              | 4   | 5       |
| APSY0603      | Industrial Organizational Psychology – II                             | 3   | 4       |
| APSY0604      | Cognitive Psychology – II                                             | 4   | 5       |

| APSY0605 | Psychology Practicals – II                                         | 6 | 5 |
|----------|--------------------------------------------------------------------|---|---|
| APSY0606 | Action Oriented Counseling                                         | 3 | 4 |
| ASOC0601 | Modern Sociological Theories - II OR                               | 4 | 5 |
| ASOC0602 | Sociology of the Life Course                                       | 4 | 5 |
| ASOC0603 | Sociology of Food OR                                               | 4 | 5 |
| ASOC0604 | Sociology of Work & Management - II                                | 4 | 5 |
| ASOC0605 | Media, Culture & Society - II (Applied Component) \ OR             | 3 | 4 |
| ASOC0606 | Gender Studies - II (Applied Component)                            | 3 | 4 |
| ASOC0607 | Research Methods in Sociology - II                                 | 4 | 5 |
| ASOC0608 | Popular and Subaltern Movements – II Option with Anthropology 6.02 | 4 | 5 |
| ASOC0609 | Organizational Development & Change (Applied Component)            | 3 | 4 |
| ASTA0601 | Probability & Sampling Distributions (B)                           | 3 | 3 |
| ASTA0602 | Analysis of Variance & Design of Experiments                       | 3 | 3 |
| ASTA0603 | Applied Statistics (B)                                             | 3 | 3 |
| ASTA06PR | Statistics Practicals                                              | 9 | 5 |

# 6.1.5. Summary of Arts Courses

Note: One Credit consists of 30 hours of contact and self-study.

| F.Y.B.A. PER SEMESTER |       |      |         |       |       |       |       |
|-----------------------|-------|------|---------|-------|-------|-------|-------|
| Sub                   | EES   | Lang | Sp. Sub | Sub 1 | Sub 2 | Sub 3 | Total |
| L/W                   | 3 + 1 | 4    | 3       | 4     | 4     | 4     | 23    |
| Credits               | 3     | 3    | 3       | 4     | 4     | 4     | 21    |

| S.Y.B.A. PER SEMESTER |    |     |            |            |            |            |            |            |       |
|-----------------------|----|-----|------------|------------|------------|------------|------------|------------|-------|
| Sub                   | AC | SPC | Sub<br>1-1 | Sub<br>1-2 | Sub<br>2-1 | Sub<br>2-2 | Sub<br>3-1 | Sub<br>3-2 | Total |
| L/W                   | 4  | 3   | 3          | 3          | 3          | 3          | 3          | 3          | 25    |
| Credits               | 3  | 3   | 3          | 3          | 3          | 3          | 3          | 3          | 24    |

| T.Y.B.A. PER SEMESTER |     |       |       |       |      |      |       |
|-----------------------|-----|-------|-------|-------|------|------|-------|
| Sub                   | C-1 | C - 2 | C - 3 | C - 4 | AC 1 | AC 2 | Total |
| L/W                   | 4   | 4     | 4     | 4     | 3    | 3    | 22    |
| Credits               | 5   | 5     | 5     | 5     | 4    | 4    | 28    |

### 6.2. BACHELOR OF SCIENCE (B.Sc.)

Table 6.2.

| S.N | F.Y.B.Sc.      | S.Y.B.Sc.   | T.Y.B.Sc.            |
|-----|----------------|-------------|----------------------|
| 1   | (I S . C . D)  | (LS +C)     | LS or (BC + LS) or C |
| 1   | (LS +C + P)    | or (P + C)  | or Por C             |
| 2   | (LS +C + G)    | (C + LS)    | LS or (BC + LS) or C |
|     | (20.0.0)       | or (C + G)  | or C or G            |
| 3   | (LS +C + B)    | (LS + C)    | LS or (BC + LS) or C |
|     | (L3 +0 + b)    | or (B + C)  | (B + BC) or C        |
| 4   | (MB + C +P)    | (MB + C)    | (BC + MB) or C       |
| 4   | (IVID + C +1 ) | or (P + C)  | C or P               |
| 5   | (MB + C + Z)   | (MB + C)    | (BC + MB) or C       |
|     | (IVID + C + Z) | or (C + Z)  | (BC + Z) or C        |
|     |                | (C + B)     | (B + BC) or C        |
| 6   | (B + C + Z)    | or (C + Z)  | (BC + Z) or C        |
|     |                | or (B + Z)  | (B + Z)              |
| 7   | (C+ P+ MT)     | (P + C)     | C or P               |
| -   | (0+1+1011)     | or (P + MT) | MT or P              |
| 8   | (P + C + G)    | (C + G)     | C or G               |
| 0   | (1 + 0 + 0)    | or (C + P)  | C or P               |
| 9   | (P + MT + G)   | (G + P)     | G or P               |
| 9   | (1 + 1011 + 0) | or (P + MT) | MT or P              |
| 10  | (P + MT + S)   | (P + MT)    | MT or P              |
| 10  | (F + WIT + 3)  | or (MT + S) | MT or S              |
| 11  | (E + MT + S)   | (MT + S)    | MT or S              |

KEY: Botany = B, Biochemistry = BC, Chemistry = C, Economics = E, Geology = G, Life Science = LS, Mathematics = MT, Microbiology = MB, Physics = P, Statistics = S, Zoology = Z

- **6.2.1. F.Y.B.Sc.**: A student shall offer any one of the course combinations available in the F.Y.B.Sc., with three Subjects and two Special Courses.
  - **6.2.1.1.** Only students who have Biology as a subject in Std. XII may opt for combinations 1 to 6 (refer Table 6.2., F.Y.B.Sc.).
  - **6.2.1.2.** Only students who have Mathematics as a subject at HSC or other qualifying exam may opt for combinations with Mathematics, Statistics or Physics.
  - **6.2.1.3.** Change of subjects will be allowed till a week after College beings, subject to availability of seats.
- **6.2.2. S.Y.B.Sc.:** The choice of subjects will be approved only at the end of the Semester II by the Heads of the concerned departments based entirely on merit (total of concerned subject marks across the preceding 2 semesters) and the availability of seats.
- **6.2.3. T.Y.B.Sc.:** Table 6.2. (page 51) lists the subjects offered at the T.Y.B.Sc.:

- **6.2.3.1. Single Majors:** Physics, Chemistry, Mathematics, Statistics, Life Sciences and Geology.
- **6.2.3.2. Double Majors:** Botany, Biochemistry, Life Science, Microbiology & Zoology, provided that the subject has been offered at the S.Y.B.Sc. level.
- **6.2.3.3.** The choice of major subject/s will be approved only at the end of the Semester IV by the HoDs of the concerned subjects based entirely on merit (total marks of 4 semesters of the concerned subject) and availability of seats.

### 6.2.4. Syllabi per Semester

#### SEMESTER - I F.Y.B.Sc.

| Code     | Course Title                                                   | L/W | Credits |
|----------|----------------------------------------------------------------|-----|---------|
| SSPC0101 | Special Course: Giving Voice to Values                         | 3   | 3       |
| SBOT0101 | Thallophyta                                                    | 3   | 2       |
| SBOT0102 | Angiosperms                                                    | 3   | 2       |
| SBOT01PR | Botany Practicals – I                                          | 6   | 2       |
| SCHE0101 | Concepts of Physical and Analytical Chemistry –I               | 3   | 2       |
| SCHE0102 | Fundamentals of Inorganic & Organic Chemistry –I               | 3   | 2       |
| SCHE01PR | Chemistry Practicals–I                                         | 6   | 2       |
| SECO0101 | Micro Economics – I                                            | 4   | 3       |
| SECO0102 | Macro Economics – I                                            | 4   | 3       |
| SGE00101 | Introduction to Mineralogy, Crystallography & Stratigraphy     | 3   | 2       |
| SGEO0102 | Introduction to Earth System, Cartography & Structural Geology | 3   | 2       |
| SGE001PR | Geology Practicals – I                                         | 6   | 2       |
| SLSC0101 | Fundamentals of Biochemistry                                   | 3   | 2       |
| SLSC0102 | Genetics And Evolution                                         | 3   | 2       |
| SLSC01PR | Life Science Practicals – I                                    | 6   | 2       |
| SMAT0101 | Calculus - I                                                   | 3+1 | 3       |
| SMAT0102 | Algebra - I                                                    | 3+1 | 3       |
| SMIC0101 | Microbial Cell Structure & Function                            | 3   | 2       |
| SMIC0102 | Elements of Microbial Nutrition, Growth & Control              | 3   | 2       |
| SMIC01PR | Microbiology Practicals – I                                    | 6   | 2       |
| SPHY0101 | Mechanics                                                      | 3   | 2       |
| SPHY0102 | Waves and Thermodynamics                                       | 3   | 2       |
| SPHY01PR | Physics Practicals – I                                         | 6   | 2       |
| SSTA0101 | Descriptive Statistics (A)                                     | 3   | 2       |
| SSTA0102 | Statistical Methods (A)                                        | 3   | 2       |
| SSTA01PR | Statistics Practicals                                          | 6   | 2       |
| SZO00101 | Invertebrate Systematics And Biomolecules                      | 3   | 2       |
| SZO00102 | Genetics and Evolution                                         | 3   | 2       |
| SZOO01PR | Zoology Practicals – I                                         | 6   | 2       |

#### SEMESTER – II F.Y.B.Sc.

| Code     | Course Title                          | L/W | Credits |
|----------|---------------------------------------|-----|---------|
| SSPC0201 | Special Course: Environmental Studies | 3   | 3       |
| SBOT0201 | Plant Physiology                      | 3   | 2       |
| SBOT0202 | Cytology and Ecology                  | 3   | 2       |

| SBOT02PR | Botany Practicals – II                               | 6   | 2 |
|----------|------------------------------------------------------|-----|---|
| SCHE0201 | Concepts of Physical & Analytical Chemistry - II     | 3   | 2 |
| SCHE0202 | Fundamentals of Inorganic & Organic Chemistry - II   | 3   | 2 |
| SCHE02PR | Chemistry Practicals - II                            | 6   | 2 |
| SEC00201 | Micro Economics – II                                 | 4   | 3 |
| SEC00202 | Macro Economics – II                                 | 4   | 3 |
| SGE00201 | Intro: Petrology, Geotectonics & Economic Geology    | 3   | 2 |
| SGE00202 | Intro: Physical Geology, Stratigraphy & Plaeontology | 3   | 2 |
| SGEO02PR | Geology Practicals - II                              | 6   | 2 |
| SLSC0201 | Cell Biology                                         | 3   | 2 |
| SLSC0202 | Fundamentals Of Microbiology                         | 3   | 2 |
| SLSC02PR | Life Science Practicals - II                         | 6   | 2 |
| SMAT0201 | Calculus - II                                        | 3+1 | 3 |
| SMAT0202 | Algebra - II                                         | 3+1 | 3 |
| SMIC0201 | Microbial Diversity, Taxonomy & Significance         | 3   | 2 |
| SMIC0202 | Basics of Metabolism & Genetics                      | 3   | 2 |
| SMIC02PR | Microbiology Practicals – II                         | 6   | 2 |
| SPHY0201 | Electricity and Magnetism                            | 3   | 2 |
| SPHY0202 | Optics                                               | 3   | 2 |
| SPHY02PR | Physics Practicals - II                              | 6   | 2 |
| SSTA0201 | Descriptive Statistics (B)                           | 3   | 2 |
| SSTA0202 | Statistical Methods (B)                              | 3   | 2 |
| SSTA02PR | Statistics Practicals                                | 6   | 2 |
| SZO00201 | Vertebrate Systematics and Ecology                   | 3   | 2 |
| SZO00202 | Biotechniques And Comparative Physiology             | 3   | 2 |
| SZO002PR | Zoology Practicals - II                              | 6   | 2 |

#### SEMESTER – III S.Y.B.Sc.

| Code     | Course Title                               | L/W | Credits |
|----------|--------------------------------------------|-----|---------|
| SSPC0301 | Special Course: Human Rights               | 3   | 3       |
| SSCS0301 | Scientific Communication Skills            | 1   | 1       |
| SBOT0301 | Algae and Fungi                            | 3   | 2       |
| SBOT0302 | Photosynthesis and Respiration             | 3   | 2       |
| SBOT0303 | Anatomy and Embryology                     | 3   | 2       |
| SBOT03PR | Botany Practicals – III                    | 9   | 3       |
| SCHE0301 | Physical and Analytical Chemistry – I      | 3   | 2       |
| SCHE0302 | Inorganic and Industrial Chemistry - I     | 3   | 2       |
| SCHE0303 | Organic and Industrial Chemistry - I       | 3   | 2       |
| SCHE03PR | Chemistry Practicals - III                 | 9   | 3       |
| SGE00301 | Stratigraphy and Invertebrate Paleontology | 3   | 2       |
| SGE00302 | Crystallography                            | 3   | 2       |
| SGE00303 | Geomorphology & Cartographic Analysis      | 3   | 2       |
| SGEO30PR | Geology Practicals - III                   | 9   | 3       |
| SLSC0301 | Comparative Physiology- I                  | 3   | 2       |
| SLSC0302 | Enzymes and Metabolic Pathways             | 3   | 2       |
| SLSC0303 | & Human Health                             | 3   | 2       |
| SLSC03PR | Life Science Practicals - III              | 9   | 3       |
| SMAT0301 | Calculus – III                             | 3+1 | 3       |

| SMAT0302 | Algebra – III                                          | 3+1 | 3 |
|----------|--------------------------------------------------------|-----|---|
| SMAT0303 | Finite Mathematics                                     | 3   | 2 |
| SMAT03PR | Mathematics Practicals - III                           | 3   | 1 |
| SMIC0301 | Cell Biology, Microbial Virulence & Innate Immunity    | 3   | 2 |
| SMIC0302 | Introduction to Microbial Metabolism And Biostatistics | 3   | 2 |
| SMIC0303 | Basics of Genetics & Bioinformatics                    | 3   | 2 |
| SMIC03PR | Microbiology Practicals – III                          | 9   | 3 |
| SPHY0301 | Wave and Quantum Optics                                | 3   | 2 |
| SPHY0302 | Mathematical Physics                                   | 3   | 2 |
| SPHY0303 | Electronics - I                                        | 3   | 2 |
| SPHY03PR | Physics Practicals - III                               | 9   | 3 |
| SSTA0301 | Probability & Sampling Distributions (A)               | 3   | 2 |
| SSTA0302 | Sampling Techniques                                    | 3   | 2 |
| SSTA0303 | Operations Research                                    | 3   | 2 |
| SSTA03PR | Statistics Practicals                                  | 9   | 3 |
| SZO00301 | Ethology and Parasitology                              | 3   | 2 |
| SZO00302 | Biostatistics and Evolution                            | 3   | 2 |
| SZO00303 | Advanced Genetics and Bioinformatics                   | 3   | 2 |
| SZOO03PR | Zoology Practicals - III                               | 9   | 3 |

#### SEMESTER - IV S.Y.B.Sc.

| Code        | Course Title                                                | L/W | Credits |
|-------------|-------------------------------------------------------------|-----|---------|
|             | Cross Faculty Course:                                       |     |         |
|             | An Introduction to Gandhian Studies (History)               | 3   | 3       |
|             | Fundamentals of the Indian Constitution (Political Science) | 3   | 3       |
|             | Indian Culture and Philosophy     (AIC)                     | 3   | 3       |
|             | 4. International Economics (Economics)                      | 3   | 3       |
| SSPC0401n   | Management Accounting & Invest. Portfolio Management (BMS)  | 3   | 3       |
| n = 1 to 10 | 6. Psychology of Relationships (Psychology)                 | 3   | 3       |
|             | 7. Representing the Nation through the News Media (BMM)     | 3   | 3       |
|             | 8. Science of Culture (Sociology & Anthropology)            | 3   | 3       |
|             | Science, Technology & Social Change: Some Issues &          | 3   | 3       |
|             | Challenges (Sociology & Anthropology)                       | ·   | -       |
|             | 10. Literature and Resistance (English)                     | 3   | 3       |
| SSCS0401    | Scientific Communication Skills                             | 1   | 1       |
| SBOT0401    | Lower Vascular Plants                                       | 3   | 2       |
| SBOT0402    | Angiosperms Families                                        | 3   | 2       |
| SBOT0403    | Analytical Tools                                            | 3   | 2       |
| SBOT04PR    | Botany Practicals – IV                                      | 9   | 3       |
| SCHE0401    | Physical and Analytical Chemistry – II                      | 3   | 2       |
| SCHE0402    | Inorganic and Industrial Chemistry – II                     | 3   | 2       |
| SCHE0403    | Organic and Industrial Chemistry – II                       | 3   | 2       |
| SCHE04PR    | Chemistry Practicals - IV                                   | 9   | 3       |
| SGE00401    | Economic mineral deposits                                   | 3   | 2       |
| SGE00402    | Optical and Systematic Mineralogy                           | 3   | 2       |
| SGE00403    | Field Geology & Hydrogeology                                | 3   | 2       |
| SGEO04PR    | Geology Practicals - IV                                     | 9   | 3       |
| SLSC0401    | Comparative Physiology- II                                  | 3   | 2       |
| SLSC0402    | Molecular Biology                                           | 3   | 2       |

| SLSC0403 | Biostatistics and Population Genetics        | 3   | 2 |
|----------|----------------------------------------------|-----|---|
| SLSC04PR | Life Science Practicals - IV                 | 9   | 3 |
| SMAT0401 | Calculus – IV                                | 3+1 | 3 |
| SMAT0402 | Algebra – IV                                 | 3+1 | 3 |
| SMAT0403 | Differential Equations                       | 3   | 2 |
| SMAT04PR | Mathematics Practicals - IV                  | 3   | 1 |
| SMIC0401 | Virology and Immunology                      | 3   | 2 |
| SMIC0402 | Environmental Microbiology                   | 3   | 2 |
| SMIC0403 | Food Microbiology & Bioprocess Technology    | 3   | 2 |
| SMIC04PR | Microbiology Practicals – IV                 | 9   | 3 |
| SPHY0401 | Thermodynamics                               | 3   | 2 |
| SPHY0402 | Quantum Mechanics                            | 3   | 2 |
| SPHY0403 | Acoustics                                    | 3   | 2 |
| SPHY04PR | Physics Practicals - IV                      | 9   | 3 |
| SSTA0401 | Probability & Sampling Distributions (B)     | 3   | 2 |
| SSTA0402 | Analysis of Variance & Design of Experiments | 3   | 2 |
| SSTA0403 | Industrial Statistics                        | 3   | 2 |
| SSTA04PR | Statistics Practicals                        | 9   | 3 |
| SZO00401 | Developmental Biology and Information Flow   | 3   | 2 |
| SZOO0402 | Cell Biology                                 | 3   | 2 |
| SZOO0403 | Biochemistry and Applied Zoology             | 3   | 2 |
| SZOO04PR | Zoology Practicals - IV                      | 9   | 3 |

### SEMESTER - V T.Y.B.Sc.

| Code       | Course Title                               | L/W | Credits |
|------------|--------------------------------------------|-----|---------|
| SBOT0501   | Cytogenetics and Biotechnology             | 4   | 4       |
| SBOT0502   | Plant Systematics                          | 4   | 4       |
| SBOT05PR   | Botany Practicals – V                      | 8   | 4       |
| SCHE0501   | Spectroscopy, Molecular & Nuclear Dynamics | 4   | 4       |
| SCHE0502   | Chemical Bonding & Co-Ordination Chemistry | 4   | 4       |
| SCHE0503   | Stereochemistry & Natural Products         | 4   | 4       |
| SCHE0504   | General Analytical Chemistry               | 4   | 4       |
| SCHE05PR   | Chemistry Practicals - V                   | 16  | 8       |
| SCHE05AC   | Neuroscience                               | 4   | 4       |
| SCHE05ACPR | Applied Component Practicals               | 4   | 2       |
| SGE00501   | Precambrian Geology of India               | 4   | 4       |
| SGEO0502   | Igneous Petrology                          | 4   | 4       |
| SGE00503   | Structural Geology                         | 4   | 4       |
| SGEO0504   | Metamorphic Petrology                      | 4   | 4       |
| SGEO05PR   | Geology Practicals - V                     | 16  | 8       |
| SGEO05AC   | Remote Sensing and Image Interpretation    | 2   | 4       |
| SGEO05ACPR | Applied Component Practicals               | 4   | 2       |
| SLSC0501   | Genetics                                   | 4   | 4       |
| SLSC0502   | Developmental Biology                      | 4   | 4       |
| SLSC0503   | Industrial Biotechnology & Nanotechnology  | 4   | 4       |
| SLSC0504   | Ecology & Biodiversity                     | 4   | 4       |
| SLSC05PR   | Life Science Practicals - V                | 16  | 8       |
| SBCH0501   | Molecules of Biological Significance       | 4   | 4       |
| SBCH0502   | Nutrition & Metabolism                     | 4   | 4       |

| SBCH05PR   | Biochemistry Practicals                                             | 8  | 4 |
|------------|---------------------------------------------------------------------|----|---|
| SLSC05AC   | Environment & Environmental Pollution                               | 4  | 4 |
| SLSC05ACPR | Applied Component Practicals - V                                    | 4  | 2 |
| SMAT0501   | Calculus – V                                                        | 3  | 4 |
| SMAT0502   | Algebra – V                                                         | 3  | 4 |
| SMAT0503   | Topology of Metric Spaces – I                                       | 3  | 4 |
| SMAT0504   | Numerical Methods- I                                                | 3  | 4 |
| SMAT05PR   | Mathematics Practicals – V                                          | 12 | 8 |
| SMAT05AC   | Computer Programming - I                                            | 4  | 4 |
| SMAT05ACPR | Computer Programming Practicals                                     | 4  | 2 |
| SMIC0501   | Industrial Biotechnology & Genetics                                 | 4  | 4 |
| SMIC0502   | Medical Microbiology & Immunology I                                 | 4  | 4 |
| SMIC05PR   | Microbiology Practicals – V                                         | 8  | 4 |
| SPHY0501   | Classical Mechanics                                                 | 4  | 4 |
| SPHY0502   | Statistical Mechanics                                               | 4  | 4 |
| SPHY0503   | Electronics - II                                                    | 4  | 4 |
| SPHY0504   | Atomic and Molecular Physics                                        | 4  | 4 |
| SPHY05PR   | Physics Practicals - V                                              | 16 | 8 |
| SPHY05AC   | Digital Image Processing                                            | 4  | 4 |
| SPHY05ACPR | Digital Image Processing Practicals                                 | 4  | 2 |
| SSTA0501   | Probability Theory                                                  | 4  | 4 |
| SSTA0502   | Statistical Estimation                                              | 4  | 4 |
| SSTA0503   | Applied Statistics (IA)                                             | 4  | 4 |
| SSTA0504   | Applied Statistics (IIA)                                            | 4  | 4 |
| SSTA05PR   | Statistics Practicals                                               | 16 | 8 |
| SZOO0501   | Ontogeny of Vertebrates, Behavioural Ecology & Conservation Biology | 4  | 4 |
| SZOO0502   | Physiological Adaptations                                           | 4  | 4 |
| SZOO05PR   | Zoology Practicals - V                                              | 8  | 4 |
| SZOO05AC   | Economic Entomology- I                                              | 4  | 4 |
| SZOO05ACPR | Economic Entomology Practicals                                      | 4  | 2 |

### SEMESTER - VI T.Y.B.Sc.

| Code       | Course Title                                      | L/W | Credits |
|------------|---------------------------------------------------|-----|---------|
| SBOT0601   | Plant Growth Physiology                           | 4   | 4       |
| SBOT0602   | Environmental Botany                              | 4   | 4       |
| SBOT06PR   | Botany Practicals – VI                            | 8   | 4       |
| SCHE0601   | General Physical Chemistry                        | 4   | 4       |
| SCHE0602   | Solid State, Solution & Medicinal Chemistry       | 4   | 4       |
| SCHE0603   | Spectometric Identification & Synthetic Chemistry | 4   | 4       |
| SCHE0604   | Instrumental Methods of Analysis                  | 4   | 4       |
| SCHE06PR   | Chemistry Practicals - VI                         | 16  | 8       |
| SCHE06AC   | Drugs & Color Chemistry                           | 4   | 4       |
| SCHE06ACPR | Applied Component Practicals                      | 4   | 2       |
| SGEO0601   | Phanerozoic Geology of India                      | 4   | 4       |
| SGE00602   | Sedimentary Petrology                             | 4   | 4       |
| SGEO0603   | Engineering Geology                               | 4   | 4       |
| SGEO0604   | Photogrammetry, Aerial Photo Interpretation & GIS | 4   | 4       |
| SGEO06PR   | Geology Practicals - VI                           | 16  | 8       |
| SGEO06AC   | Gemmology                                         | 4   | 4       |

|   |            |                                                          |    | • |
|---|------------|----------------------------------------------------------|----|---|
| L | SGEO06ACPR | Applied Component Practicals                             | 4  | 2 |
|   | SLSC0601   | Immunology                                               | 4  | 4 |
|   | SLSC0602   | Neurobiology                                             | 4  | 4 |
|   | SLSC0603   | Recombinant DNA Technology &Bioinformatics               | 4  | 4 |
|   | SLSC0604   | Sustainable Development & Carbon Management              | 4  | 4 |
|   | SLSC06PR   | Life Science Practicals - VI                             | 16 | 8 |
|   | SBCH0601   | Biomolecules and Bioanalytical Chemistry                 | 4  | 4 |
|   | SBCH0602   | Metabolism, Clinical Biochemistry & Pharmacology         | 4  | 4 |
|   | SBCH06PR   | Biochemistry Practicals                                  | 8  | 4 |
| Ī | SLSC06AC   | Environment Sustainability and Legislation               | 4  | 4 |
| Ī | SLSC06ACPR | Environmental Science Practicals                         | 4  | 2 |
| Ī | SMAT0601   | Calculus - VI                                            | 3  | 4 |
| Ī | SMAT0602   | Algebra – VI                                             | 3  | 4 |
| Ī | SMAT0603   | Topology of Metric Spaces – II                           | 3  | 4 |
| Ī | SMAT0604   | Numerical Methods - II                                   | 3  | 4 |
| Ī | SMAT06PR   | Mathematics Practicals – VI                              | 12 | 8 |
| Ī | SMAT06AC   | Computer Programming - II                                | 4  | 4 |
| Ī | SMAT06ACPR | Computer Programming Practicals                          | 4  | 2 |
| Ī | SMIC0601   | Genetics, Molecular Biology & Bioinformatics             | 4  | 4 |
| Ī | SMIC0602   | Medical Microbiology & Immunology-II                     | 4  | 4 |
| Ī | SMIC06PR   | Microbiology Practicals – VI                             | 8  | 4 |
| Ī | SPHY0601   | Modern Astrophysics                                      | 4  | 4 |
| Ī | SPHY0602   | Electrodynamics                                          | 4  | 4 |
| Ī | SPHY0603   | Nuclear Physics                                          | 4  | 4 |
| Ī | SPHY0604   | Solid State Physics                                      | 4  | 4 |
| Ī | SPHY06PR   | Physics Practicals - VI                                  | 16 | 8 |
| Ī | SPHY06AC   | Applied Physics                                          | 4  | 4 |
| Ī | SPHY06ACPR | Environmental Physics Practicals                         | 4  | 2 |
| Ī | SSTA0601   | Probability Distributions & Stochastic Processes         | 4  | 4 |
| Ī | SSTA0602   | Statistical Inference                                    | 4  | 4 |
| Ī | SSTA0603   | Applied Statistics (IB)                                  | 4  | 4 |
| Ī | SSTA0604   | Applied Statistics (IIB)                                 | 4  | 4 |
| f | SSTA06PR   | Statistics Practicals                                    | 16 | 8 |
| j | SZO00601   | Basics of Enzymes, Toxicology, Histology and Nanoscience | 4  | 4 |
| ſ | SZO00602   | Immunology & Recombinant DNA Technology                  | 4  | 4 |
| j | SZOO06PR   | Zoology Practicals - VI                                  | 8  | 4 |
| f | SZOO06AC   | Economic Entomology – II                                 | 4  | 4 |
| j | SZOO06ACPR | : Entomology Practicals                                  | 4  | 2 |
|   |            |                                                          |    |   |

# 6.2.5. Summary of Science Courses

Note: One Credit consists of 30 hours of contact and self-study.

| F.Y.B.Sc. PER SEMESTER |   |        |   |                      |   |       |                    |       |
|------------------------|---|--------|---|----------------------|---|-------|--------------------|-------|
| Cubinat                |   | Theory |   | Practicals Special - |   | Tatal |                    |       |
| Subject                | 1 | 2      | 3 | 1                    | 2 | 3     | Special<br>Subject | Total |
| L/W                    | 6 | 6      | 6 | 6                    | 6 | 6     | 3                  | 39    |
| Credits                | 4 | 4      | 4 | 2                    | 2 | 2     | 3                  | 21    |

| S.Y.B.Sc. PER SEMESTER |        |   |            |   |                    |              |       |
|------------------------|--------|---|------------|---|--------------------|--------------|-------|
| Cubicot                | Theory |   | Practicals |   | Special Scientific |              | Total |
| Subject                | 1      | 2 | 1          | 2 | Subject            | Comm. Skills | Total |
| L/W                    | 9      | 9 | 9          | 9 | 3                  | 1            | 40    |
| Credits                | 6      | 6 | 3          | 3 | 3                  | 1            | 22    |

| T.Y.B.Sc. PER SEMESTER |                   |     |         |     |       |  |
|------------------------|-------------------|-----|---------|-----|-------|--|
|                        | Theory Practicals |     |         |     |       |  |
|                        | Course            | AC  | Course  | AC  | Total |  |
|                        | 1,2,3,4           | 1,2 | 1,2,3,4 | 1,2 |       |  |
| L/W                    | 16                | 4   | 16      | 4   | 40    |  |
| Credits                | 16                | 4   | 8       | 2   | 30    |  |

### 6.3. BACHELOR OF COMMERCE (B.Com.)

**6.3.1.** Decree 4 of the 32<sup>nd</sup> General Congregation (1975) of the Society of Jesus made a clear option for the poor. Keeping this in mind the Bombay Province of the Society of Jesus began the Commerce Section in St. Xavier's College in 1988. The primary aim of the Commerce Section has always been to cater to the poorest of the poor. This was why it's lectures were scheduled in the evenings, when those who were economically poor and had to work during the day to earn a living and sustain their families, could attend College. In the 30 years since its inception, the Commerce Section has been able to stick to this rationale and has grown from one class and one division in 1988 to 2 divisions each of First, Second and Third year. Girl students are granted admission even if they are not working since the girl child is already at a disadvantage when compared with the male child.

### 6.3.2. Syllabi per Semester

#### SEMESTER - I F.Y.B.Com.

| Code     | Course Title                                         | L/W | Credits |
|----------|------------------------------------------------------|-----|---------|
| CSPC0101 | Special Course: Environmental Studies                | 3   | 3       |
| CCOM0101 | Fundamentals of Financial Accounting I               | 4   | 3       |
| CCOM0102 | Business Economics I                                 | 3   | 3       |
| CCOM0103 | Business Mathematics & Statistics I                  | 5+1 | 3       |
| CCOM0104 | Commerce – I : Management - Functions and Challenges | 3   | 3       |
| CCOM0105 | Communication Skills in English                      | 4+1 | 3       |
| CCOM0106 | Commerce – II : Introduction to Business             | 3   | 3       |

#### SEMESTER – II F.Y.B.Com.

| Code     | Course Title                            | L/W | Credits |
|----------|-----------------------------------------|-----|---------|
| CSPC0201 | Special Course: Giving Voice to Values  | 3   | 3       |
| CCOM0201 | Fundamentals of Financial Accounting II | 4   | 3       |
| CCOM0202 | Business Economics II                   | 3   | 3       |
| CCOM0203 | Business Mathematics & Statistics II    | 5+1 | 3       |
| CCOM0204 | Commerce III : Marketing                | 3   | 3       |
| CCOM0205 | Business Communication                  | 4+1 | 3       |
| CCOM0206 | Commerce IV : Service Sector            | 3   | 3       |

### SEMESTER - III S.Y.B.Com.

| Code     | Course Title                              | L/W | Credits |
|----------|-------------------------------------------|-----|---------|
| CSPC0301 | Special Course: Human Rights              | 3   | 3       |
| CCOM0301 | Financial Accounting - I                  | 5   | 4       |
| CCOM0302 | Business Economics - III                  | 3   | 3       |
| CCOM0303 | Commercial Laws - I                       | 4   | 3       |
| CCOM0304 | Commerce - V: Human Resource Mgt          | 3   | 3       |
| CCOM0305 | Regulatory Aspect of Banking & Finance I  | 3   | 3       |
|          | Applied Component:                        |     |         |
| CCOM0306 | Mass Communication (Theory & Practice) OR | 3   | 3       |
| CCOM0307 | Retail Marketing                          | 3   | 3       |

### SEMESTER - IV S.Y.B.Com.

| Code     | Course Title                           | Course Title                                     |   |   |
|----------|----------------------------------------|--------------------------------------------------|---|---|
| CSPC0401 | Special Course: Science & Technology   |                                                  | 3 | 3 |
| CCOM0401 | Financial Accounting – II              |                                                  | 5 | 4 |
| CCOM0402 | Business Economics - IV                |                                                  |   | 3 |
| CCOM0403 | Commercial Laws – II                   | Commercial Laws – II                             |   |   |
| CCOM0404 | Commerce - VI: Business Finance & Ca   | Commerce - VI: Business Finance & Capital Market |   |   |
| CCOM0405 | Regulatory Aspect of Banking & Finance | : - II                                           | 3 | 3 |
|          | Applied Component:                     |                                                  |   |   |
| CCOM0406 | Mass Communication (Media Studies)     | OR                                               | 3 | 3 |
| CCOM0406 | Advertising                            | ſ                                                | 3 | 3 |

## SEMESTER – V T.Y.B.Com.

| Code     | Course Title                                     | L/W | Credits |
|----------|--------------------------------------------------|-----|---------|
| CCOM0501 | Basic Corporate Accounts                         | 5   | 6       |
| CCOM0502 | Basics & Fundamentals of Costing & Auditing      | 4   | 5       |
| CCOM0503 | Fundamentals of Corporate Finance - I            | 3   | 5       |
| CCOM0504 | Business Economics - V                           | 3   | 4       |
| CCOM0505 | Commerce - VII: Production & Material Management | 3   | 3       |
|          | Applied Component:                               |     |         |
| CCOM0506 | Export Marketing                                 | 3   | 3       |
| CCOM0507 | Direct Tax – Income Tax                          | 3   | 4       |

### SEMESTER - VI T.Y.B.Com.

| Code     | Course Title                                  | L/W | Credits |
|----------|-----------------------------------------------|-----|---------|
| CCOM0601 | Advanced Corporate Accounts                   | 5   | 6       |
| CCOM0602 | Advanced Auditing & Costing Accounting        | 4   | 5       |
| CCOM0603 | Fundamentals of Corporate Finance - II        | 3   | 5       |
| CCOM0604 | Business Economics - VI                       | 3   | 4       |
| CCOM0605 | Commerce - VIII: Entrepreneurship             | 3   | 3       |
|          | Applied Component:                            |     |         |
| CCOM0606 | Corporate Secretarial Management & Governance | 3   | 3       |
| CCOM0607 | Indirect Tax - GST                            | 3   | 4       |

## 6.3.3. Summary of Commerce Courses

Note: One Credit consists of 30 hours of contact and self-study.

| F.Y.B.Com. PER SEMESTER |   |   |   |     |   |     |   |       |
|-------------------------|---|---|---|-----|---|-----|---|-------|
| Subject                 | 1 | 2 | 3 | 4   | 5 | 6   | 7 | Total |
| L/W                     | 3 | 4 | 3 | 5+1 | 3 | 4+1 | 3 | 27    |
| Credits                 | 3 | 3 | 3 | 3   | 3 | 3   | 3 | 21    |

| S.Y.B.Com. PER SEMESTER |   |   |   |   |   |   |   |       |
|-------------------------|---|---|---|---|---|---|---|-------|
| Subject                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
| L/W                     | 3 | 3 | 4 | 4 | 4 | 4 | 2 | 24    |
| Credits                 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 22    |

| T.Y.B.Com. PER SEMESTER |   |   |   |   |   |   |   |       |
|-------------------------|---|---|---|---|---|---|---|-------|
| Subject                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
| L/W                     | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 24    |
| Credits                 | 5 | 5 | 4 | 5 | 3 | 4 | 4 | 30    |

### 7.1. BACHELOR OF MANAGEMENT STUDIES (B.M.S.)

- 7.1.1. Introduction: The BMS course at St. Xavier's College, Mumbai was started in 1999 as a self-financed 3-year undergraduate programme affiliated to the University of Mumbai. The aim has always been to foster the spirit of entrepreneurship among young minds and also to develop mid-level managerial skills for industry. As an Autonomous College since 2010, the BMS curriculum has been critically upgraded and has been given a research slant by including relevant courses in the fields of Finance, Marketing, Human Resources and Production. Due to the project-based learning style, the alumni of this Department are placed in top positions in organisations across the globe and some have started and sustained their own ventures and businesses that nurture inclusive growth through social entrepreneurship.
- **7.1.2.** Number of students: 60 students.
- **7.1.3.** Eligibility: A candidate in order to be eligible for admission to the B.M.S. degree course shall have passed the 12<sup>th</sup> Std. Examination conducted by the Maharashtra State Board of Higher Secondary Education or its equivalent examination or Diploma in any Engineering branch with two or three or four years duration after passing the Secondary School Certificate (S.S.C.) examination conducted by the Board of Technical Education, Maharashtra State or equivalent examination.
- **7.1.4.** Eligibility Certificate: Refer Section 4.3, page 27
- **7.1.5.** Admission Criteria: For the BMS Course, unlike other courses, the students come from all 3 faculties (Arts, Science & Commerce) where the marking systems are very different. Hence an entrance test for this course is conducted for admission purposes. Admissions are on the basis of the Entrance Test (refer 4.1.2., page 24). Also refer 4.1.9, page 24 and Table 4.1.9 (B), page 26

## 7.1.6. Minimum Percentage of Marks in Qualifying Exams

- 7.1.6.1. Candidates applying in any of the categories, viz., General , Christian Minority Community and Special Category should have passed the Qualifying Std. XII Examination (or any other equivalent Exams)
- **7.1.7. Fees:** Refer Table 4.4.1 (A), page 28; Sections 4.5 (page 29) & 4.6 (page 29)

## 7.1.8. Syllabi per Semester

## SEMESTER - I F.Y.B.M.S.

| Code     | Course Title                           | L/W | Credits |
|----------|----------------------------------------|-----|---------|
| CSPC0101 | Special Course: Giving Voice to Values | 3   | 3       |
| CMS0101  | Principles of Management               | 4   | 3       |
| CMS0102  | Introduction to Financial Accounts     | 4   | 3       |
| CMS0103  | Business Law                           | 4   | 3       |
| CMS0104  | Business Mathematics                   | 4   | 3       |
| CMS0105  | Business Communication                 | 4   | 3       |
| CMS0106  | Computer Applications in Business      | 4   | 3       |
|          | 27                                     | 21  |         |

#### SEMESTER II F.Y.B.M.S.

|          | GEMEGTER II TITIBIMIG.                |     |         |  |  |  |
|----------|---------------------------------------|-----|---------|--|--|--|
| Code     | Course Title                          | L/W | Credits |  |  |  |
| CSPC0201 | Special Course: Environmental Studies | 3   | 3       |  |  |  |
| CMS0201  | Organizational Behavior               | 4   | 3       |  |  |  |
| CMS0202  | Industrial Law                        | 4   | 3       |  |  |  |
| CMS0203  | Marketing Management                  | 4   | 3       |  |  |  |
| CMS0204  | Microeconomics                        | 4   | 3       |  |  |  |
| CMS0205  | Business Statistics                   | 4   | 3       |  |  |  |
| CMS0206  | Introduction to Cost Accounting       | 4   | 3       |  |  |  |
|          | 27                                    | 21  |         |  |  |  |

### SEMESTER - III S.Y.B.M.S.

| Code     | Course Title                 | L/W | Credits |
|----------|------------------------------|-----|---------|
| CSPC0301 | Special Course: Human Rights | 3   | 3       |
| CMS0301  | Human Resource Management    | 4   | 4       |
| CMS0302  | Management Accounting        | 4   | 4       |
| CMS0303  | Operations Management        | 4   | 3       |
| CMS0304  | Consumer Behaviour           | 4   | 4       |
| CMS0305  | Macroeconomics               | 4   | 3       |
| CMS0306  | Elements of Taxation         | 4   | 3       |
|          | 27                           | 24  |         |

### SEMESTER - IV S.Y.B.M.S.

| Code       | Course Title                               |                   |    | Credits |
|------------|--------------------------------------------|-------------------|----|---------|
|            | Cross Faculty Courses:                     |                   |    |         |
|            | 1. Astronomy, Physics and its impact on th |                   |    |         |
|            | 2. Chem. in Context: Applying Chem. to so  | ciety (Chemistry) |    |         |
| CSPC0401   | 3. Descriptive Statistics                  | (Statistics)      |    |         |
| n          | 4. Garden Art                              | (Botany)          | 3  | 3       |
| n = 1 to 8 | 5. Infectious Diseases: Staying Ahead      | (Microbiology)    |    |         |
|            | 6. Nutrition and Reproductive Health       | (Life Science)    |    |         |
|            | 7. Secret Lives of Animals                 | (Zoology)         |    |         |
|            | Web Designing (Information Technology)     | nation            |    |         |
| CMS0401    | Research Methods in Business               |                   | 4  | 4       |
| CMS0402    | Financial Management                       |                   | 4  | 4       |
| CMS0403    | Productivity & Quality Management          |                   | 4  | 3       |
| CMS0404    | Cooperatives & Rural Markets               |                   | 4  | 4       |
| CMS0405    | Business Environment                       |                   | 4  | 3       |
| CMS0406    | Banking, Insurance & Capital Markets       |                   | 4  | 3       |
|            | TOTAL                                      |                   | 27 | 24      |

### SEMESTER - V T.Y.B.M.S.

| Code      | Course Title                                            | L/W | Credits |    |
|-----------|---------------------------------------------------------|-----|---------|----|
| CBMS0501  | Entrepreneurship & Management of Small & Med Enterprise | 4   | 5       |    |
| CMS0502   | Service Sector Management                               |     | 4       | 4  |
| CMS0503   | Supply Chain Management                                 | 4   | 4       |    |
| CMS0504   | Indian Management Thoughts and Practices                | 4   | 4       |    |
| CMS0505   | International Finance                                   | 4   | 4       |    |
| CMS0506   | Elective I: Financial Resource Raising                  | )R  | 4       | 4  |
| CMS0507   | Elective II: International Business                     | OR  | 4       | 4  |
| CMS0508   | Elective III: Training and Development                  |     | 4       | 4  |
| CMS0509PJ | Management Research Project                             | 3   | 3       |    |
|           | TOTAL                                                   |     | 27      | 28 |

SEMESTER - VI T.Y.B.M.S.

| Code    | Course Title                                  |    | L/W | Credits |
|---------|-----------------------------------------------|----|-----|---------|
| CMS0601 | Strategic Management                          | 4  | 5   |         |
| CMS0602 | Risk Management                               | 4  | 5   |         |
| CMS0603 | Operations Research                           | 4  | 4   |         |
| CMS0604 | Business Ethics & Corporate Social Respon     | 4  | 5   |         |
| CMS0605 | E-Commerce                                    | 4  | 4   |         |
| CMS0606 | Elective I: Invest. Analysis & Portfolio Mgf. | OR | 4   | 5       |
| CMS0607 | Elective II: Retail& Sales Management         | OR | 4   | 5       |
| CMS0608 | Elective III: Econometrics                    | 4  | 5   |         |
|         | TOTAL                                         |    | 24  | 28      |

## 7.1.9. Summary of Management Studies Courses

Note: One Credit consists of 30 hours of contact and self-study.

| F.Y.B.M.S. (SEMESTER I & II respectively) |   |   |   |   |   |   |   |       |
|-------------------------------------------|---|---|---|---|---|---|---|-------|
| Subjects                                  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
| L/W                                       | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 27    |
| Credits                                   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 21    |

| S.Y.B.M.S. (SEMESTER III & IV respectively) |   |   |   |   |   |   |   |       |
|---------------------------------------------|---|---|---|---|---|---|---|-------|
| Subjects                                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
| L/W                                         | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 27    |
| Credits                                     | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 24    |

|        | T.Y.B.M.S. SEMESTER (SEMESTER V & VI respectively) |   |   |   |   |   |   |    |       |
|--------|----------------------------------------------------|---|---|---|---|---|---|----|-------|
|        | Subject                                            | 1 | 2 | 3 | 4 | 5 | 6 | 7  | Total |
|        | S                                                  |   |   |   |   |   |   |    |       |
| Sem V  | L/W                                                | 4 | 4 | 4 | 4 | 4 | 4 | 3  | 27    |
|        | Credits                                            | 5 | 4 | 4 | 4 | 4 | 4 | 3  | 28    |
| Sem VI | L/W                                                | 4 | 4 | 4 | 4 | 4 | 4 | NA | 27    |
|        | Credits                                            | 5 | 5 | 4 | 4 | 5 | 5 | NA | 28    |

- 7.2. BACHELOR OF MASS MEDIA (B.M.M.) the course name has changed to BA (MCJ) i.e. BACHELOR OF ARTS (MASS COMMUNICATION AND JOURNALISM) from June 2020 onwards
  - 7.2.1. Introduction: This Course was introduced in 2002. It initiates undergraduate students to the need to develop a strong foundation in the fundamental art subjects. The Course design helps students develop a critical and inquiry-based understanding of societal constructs, an individual's behaviour in consumer driven economies and media business management. Our alumni pursue post-graduate degrees / find job placements in Journalism, Marketing, Brand Management, Visual Arts & Design, Production-Direction-Cinematography, etc. Our graduates have also become Entrepreneurs in media related businesses.
  - **7.2.2.** Number of Students: 60 Students
  - **7.2.3.** Eligibility: A candidate in order to be eligible for admission to the **BA (MCJ)** degree course shall have passed the 12<sup>th</sup> Std. Examination conducted by the Maharashtra State Board of Higher Secondary Education or its equivalent examination or Diploma in any Engineering branch with two or three or four years duration after passing the Secondary School Certificate (S.S.C.) examination conducted by the Board of Technical Education, Maharashtra State or equivalent examination.
  - **7.2.4.** Eligibility Certificate: Refer Section 4.3, page 27
  - **7.2.5.** Admission Criteria: For the BA (MCJ) Course, the students come from all 3 faculties (Arts, Science & Commerce) where the marking systems are very different. Hence an entrance test for this course is conducted for admission purposes. Admissions are on the basis of the Entrance Test (refer 4.1.2., page 24). Also refer 4.1.9, page 24 and Table 4.1.9 (B), page 26.
  - 7.2.6. Minimum Percentage of Marks in Qualifying Exams
    - **7.2.6.1.** Candidates applying in any of the categories, viz., General, Christian Minority Community and Special Category should have passed the Qualifying Std. XII Examination (or any other equivalent Exams)
  - **7.2.7. Fees:** Refer Table 4.4.1 (A), page 28; Sections 4.5 (page 29) & 4.6 (page 29)

## 7.2.8. Syllabi per Semester

### SEMESTER - I F.Y.BA (MCJ)

| Code     | Course Title                           | L/W | Credits |
|----------|----------------------------------------|-----|---------|
| ASPC0101 | Special Course: Giving Voice to Values | 3   | 3       |
| AMM0101  | Effective Communication Skills – I     | 4   | 3       |
| AMM0102  | Mass Communication and Society         | 4   | 3       |
| AMM0103  | Introduction to Economics - I          | 4   | 3       |
| AMM0104  | Introduction to Sociology              | 4   | 3       |
| AMM0105  | Introduction to Literature             | 4   | 3       |
| AMM0106  | Computer Graphics                      | 4   | 3       |
|          | TOTAL                                  | 27  | 21      |

### SEMESTER - II F.Y.BA (MCJ)

| Code     | Course Title                          | L/W | Credits |  |
|----------|---------------------------------------|-----|---------|--|
| ASPC0201 | Special Course: Environmental Studies | 3   | 3       |  |
| AMM0201  | Effective Communication Skills - II   | 4   | 3       |  |
| AMM0202  | Introduction to Media Ethics          | 4   | 3       |  |
| AMM0203  | Media Psychology                      | 4   | 3       |  |
| AMM0204  | History of Ideas                      | 4   | 3       |  |
| AMM0205  | Introduction to Economics – II        | 4   | 3       |  |
| AMM0206  | Introduction to Radio and T.V.        | 4   | 3       |  |
|          | TOTAL                                 |     |         |  |

## SEMESTER - III S.Y.BA (MCJ)

| Code     | Course Title                           | L/W | Credits |
|----------|----------------------------------------|-----|---------|
| ASPC0301 | Special Course: Human Rights           | 3   | 3       |
| AMM0301  | Application of Economics Concepts      | 4   | 3       |
| AMM0302  | Cultural Studies                       | 4   | 4       |
| AMM0303  | Introduction to Marketing Concepts     | 4   | 3       |
| AMM0304  | Introduction to Management Environment | 4   | 4       |
| AMM0305  | Introduction to Journalism             | 4   | 3       |
| AMM0306  | Introduction to Photography            | 4   | 4       |
|          | TOTAL                                  | 27  | 24      |

### SEMESTER - IV S.Y.BA (MCJ).

| Code       | Course Title                                               | L/W | Credits |
|------------|------------------------------------------------------------|-----|---------|
|            | Cross Faculty Courses:                                     |     |         |
|            | Astronomy, Physics and its impact on the World (Physics)   |     |         |
|            | 2. Chem. in Context: Applying Chem. to society (Chemistry) |     |         |
| CSPC0401n  | 3. Descriptive Statistics (Statistics)                     |     |         |
| n = 1 to 8 | 4. Garden Art (Botany)                                     | 3   | 3       |
|            | 5. Infectious Diseases: Staying Ahead (Microbiology)       |     |         |
|            | 6. Nutrition and Reproductive Health (Life Science)        |     |         |
|            | 7. Secret Lives of Animals (Zoology)                       |     |         |
|            | 8. Web Designing (Information Technology)                  |     |         |
| AMM0401    | Writing Skills for Media                                   | 4   | 3       |
| AMM0402    | Introduction to Audio Video Production                     | 4   | 4       |
| AMM0403    | Theory of Media                                            | 4   | 3       |
| AMM0404    | Mass Media Research                                        | 4   | 4       |
| AMM0405    | Introduction to Advertising Concepts                       | 4   | 3       |
| AMM0406    | Film Reading & Appreciation                                | 4   | 4       |
|            | TOTAL                                                      | 27  | 24      |

### SEMESTER - V T.Y.BA (MCJ) (ADVERTISING)

| Code    | Course Title                          | L/W | Credits |
|---------|---------------------------------------|-----|---------|
| AMM0501 | Advertising for International Markets | 4   | 5       |
| AMM0502 | Media Law and Advertising Ethics      | 4   | 4       |
| AMM0503 | Consumer Behaviour                    | 4   | 5       |
| AMM0504 | Introduction to Financial Markets     | 4   | 4       |
| AMM0505 | Contemporary Issues                   | 4   | 5       |
| AMM0506 | Copywriting                           | 4   | 5       |
|         | TOTAL                                 |     |         |

#### SEMESTER - V T.Y.BA (MCJ) (JOURNALISM)

| Code     | Course Title                      | L/W | Credits |
|----------|-----------------------------------|-----|---------|
| AMM0504  | Introduction to Financial Markets | 4   | 4       |
| AMM0505  | Contemporary Issues               | 4   | 5       |
| AMM0507  | Reporting                         | 4   | 5       |
| AMM0508  | Editing                           | 4   | 5       |
| AMM0509  | Feature and Opinion               | 4   | 5       |
| AMM05010 | Journalism and Public Opinion     | 4   | 4       |
|          | TOTAL                             | 24  | 28      |

#### SEMESTER - VI T.Y.BA (MCJ) (ADVERTISING)

| Code    | Course Title                     | L/W | Credits |
|---------|----------------------------------|-----|---------|
| AMM0601 | Introduction to Entrepreneurship | 4   | 5       |
| AMM0602 | Brand Building                   | 4   | 5       |
| AMM0603 | Financial Management             | 4   | 5       |
| AMM0604 | Public Relations                 | 4   | 5       |
| AMM0605 | Advertising Design               | 4   | 4       |
| AMM0606 | 10606 Digital Marketing          |     | 4       |
| _       | TOTAL                            | 24  | 28      |

### SEMESTER - VI T.Y.BA (MCJ) (JOURNALISM)

| Code    | Course Title                     | L/W | Credits |
|---------|----------------------------------|-----|---------|
| AMM0601 | Introduction to Entrepreneurship | 4   | 5       |
| AMM0604 | Public Relations                 | 4   | 5       |
| AMM0607 | Press Laws and Ethics            | 4   | 4       |
| AMM0608 | Indian Regional Journalism       | 4   | 4       |
| AMM0609 | Newspaper and Magazine Making    | 4   | 5       |
| AMM0610 | Digital Media                    | 4   | 5       |
| TOTAL   |                                  |     | 28      |

#### 7.2.9. Summary of BA (MCJ) Courses

**Note:** One Credit consists of 30 hours of contact and self-study.

| F.YBA (MCJ) (SEMESTERS I & II) |   |   |   |   |   |   |   |       |
|--------------------------------|---|---|---|---|---|---|---|-------|
| Subjects                       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
| L/W                            | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 27    |
| Credits                        | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 21    |

| S.Y.BA (MCJ) (SEMESTERS III & IV) |   |   |   |   |   |   |   |       |
|-----------------------------------|---|---|---|---|---|---|---|-------|
| Subjects                          | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
| L/W                               | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 27    |
| Credits                           | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 24    |

| T.Y.BA (MCJ) (SEMESTERS V & VI) |   |   |   |   |   |   |       |
|---------------------------------|---|---|---|---|---|---|-------|
| Subjects                        | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| L/W                             | 4 | 4 | 4 | 4 | 4 | 4 | 24    |
| Credits                         | 5 | 4 | 5 | 5 | 4 | 5 | 28    |

#### 7.3. BACHELOR IN SCIENCE (INFORMATION TECHNOLOGY) (B.Sc. - I.T.)

7.3.1. Introduction: The B.Sc.- I.T. course was initiated in 2007-2008 as one of the self-financed courses of St Xavier's College. The course had produced subject-based Merit Rankers at the University level in 2012. Under autonomy this programme offers a wide range of subjects across each of the six semesters offering exposure in areas that touch upon mathematical abilities (Applied Mathematics, Discrete Mathematics, Descriptive Statistics, Operations Research, etc.) to Computer Programming like Computer Graphics, Arts of Programming, Java, Net, etc. The programme updates its syllabi regularly and introduces into the curriculum new technologies like: Enterprise Resource Planning (ERP), Mobile Application Development, Artificial Intelligence, Data Mining, Cloud Computing, Big Data, etc.

#### 7.3.2. Number of Students: 60 Students

**7.3.3. Eligibility:** The eligibility criterion for admission to this course requires at least 45% aggregate at the XII Std. Examination of the Maharashtra State Board of Secondary & Higher Secondary Education or its equivalent with <a href="MATHEMATICS">MATHEMATICS</a> as one of the subjects).

**7.3.4.** Admission Criteria: Refer 4.1.9, page 24 and Table 4.1.9 (B), page 26

**7.3.5.** Eligibility Certificate: Refer Section 4.3, page 27

**7.3.6. Fees:** Refer Table 4.4.1.(A), page 28; Sections 4.5 (page 29) & 4.6 (page 29)

#### 7.3.7. Syllabi per Semester

#### SEMESTER - I F.Y.B.Sc. (IT)

| Code     | Course Title                                 | L/W | Credits |
|----------|----------------------------------------------|-----|---------|
| SSPC0101 | Special Course: Giving Voice to Values       | 3   | 3       |
| SITS0101 | Professional Communication Skills            | 4   | 3       |
| SITS0102 | Applied Mathematics – I                      | 4   | 3       |
| SITS0103 | Digital Electronics                          | 4   | 3       |
| SITS0104 | The Art of Programming                       | 4   | 3       |
| SITS0105 | Data Communication & Network Standards       | 4   | 3       |
| SITS01PR | The Art of Programming & Digital Electronics | 6   | 3       |
|          | 29                                           | 21  |         |

#### SEMESTER - II F.Y.B.Sc. (IT)

| Code         | Course Title                                                | L/W | Credit<br>s |
|--------------|-------------------------------------------------------------|-----|-------------|
| SSPC020<br>1 | Special Course: Environmental Studies                       | 3   | 3           |
| SITS0201     | Computer Graphics                                           | 4   | 3           |
| SITS0202     | Applied Mathematics – II                                    | 4   | 3           |
| SITS0203     | Microprocessors and Microcontrollers                        | 4   | 3           |
| SITS0204     | Descriptive Statistics                                      | 4   | 3           |
| SITS0205     | C++ Programming                                             | 4   | 3           |
| SITS02PR     | Comp Graphics, Microprocessors & Controllers & C++ Prog'ing | 6   | 3           |
|              | TOTAL                                                       | 29  | 21          |

#### SEMESTER - III S.Y.B.Sc. (IT)

| Code     | Course Title                                    | L/W | Credits |
|----------|-------------------------------------------------|-----|---------|
| SSPC0301 | Special Course: Human Rights                    | 3   | 3       |
| SITS0301 | Logic & Discrete Mathematical Structures - LDMS | 4   | 3       |
| SITS0302 | Web Designing & Programming                     | 4   | 3       |
| SITS0303 | Data Base Systems and Concepts                  | 4   | 3       |
| SITS0304 | Object Oriented Programming with JAVA           | 4   | 3       |
| SITS0305 | Embedded Systems                                | 4   | 3       |
| SITS03PR | Data Base Systems and Embedded System           | 6   | 3       |
| SITS03PR | OOPS with JAVA and Web Designing                | 6   | 3       |
|          | TOTAL                                           | 35  | 24      |

SEMESTER - IV S.Y.B.Sc. (IT)

| Code         |                                                                      | I /\A/ | Cuadita |
|--------------|----------------------------------------------------------------------|--------|---------|
| Code         | Course Title                                                         | L/W    | Credits |
|              | Cross Faculty Course:                                                |        |         |
|              | An Introduction to Gandhian Studies (History)                        |        |         |
|              | Fundamentals of Indian Constitution (Pol. Sci.)                      |        |         |
|              | Indian Culture and Philosophy (AICA)                                 |        |         |
| SSPC0401n    | 4. International Economics (Economics)                               |        |         |
| n = 1 to 10  | <ol><li>Mgt. Accounting &amp; Invest. Portfolio Mgt. (BMS)</li></ol> | 3      | 3       |
| 11 - 1 10 10 | Psychology of Relationships (Psychology)                             | ٦      | 3       |
|              | 7. Rep'ing the Nation through News Media (BMM)                       |        |         |
|              | 8. Science of Culture (Socio. & Anthro.)                             |        |         |
|              | Science, Technology & Social Change: Some                            |        |         |
|              | Issues & Challenges (Socio. & Anthro.)                               |        |         |
|              | 10. Literature & Resistance (English)                                |        |         |
| SITS0401     | Software Engineering                                                 | 4      | 3       |
| SITS0402     | Modern Operating System                                              | 4      | 3       |
| SITS0403     | Mobile Application Development                                       | 4      | 3       |
| SITS0404     | Data Structure using JAVA                                            | 4      | 3       |
| SITS0405     | Statistical Techniques and Operation Research                        | 4      | 3       |
| SITS04PR     | Modern Operating System & Mobile Application Dev.                    | 6      | 3       |
| SITS04PR     | Data Structure using JAVA and Statistical Techniques                 | 6      | 3       |
|              | TOTAL                                                                | 35     | 24      |

SEMESTER - V T.Y.B.Sc. (IT)

| Code     | Course Title                                              | L/W | Credits |
|----------|-----------------------------------------------------------|-----|---------|
| SITS0501 | Network Security & Internet Technologies                  | 4   | 4       |
| SITS0502 | C# with ASP.Net                                           | 4   | 4       |
| SITS0503 | Data Warehousing & Data Mining                            | 4   | 4       |
| SITS0504 | E-Commerce and Enterprise Resource Planning               | 4   | 4       |
| SITS0505 | Introduction to Artificial Intelligence                   | 4   | 4       |
| SITS05PR | Network Security and Data Warehousing                     | 6   | 4       |
| SITS05PR | C# & ASP. NET and Introduction to Artificial Intelligence | 6   | 4       |
| SITS05PJ | Scientific Communication Skills & Project                 | 1   | -       |
|          | TOTAL                                                     | 33  | 28      |

SEMESTER - VI T..Y.B.Sc (IT)

| Code     | Course Title                             | L/W | Credits |
|----------|------------------------------------------|-----|---------|
| SITS0601 | Big Data and Cloud Computing             | 4   | 4       |
| SITS0602 | Image Processing and deep learning       | 4   | 4       |
| SITS0603 | Advanced Java                            | 4   | 4       |
| SITS0604 | Software Testing                         | 4   | 4       |
| SITS06PR | Big Data Visualization & Advanced Java   | 6   | 4       |
| SITS06PJ | Project, Scientific Communication Skills | 3+9 | 8       |
| TOTAL    |                                          |     | 28      |

#### 7.3.7. Summary of B.Sc. (IT) Courses

Note: One Credit consists of 30 hours of contact and self-study.

| F.Y.B.Sc. (IT) (SEMESTERS I & II) |      |      |      |      |      |      |        |       |
|-----------------------------------|------|------|------|------|------|------|--------|-------|
| Course                            | Th-1 | Th-2 | Th-3 | Th-4 | Th-5 | Th-6 | Pracs. | Total |
| L/W                               | 3    | 4    | 4    | 4    | 4    | 4    | 6      | 29    |
| Credits                           | 3    | 3    | 3    | 3    | 3    | 3    | 3      | 21    |

| S.Y.B. Sc. (IT) (SEMESTER III & IV) |      |      |      |      |      |      |       |       |
|-------------------------------------|------|------|------|------|------|------|-------|-------|
| Course                              | Th-1 | Th-2 | Th-3 | Th-4 | Th-5 | Th-6 | Pracs | Total |
| L/W                                 | 3    | 4    | 4    | 4    | 4    | 4    | 12    | 35    |
| Credits                             | 3    | 3    | 3    | 3    | 3    | 3    | 6     | 24    |

| T.Y.B. Sc. (IT) (SEMESTER V & VI) |      |      |      |      |      |       |         |       |
|-----------------------------------|------|------|------|------|------|-------|---------|-------|
| Course                            | Th-1 | Th-2 | Th-3 | Th-4 | Th-5 | Pracs | Th-6    | Total |
| (Sem. V) L / W                    | 4    | 4    | 4    | 4    | 4    | 12    | 1       | 33    |
| Credits                           | 4    | 4    | 4    | 4    | 4    | 8     |         | 28    |
| (Sem. VI) L / W                   | 4    | 4    | 4    | 4    |      | 6     | 12 (PJ) | 34    |
| Credits                           | 4    | 4    | 4    | 4    |      | 4     | 8 (PJ)  | 28    |

M.Sc. in: Botany / Geology / Life Science / Microbiology

#### 8.1. M.Sc. Programme: An Overview

- **8.1.1.** University and seeking admissions to First Year M.Sc. Courses are required to apply for a **Provisional Eligibility Certificate (EC)** through the College at the time of admission. The EC Application Form, available at the College Office, should be duly filled and submitted with an attested copy of the B.Sc. Degree marksheet and a passport size photograph along with the prescribed fees of Rs.320 & Rs.500 (for verification of documents) to the College Office. Once admission is granted, for confirmation of the eligibility, students should submit to the College Office, within the First Semester, the Passing Certificate & the Migration Certificate (both in originals).
- **8.1.2.** Students passing the Degree Examinations from Mumbai University will be required to submit the **Transfer Certificate** issued by their respective Colleges. This needs to be submitted after completion of the admissions process to the College.
- **8.1.3.** At the time of admission the candidate must submit the following documents:
- i. Degree Marksheets & Pass Certificate (Original + 2 attested copies)
- ii. Baptism Certificate (for Christians)
  - **8.1.4.** Caste Admissions to the above courses will begin only after the declaration of the B.Sc. Degree results of the University of Mumbai sometime in the second or third week of June
  - **8.1.5.** The College has introduced an **ONLINE** application system for the above mentioned First Year post-graduate M.Sc. Part-I courses. **All candidates applying for admission** are expected to apply through the online application system on the homepage of the website www.xaviers.edu.
  - **8.1.6.** The Online Application Fee (M.Sc. Aided Courses) of Rs. 250 is to be paid by demand draft in favour of 'St. Xavier's College, Mumbai', payable in Mumbai.
  - **8.1.7.** The last date for submission of online admission application forms and dates for display of merit lists will be put up on the homepage of the College website after the declaration of the B.Sc. Degree results of the University of Mumbai.
  - **8.1.8.** Students are selected for all the M.Sc. courses covered in this Section of the handbook on the basis of the marks / grades secured at the qualifying UG examination.
- **Eligibility Certificate:** Students passing the B.Sc. Degree from Universities other than Mumbai Certificate (for Reserved Category) or Documentary Evidence regarding Special Category (Refer Section 8.1.12, page 75).
- **iv.** Migration Certificate (for those from other Universities).
  - 8.1.9. Total No. of Seats for:
    - Aided Courses: 20 seats per year each Botany, Geology, Life Science and Microbiology. Self-Financed Courses: 30 seats for Biotechnology; 25 seats for Big Data Analytics and 20 seats for Physics (Astrophysics)
  - **8.1.10. Fees (for Aided M.Sc. only):** Includes Deposit and Laboratory Fees, as sanctioned by the Board of Management, St. Xavier's College (Autonomous): M.Sc. Part I :Rs.14,950 (approx.) & M.Sc. Part II :Rs.13,355 (approx.)
  - **8.1.11. Reservation of Seats:** Refer 4.1.9 on page 25 and Table 8.1.11 on page 75

### M.Sc. in: Botany / Geology / Life Science / Microbiology

#### **Table 8.1.11**

| M.Sc. (Aided) (20 seats) and M.Sc. (Self-Financed) (30 / 25 seats) M.A. (Aided and Self-Financed) (60 seats)   |          |  |  |  |
|----------------------------------------------------------------------------------------------------------------|----------|--|--|--|
| Category                                                                                                       | Criteria |  |  |  |
| TOTAL SEATS 100% (i.e., 20 or 30 or 60)                                                                        |          |  |  |  |
| Management Quota: 15% of 20 seats OR 15% of 25 / 30 seats OR 15% of 60 seats (for M.A.)                        | Case A   |  |  |  |
| BALANCE SEATS 85% (i.e., 17 or 25 or 51)                                                                       |          |  |  |  |
| Christian Minority: 50% of 85% of 20 seats OR 50% of 85% of 25 / 30 seats OR 50% of 85% of 60 seats (for M.A.) | Case D   |  |  |  |
| General Category: 42% of 85% of 20 seats OR 42% of 85% of 25 / 30 seats OR 42% of 85% of 60 seats (for M.A.)   | Case D   |  |  |  |
| Others  i. Persons with Disability Category:                                                                   | Case D   |  |  |  |

#### Kev:

- Case A: Only for those the College is obliged to admit and without any guid pro guo.
- **Case D:** Admitted on the basis of their Merit Rank which is based on performance at the appropriate Graduation Examinations
- **8.1.12.** Special Category refers\*\* to:
  - **8.1.11.1.** Wards of Transferred State / Central Govt. and Private Sector employees employees of Defence Department / Ex-Servicemen.
  - **8.1.11.2.** Wards of Freedom Fighters.
  - **8.1.11.3.** Award Winners at the District / State / National Levels in Sports or Cultural Activities.

M.Sc. in: Botany / Geology / Life Science / Microbiology

#### 8.2. M.Sc. DEGREE IN BOTANY

#### 8.2.1. Introduction

Botany is a discipline of the Biological Sciences and specifically the Science of Plant Life. The field of Botany covers a wide range of scientific disciplines including structure, growth, reproduction, physiology, metabolism, development, diseases, chemical properties, classification and evolutionary relationships among the taxonomic groups of plants. Botany began with early human efforts to identify edible, medicinal and poisonous plants, making it one of the oldest branches of science. The study of plants is vital because they are a fundamental part of life on earth, and generate the oxygen and food that allow humans and other organisms to exist. India is rich in Biodiversity of plants and other biological organisms. It is a source of our food, medicine and many other requirements of life. Biodiversity is one of the important areas to be studied and understood.

In order to cater to this need, the Botany Department of St. Xavier's College (Autonomous) offers the M.Sc. degree in Botany under its Autonomous system which allows us to design our own syllabi and our own evaluation system. The degree is awarded by the University of Mumbai.

#### 8.2.2. Eligibility Criteria

- **8.2.2.1.** A candidate for being eligible for admission to the M.Sc. Degree in Botany should have passed the B.Sc. (Three year integrated course) degree examination of the University of Mumbai with at least seven units (i.e. minimum required for majoring in a subject) in Botany **or** B.Sc. Botany from any other University recognized as equivalent thereto.
- **8.2.2.2.** For Eligibility / Transfer / Migration Certificates: Refer 8.1.6, 8.1.7., page 74. For Reservation Criteria: Refer 8.1.11; page 74.

### 8.2.3. List Of Courses / Specializations

St. Xavier's College (Autonomous), Mumbai offers the M.Sc. Degree in Botany in one specialization, viz., Angiosperm Taxonomy.

#### 8.2.4. Syllabi per Semester

#### Semester I

| Code     | Course Title      | L/W | Credits |
|----------|-------------------|-----|---------|
| SBOT0701 | Cryptogams        | 4   | 4       |
| SBOT0702 | Plant Taxonomy    | 4   | 4       |
| SBOT0703 | Plant Metabolism  | 4   | 4       |
| SBOT0704 | Molecular Biology | 4   | 4       |
| SBOT07PR | Practicals        | 16  | 8       |

### M.Sc. in: Botany / Geology / Life Science / Microbiology

#### Semester II

| Code     | Course Title                 | L/W | Credits |
|----------|------------------------------|-----|---------|
| SBOT0801 | Archegoniates                | 4   | 4       |
| SBOT0802 | Anatomy and Medicinal Botany | 4   | 4       |
| SBOT0803 | Ecology                      | 4   | 4       |
| SBOT0804 | Plant Development            | 4   | 4       |
| SBOT08PR | Practicals                   | 16  | 8       |

#### Semester III

| Code     | Course Title                                | L/W | Credits |
|----------|---------------------------------------------|-----|---------|
| SBOT0901 | Biostatistics                               | 4   | 4       |
| SBOT0902 | Plant Pathology                             | 4   | 4       |
| SBOT0903 | Applied Botany                              | 4   | 4       |
| SBOT0904 | Angiosperms- I (Phylogeny and Nomenclature) | 4   | 4       |
| SBOT09PR | Practicals                                  | 16  | 8       |

#### Semester IV

| Code     | Course Title                                 | L/W | Credits |
|----------|----------------------------------------------|-----|---------|
| SBOT1001 | Instrumentation                              | 4   | 4       |
| SBOT1002 | Angiosperms- II (Characters and Ethnobotany) | 4   | 4       |
| SBOT1003 | Angiosperms-III (Taxonomic Aids)             | 4   | 4       |
| SBOT1004 | Angiosperms-IV (Geography and IPR)           | 4   | 4       |
| SBOT10PR | Practicals                                   | 16  | 8       |

# **8.2.4.1.** Semesters I, II, III & IV Credit distribution is shown in Table 8.2.4.1. **Table 8.2.4.1**.

| Subject | Subject Course 1, 2, 3<br>and 4 Theory | Subject Course 1, 2, 3 and 4 Practical | Total |
|---------|----------------------------------------|----------------------------------------|-------|
| L/W     | 16                                     | 16                                     | 32    |
| Credits | 16                                     | 08                                     | 24    |

#### 8.2.5. Schemes of Evaluation (for each Course)

End Semester Exam 60% + Internal Assessment 40%.

A Research Project in the Semester IV will be a compulsory requirement.

#### 8.2.6. Facilities in the Department

The Botany Department of St. Xavier's College is the only department in the entire University of Mumbai having the Blatter Herbarium with its collection of 200,000 herbarium specimens which includes a major collection of Angiosperm. In addition it also holds a collection of algae, fungi and Gymnosperms. The Herbarium also has a well-stocked attached library having 5000 volumes of Angiosperm Taxonomy related books, and various national and international research journals. The department also offers the Ph.D. Programme in Angiosperm Taxonomy. We have two newly developed, well

### M.Sc. in: Botany / Geology / Life Science / Microbiology

equipped, multimedia enabled dedicated postgraduate labs for the M.Sc. Programme. A central Instrumentation facility (CIF Lab) provides access to a number of advanced and newly acquired instruments required for practicals.

#### 8.2.7. Other Activities of this Programme

The Course is aimed at training the PG students for research. Students have to give regular seminars in the subject. Field trips accompanied by qualified and experienced teachers along with Ph.D. students.

#### 8.3. M.Sc. DEGREE IN GEOLOGY:

8.3.1. Introduction: This is a two year Geology course which covers all the major aspects of this discipline. This course is affiliated to and recognized by the University of Mumbai. Students can also add a certain specialization to their M.Sc. studies as they have to undertake a dissertation (research project). In contemporary times, Geologists are increasingly in demand to study and evaluate geologic hazards and natural resources such as oil and gas. The Placement Cell of the College helps in connecting our students with such employment avenues.

#### 8.3.2. Eligibility Criteria

- **8.3.2.1.** Graduates with a degree from a recognized University / College with major subject as Geology (at least 50% of the total credits earned or equivalent in marks, should be in Geology) can apply.
- **8.3.2.2.** For Eligibility / Transfer / Migration Certificates: Refer 8.1.6, 8.1.7., page 74. For Reservation Criteria: Refer: 8.1.11; page 74.

#### 8.3.3. List of Courses

The courses offered at the post graduate program (four semesters) in Geology have been designed by keeping the present day industry requirements in mind. A dissertation in the final semester is aimed at exposing the learner to present day trends of research in the subject.

#### 8.3.4. Syllabi per Semester

#### Semester I

| Code       | Course Title                      | L/W | Credits |
|------------|-----------------------------------|-----|---------|
| SGE00701   | Stratigraphy and Geology of India | 4   | 4       |
| SGE00702   | Geochemistry                      | 4   | 4       |
| SGE00703   | Structural Geology                | 4   | 4       |
| SGE00704   | Advanced Gemmology                | 4   | 4       |
| SGEO0701PR | Stratigraphy and Geology of India | 4   | 2       |
| SGEO0702PR | Geochemistry                      | 4   | 2       |
| SGEO0703PR | Structural Geology                | 4   | 2       |
| SGEO0704PR | Advanced Gemmology                | 4   | 2       |

# M.Sc. in: Botany / Geology / Life Science / Microbiology

#### Semester II

| Code       | Course Title                                 | L/W | Credits |
|------------|----------------------------------------------|-----|---------|
| SGE00801   | Remote Sensing and Digital Image Processing. | 4   | 4       |
| SGE00802   | Igneous Petrology                            | 4   | 4       |
| SGEO0803   | Metamorphic Petrology                        | 4   | 4       |
| SGE00804   | Sedimentary Petrology                        | 4   | 4       |
| SGEO0801PR | Remote Sensing and Digital Image Processing. | 4   | 2       |
| SGEO0802PR | Igneous Petrology                            | 4   | 2       |
| SGEO0803PR | Metamorphic Petrology                        | 4   | 2       |
| SGEO0804PR | Sedimentary Petrology                        | 4   | 2       |

#### Semester III

| Code       | Course Title                          | L/W | Credits |
|------------|---------------------------------------|-----|---------|
| SGE00901   | General and Invertebrate Paleontology | 4   | 4       |
| SGE00902   | Hydrogeology                          | 4   | 4       |
| SGEO0903   | Geophysical Prospecting               | 4   | 4       |
| SGE00904   | Coal and Petroleum Geology            | 4   | 4       |
| SGEO0901PR | General and Invertebrate Paleontology | 4   | 2       |
| SGEO0902PR | Hydrogeology                          | 4   | 2       |
| SGEO0903PR | Geophysical Prospecting               | 4   | 2       |
| SGEO0904PR | Coal and Petroleum Geology            | 4   | 2       |

#### Semester IV

| •••••••    |                                    |     |         |
|------------|------------------------------------|-----|---------|
| Code       | Course Title                       | L/W | Credits |
| SGEO1001   | Micropaleontology and Oceanography | 4   | 4       |
| SGEO1002   | Engineering Geology                | 4   | 4       |
| SGEO1003   | Economic Geology                   | 4   | 4       |
| SGEO1004   | Dissertation*                      | 8   | 6       |
| SGEO1001PR | Micropaleontology and Oceanography | 4   | 2       |
| SGEO1002PR | Engineering Geology                | 4   | 2       |
| SGEO1003PR | Economic Geology                   | 4   | 2       |

<sup>\*</sup> The Dissertation entails field work, lab work, report, presentation and *viva voce*.

### **8.3.5.** Semesters I, II and III Credit distribution is shown in Table 8.3.5 (A)

Table 8.3.5 (A)

| Subject        | Subject Course 1, 2, 3 and 4 theory | Subject Course 1, 2, 3 and 4 Practical | Total |
|----------------|-------------------------------------|----------------------------------------|-------|
| Lectures/ Week | 16                                  | 16                                     | 32    |
| Credits        | 16                                  | 08                                     | 24    |

Semester IV Credit distribution is shown in Table 8.3.5. (B)

Table 8.3.5. (B)

| Subject | Subject Course 1,2 and 3 theory | Subject Course 1,2 and 3 Practical | Dissertation* | Total |
|---------|---------------------------------|------------------------------------|---------------|-------|
| L/W     | 12                              | 12                                 | 08            | 32    |
| Credits | 12                              | 06                                 | 06            | 24    |

M.Sc. in: Botany / Geology / Life Science / Microbiology

#### 8.3.6. Scheme of Evaluation (Theory and Practical Courses)

- **8.3.6.1.** Continuous Internal Assessment 40 %
- **8.3.6.2.** End Semester Examination 60 %

#### 8.3.7. Integrated Fieldwork

There are mandatory two weeks of field work at the end of the first semester. The field areas are specifically chosen so as to offer a rich learning experience through exercises in detailed geological mapping, sample collection, analysis of satellite imageries of the study area and actual large scale mapping. The aim of this field training is to initiate the student into learning techniques which will be useful for his / her dissertation during the fourth semester. It will also help the student during his / her professional career as a Geologist.

#### 8.3.8. Facilities in the Department

- 8.3.8.1. Along with the standard laboratory equipment for Earth Sciences, the Department has research grade petrological microscopes and student petrological microscopes. The rock and mineral section cutting unit is well equipped with machines and trained manpower for preparing rock and mineral thin sections. Five microscopes are procured for ore-microscopy studies. For sedimentalogy work, a sieve shaker with standard set of sieves and good binocular zoom microscopes are available. Ground water exploration work is done using the Electrical Resistivity and Sounding system. The department has licensed software for the GIS and Remote Sensing work. Modern surveying equipment such as GPS, Theodolite, Auto Level along with all accessories is available for detailed field mapping.
- 8.3.8.2. Over the span of about 90 years, the Department has accumulated a formidable collection of rocks and mineral specimens from around the world. A well-stocked rock thin section library is also present. Topographical maps covering almost the entire country are available in digital form and also in print along with digital satellite imageries of large parts of the country. The Department has a UV lamp for mineral exploration. In addition, the department has acquired new equipment like Total station, GPS, Ground water restistivity (low frequency), Petrothin sectioning system for petrographic thin sections and a drone for aerial photography. Facilities for wet and dry chemical analysis of rocks and standard equipment for measuring load bearing capacity of rocks (unconfined compressive strength) is available. The centralized library has some of the latest publications in Earth Sciences and allied fields and is also supported by the online N-List (INFLIBNET) and a considerable collection of reference books in the departmental and faculty library. Learners are also encouraged to participate in summer and winter internships, for which, placement assistance is provided.

M.Sc. in: Botany / Geology / Life Science / Microbiology

#### 8.4. M.Sc. DEGREE IN LIFE SCIENCE

- **8.4.1. MSc.** (By Papers) Life Science with a specialization in Applied Medical Science

  The Department of Life Science started the M.Sc. course in 1980. It offers two postgraduate programmes.
  - **8.4.1.1.** Life Science is a vast subject that is structured to engage a student in multiple avenues of biology. The applied sciences draw from the fundamentals that are taught in the programme and focus attention on the medical field. This acts as a launch pad for careers in diverse fields, ranging from a purely academic endeavour such as research and teaching to entrepreneurship, law, science writing, etc. The programme is designed to strengthen and enhance a student's understanding and knowledge of Biology by exposure to several fields such as Cell Biology, Physiology, Genetics, Immunology, Microbiology etc., in mainstream biology and allied fields such as Biochemistry, Biostatistics, Pharmacology, Cancer and Stem cell biology and Bioinformatics.
  - **8.4.1.2.** The programme will be conducted by the eleven faculty of the department using a blended learning approach which includes classical classroom teaching, self-study, experiential learning, seminars, presentations, field visits, etc. As part of their training, students will have an opportunity to work on a research project in the second year and submit a dissertation / reports on it. The students are also strongly encouraged to complete summer internships to complement the programme.

#### 8.4.2. MSc. (By Research) in Life Science

There are two research guides for a PG programme in the department. Interested candidates may approach the department for further details.

#### 8.4.2.1. Eligibility Criteria

- **8.4.2.1.1.** Graduates in Botany, Biochemistry, Biotechnology, Life Science, Microbiology, Zoology from the University of Mumbai are all eligible.
- **8.4.2.1.2.** Graduates in any of the above-mentioned disciplines from other Universities are also eligible, but will have to fulfil 8.4.3.3., page 85.
- **8.4.2.1.3.** For Eligibility / Transfer / Migration Certificates: Refer 8.1.6, 8.1.7., page 74. For Reservation Criteria: Refer 8.1.11, page 74
- **8.4.2.2. Process of Selection:** Applicants will be selected on the basis of the TYBSc marks / grades.

### M.Sc. in: Botany / Geology / Life Science / Microbiology

#### 8.4.3. Syllabi per Semester

#### Semester I

| Code     | Course Title                                                                              | L/W | Credits |
|----------|-------------------------------------------------------------------------------------------|-----|---------|
| SLSC0701 | Cell Biology                                                                              | 4   | 4       |
| SLSC0702 | Scientific Comm., Research Methodology, Intellectual Property Rights and Entrepreneurship | 4   | 4       |
| SLSC0703 | Biochemistry                                                                              | 4   | 4       |
| SLSC0704 | Laboratory Management and Analytical Techniques                                           | 4   | 4       |
| SLSC07PR | Practicals                                                                                | 16  | 8       |

#### Semester II

| Code     | Course Title                        | L/W | Credits |
|----------|-------------------------------------|-----|---------|
| SLSC0801 | Human Physiology - I                | 4   | 4       |
| SLSC0802 | Basic Mathematics and Biostatistics | 4   | 4       |
| SLSC0803 | Fundamentals of Immunology          | 4   | 4       |
| SLSC0804 | Microbial Diseases                  | 4   | 4       |
| SLSC08PR | Practicals                          | 16  | 8       |

#### Semester III

| Code     | Course Title                                   | L/W | Credits |
|----------|------------------------------------------------|-----|---------|
| SLSC0901 | Human Physiology - II                          | 4   | 4       |
| SLSC0902 | Molecular Biology & Recombinant DNA Technology | 4   | 4       |
| SLSC0903 | Bioinformatics and Routine Diagnostics         | 4   | 4       |
| SLSC0904 | Clinical Microbiology and Public Health        | 4   | 4       |
| SLSC09PR | Practicals                                     | 16  | 8       |

#### Semester IV

| Code     | Course Title                         | L/W | Credits |
|----------|--------------------------------------|-----|---------|
| SLSC1001 | Human Genetics                       | 4   | 4       |
| SLSC1002 | Pharmacology & Clinical Research     | 4   | 4       |
| SLSC1003 | Cancer Biology and Stem Cell Biology | 4   | 4       |
| SLSC1004 | Applied Biology                      | 4   | 4       |
| SLSC10PR | Practicals                           | 16  | 8       |

8.4.4. Semesters I, II, III & IV Credit distribution is shown in Table 8.4.6.

Table 8.4.6.

| Subject | Subject Course 1, 2, 3<br>and 4 Theory | Subject Course 1, 2, 3 and 4 Practical | Total |
|---------|----------------------------------------|----------------------------------------|-------|
| L/W     | 16                                     | 16                                     | 32    |
| Credits | 16                                     | 08                                     | 24    |

#### 8.4.5. Scheme of Evaluation

- **8.4.5.1.** Internal 40%: 2 internal tests each for 20% of the total marks Tests / Quizzes / MCQs / Assignments / Essays / Case Studies / Presentations / Projects / Surveys / Flipped Classes.
- **8.4.5.2. External 60%:** 1 Examination for 2 hours at the end of each semester.

M.Sc. in: Botany / Geology / Life Science / Microbiology

#### 8.4.6. Facilities in the Department

- **8.4.6.1.** The Department of Life Science& Bio-Chemistry is recognized by the University of Mumbai for MSc (by Research) and PhD, with research guides for both.
- **8.4.6.2.** All equipment and requirements for MSc (by Papers / Research) along with a common instrumentation facility and Library are available.
- **8.4.6.3.** Other activities for this course: Annual Seminars / Conferences / Internships / Industrial Visits / Guest Speakers.

#### 8.5. M.Sc. DEGREE IN MICROBIOLOGY

8.5.1. Introduction: The Department of Microbiology, St. Xavier's College, is the oldest Microbiology Department in the Country (over eighty years old). Microbiology, one of the three classical disciplines in the Biological Sciences is an extremely diverse and complex field. A constantly changing and advancing science it has spawned the evolution of modern scientific disciplines like microbial biotechnology, genetic engineering, immunology, molecular biology, genomics and solve many challenges in health, energy, environment, etc. The course is designed to provide students with training and research experience that will prepare them for a wide range of careers in pure and applied sciences.

#### 8.5.2. Eligibility Criteria

- **8.5.2.1.** A candidate for being eligible for admission to the M.Sc. Degree in Microbiology should have passed the B.Sc. (Three year integrated course) degree examination of the University of Mumbai with at least 14 theory courses and 6 practical courses (i.e. minimum required for majoring in a subject) in Microbiology **OR** B.Sc. Microbiology from any other University.
- **8.5.2.2.** For Eligibility / Transfer / Migration Certificates: Refer 8.1.6, 8.1.7. on page 74. Reservation Criteria: Refer: 8.1.11 on page 74

#### 8.5.3. Syllabi per Semester

#### Semester I

| Code     | Course Title                                 | L/W | Credits |
|----------|----------------------------------------------|-----|---------|
| SMIC0701 | Virology                                     | 4   | 4       |
| SMIC0702 | Genetics                                     | 4   | 4       |
| SMIC0703 | Microbial Biochemistry - I                   | 4   | 4       |
| SMIC0704 | Immunology                                   | 4   | 4       |
| SMIC07PR | Laboratory & Scientific Communication Skills | 8   | 8       |

#### Semester II

# M.Sc. in: Botany / Geology / Life Science / Microbiology

| Code       | Course Title                       | L/W | Credits |
|------------|------------------------------------|-----|---------|
| SMIC0801   | Cell Biology                       | 4   | 4       |
| SMIC0802   | Genetics and Bioinformatics        | 4   | 4       |
| SMIC0803   | Microbial Biochemistry II          | 4   | 4       |
| SMIC0804   | Medical Microbiology               | 4   | 4       |
| SMIC0801PR | Cell Biology & Bioinformatics      | 4   | 2       |
| SMIC0802PR | Molecular Biology                  | 4   | 2       |
| SMIC0803PR | Microbial Biochemistry – II        | 4   | 2       |
| SMIC0804PR | Medical Microbiology & Mathematics | 4   | 2       |

#### Semester III

| Code     | Course Title                                | L/W | Credits |
|----------|---------------------------------------------|-----|---------|
| SMIC0901 | Medical and Pharmaceutical Microbiology     | 4   | 4       |
| SMIC0902 | Tools and Techniques: Biomolecular Analysis | 4   | 4       |
| SMIC0903 | Bioprocess Technology                       | 4   | 4       |
| SMIC09PR | External Projects                           | 12  | 12      |

**Note:** Semester X: External Project is for a period of 4 months at various research institutes like BARC, TIFR, NCL, ACTREC, FMR, TMC, etc.

#### Semester IV

| Code       | Course Title                                      | L/W | Credits |
|------------|---------------------------------------------------|-----|---------|
| SMIC1001   | Applied & Env'tal Microbiology, Monitoring & Mgt. | 4   | 4       |
| SMIC1002   | Food Microbiology                                 | 4   | 4       |
| SMIC1003   | Pharmaceutical Microbiology                       | 4   | 4       |
| SMIC1004   | Advances in Biotechnology – II                    | 4   | 4       |
| SMIC1001PR | Internal Project                                  | 4   | 2       |
| SMIC1002PR | Internal Project                                  | 4   | 2       |
| SMIC1003PR | Food, Pharmaceutical & Cosmetic Microbiology      | 4   | 2       |
| SMIC1004PR | Environmental Microbiology & Biotechnology        | 4   | 2       |

#### **8.5.4.** Semesters I, II, III & IV Credit distribution is shown in Table 8.5.4.

**Table 8.5.4** 

| Subject | Subject Course 1, 2, 3 and 4 Theory | Subject Course 1, 2, 3 and 4 Practical | Total |
|---------|-------------------------------------|----------------------------------------|-------|
| L/W     | 16                                  | 16                                     | 32    |
| Credits | 16                                  | 08                                     | 24    |

#### 8.5.5. Scheme of Evaluation

### M.Sc. in: Botany / Geology / Life Science / Microbiology

- **8.5.5.1. Theory Courses**: 2 Continuous Internal Assessment and 1 End semester evaluation per course per semester.
- **8.5.5.2. Practical Courses**: 1 Continuous Internal Assessment and 1 End Semester Evaluation per course per semester.
- **8.5.5.3.** Evaluation of the Semester III external project is based on Principal Investigator's assessment of the dissertation submitted, a presentation and *viva-voce*.
- **8.5.5.4.** Evaluation of the Semester IV internal project is based on the assessment of the dissertation submitted, a presentation and *viva-voce*.

#### 8.5.6. Facilities of the Department

- **8.5.6.1.** The Department is well equipped for teaching Modern Microbiology, through its 'Palacios Research Lab'.
- **8.5.6.2.** The Department has instrumentation facilities with sophisticated instruments to carry out teaching, as well as research, in the biological sciences.
- **8.5.6.3.** The Department has its own library.
- **8.5.6.4.** The Department organizes an annual Seminar in Khandala and Industrial visits also.
- **8.5.6.5.** Every year the Department releases a Journal entitled 'Michronicle'.

# 9. POSTGRADUATE ARTS(AIDED) COURSE ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

#### 9.1. M.A. DEGREE IN ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

- 9.1.1. Introduction: In an endeavor to further the holistic understanding of Ancient Indian Culture in all its parameters, this course provides a sound grounding in understanding the various vistas of our history and culture. It helps in promoting the conservation of our heritage and also helps in heritage management. It opens the door to opportunities in the streams of Archaeology, Museology, Conservation, Social Sciences and Humanities. This course aims at helping students to:
  - **9.1.1.1.** Comprehend the theoretical framework in which to study Indian Culture, Indian Archaeology and Muselogy.
  - **9.1.1.2.** Work with Indian Archaeological data and analyses.
  - **9.1.1.3.** Have practical experience via field trips, practical and workshops.
- 9.1.2. Number of Seats: 60 Seats
- **9.1.3.** Reservation of Seats: Refer 4.1.9 on page 25 and Table 8.1.11 on page 74
- **9.1.4. Fees:** Total fees, sanctioned by the Board of Management, St. Xavier's College (Autonomous), Mumbai are:

M.A. Part I: Rs.35,000 M.A. Part II: Rs.35.000

- **9.1.5. Selection Criteria:** An Entrance Exam is held for students other than Arts and for students from other universities.
- 9.1.6. Eligibility Criteria
  - **9.1.6.1.** Students with a Bachelor's Degree in any faculty or discipline, with a minimum of 50% marks can apply.
  - **9.1.6.2.** Students from the non-Arts faculties will have to appear for an entrance exam and an interview.
  - **9.1.6.3.** For Eligibility / Transfer / Migration Certificates: Refer 8.1.6, 8.1.7. on page 74. (Note: Read B.Sc. as B.A. and M.Sc. as M.A.)

#### 9.1.7. Scheme of Evaluation:

- **9.1.7.1.** Two units of CIAs:
  - **9.1.7.1.1.** CIA 1 (20 marks) will be a Class Test.
  - **9.1.7.1.2.** CIA 2 (20 Marks) will be either a Home Assignment, Class Test, Project Report, Oral Exam (for Language Papers), Field Visit Report, Paper Presentation, etc.
- **9.1.7.2.** The ESE will be for 60 marks.
- **9.1.7.3.** Semester X a Research Thesis will have to be submitted under the guidance of a Research Guide for 80 marks.

# 9. POSTGRADUATE ARTS COURSE (AIDED) ANCIENT INDIAN HISTORY, CULTURE AND ARCHAEOLOGY

#### 9.1.8. Syllabi per Semester

L = Lectures per week & SS = Self-Study hours per week

#### Semester I

| Code     | Course Title                                                              | (L + SS) | Credits |
|----------|---------------------------------------------------------------------------|----------|---------|
| AAIC0701 | Ancient India Through the Ages: From Prehistoric to Early Historic Period | 4 + 2    | 6       |
| AAIC0702 | Studies in Indian Archaeology                                             | 4 + 2    | 6       |
| AAIC0703 | Socio- Political, Economic & Scientific Aspects in Ancient India          | 4 + 2    | 6       |
| AAIC0704 | Study of Epigraphic& Numismatics of India OR                              |          | 6       |
| AAIC0705 | History of Performing Arts and Theatre in India                           | 4 + 2    | 6       |

#### Semester II

| • • • • • • • • • • • • • • • • • • • • |                                                                         |          |         |
|-----------------------------------------|-------------------------------------------------------------------------|----------|---------|
| Code                                    | Course Title                                                            | (L + SS) | Credits |
| AAIC0801                                | Ancient India through the Ages: From Classical to Early Medieval Period | 4 + 2    | 6       |
| AAIC0802                                | Facets of Indian Art and Architecture                                   | 4 + 2    | 6       |
| AAIC0803                                | Introduction to Buddhist Studies                                        | 4 + 2    | 6       |
| AAIC0804                                | Maritime Heritage of Ancient India OR                                   | 4 + 2    | 6       |
| AAIC0805                                | Brief Study of the Comparative Mythology of the World                   | 4 + 2    | 6       |

#### Semester III

| Code      | Course Title                                                | (L + SS) | Credits |
|-----------|-------------------------------------------------------------|----------|---------|
| AAIC0901  | Religious & Philosophical Thoughts in Ancient India         | 4 + 2    | 6       |
| AAIC0902  | Studies in Indian Iconography, Paintings & Temple Arch'ture | 4 + 2    | 6       |
| AAIC0903  | Studies in Conservation and Restoration                     | 4 + 2    | 6       |
| AAICE0904 | Introduction to Pali Language                               | 4 + 2    | 6       |

#### **Semester IV**

| Code      | Course Title                                                          |    | (L + SS) | Credits |
|-----------|-----------------------------------------------------------------------|----|----------|---------|
| AAIC1001  | Museology & Preventive Conservation of Sites & Collections            |    | 4 + 2    | 6       |
| AAIC1002  | A Study of the Cultural History of World Civilization                 |    | 4 + 2    | 6       |
| AAICE1003 | Research Methodology in Ancient Indian History, Culture & Archaeology |    | 4 + 2    | 6       |
| AAICE1004 | Studies in Pali Literature and Language                               | OR | 4 + 2    | 6       |
| AAICE1005 | Remedial Conservation of Tangible Heritage                            |    | 4 + 2    | 6       |

- **9.1.8.1.** Self-Study Hours of students are monitored by the concerned Lecturer via the quality of the student's participation in the classroom deliberations.
- **9.1.8.2.** Semesters I, II, III & IV Credit distribution is shown in Table 9.1.8.2.

Table 9.1.8.2.

| Subject's L/W | Total Credits |
|---------------|---------------|
| 24            | 24            |

#### 10.1. M.Sc. in BIG DATA ANALYTICS

- **10.1.1. Introduction:** Data today is treated as a source of energy, in any venture, as they point out to our yesterdays, our current status and future areas of improvement. An individual can be a 'modern day Oracle' if he / she who can interpret data, with the right kind of analysis This Course, an initiative of Tata Consultancy Services (TCS), has helped in shaping the talent in data analysis for the seamless mutual benefits in the spheres of academics and industry. The curriculum for Big Data Analytics has been developed by Padma Shri Dr. Bimal Roy, former Director, Indian Statistical Institute has developed. The course work comprises Statistical Methods, Probability & Stochastic Process. Linear Algebra & Linear Programming, Computing for Data Sciences, Machine Learning and Database Management. St Xavier's College (Autonomous), Mumbai, will be conducting the full time (4-semester; 96 Credit) M.Sc. in Big data analytics in collaboration with TCS. The main objective of this program is to develop the skill of Big data analytics and data analytics so that students will be placed as data scientists or big data analysts in IT industry. Lectures will be held from Monday to Saturday.
- **10.1.2. Number of seats:** The intake is a maximum of 40 students per year.
- **10.1.3.** Reservation of Seats: Refer 4.1.9 on page 25 and Table 8.1.11 on page 74
- **10.1.4. Selection Process:** Admission will be on the basis of the C.G.P.A or aggregate marks secured at the T.Y.B.Sc. examination. Applications for the course will be available Online. There will be an entrance examination from the academic year 2020-21. College reserves the right to make any changes in the admission policy before the process starts.

#### 10.1.5. Eligibility Criteria

- **10.1.5.1.** Students with a B.Sc. in either Maths or Statistics or IT or CS or B.C.A from any recognized Indian university with a minimum of 55 % or equivalent C.G.P.A are eligible for this program. Courses in Calculus and Linear Algebra during the B.Sc. is mandatory.
- **10.1.5.2.** For Eligibility / Transfer / Migration Certificates: Refer 8.1.6, 8.1.7. on page 74.
- **10.1.6. Introductory Fee Structure:** As sanctioned by the Board of Management, St. Xavier's College, the fees is Rs. 90,000/- for M.Sc. Part 1 & M.Sc. Part 2 . It would be revised depending on the variable factors like cloud service charge and professional charge etc. from 2020 June onwards.

### 10.1.7. Syllabus per Semester:

#### Semester I

| Course Code                                                          | Course Name                                          | Credits | Lectures |
|----------------------------------------------------------------------|------------------------------------------------------|---------|----------|
| ITS0701                                                              | Statistical Method                                   | 3       | 45       |
| ITS0702                                                              | Probability & Stochastic Process                     | 3       | 45       |
| ITS0703                                                              | Linear Algebra & Linear Programming                  | 3       | 45       |
| ITS0704                                                              | Computing for Data Sciences using R, Python and Java | 3       | 45       |
| ITS0705                                                              | Database Management – Relational and Non-Relational  | 3       | 45       |
| ITS07PR1                                                             | Linear Algebra & Linear Programming & Statistics     | 3       | 60       |
| ITS07PR2 Data base Management Systems and computing for data science |                                                      | 3       | 60       |
| ITS07PR3                                                             | Python Programming                                   | 3       | 60       |
|                                                                      | Total                                                | 24      | 405      |

#### Semester II

| Course Code | Course Name                                                | Credits | Lectures |
|-------------|------------------------------------------------------------|---------|----------|
| ITS0801     | Foundations of Data Science                                | 3       | 45       |
| ITS0802     | Advanced Statistical Methods                               | 3       | 45       |
| ITS0803     | Machine Learning-I                                         | 3       | 45       |
| ITS0804     | Value Thinking                                             | 2       | 30       |
| ITS0805     | Enabling Technologies for Data Science                     | 3       | 45       |
| ITS0806     | Cloud computing /Operation Research                        | 4       | 60       |
| ITS08PR1    | Foundation of Data Science & Advanced Statistical Methods  | 3       | 60       |
| ITS08PR2    | Machine Learning I &Enabling Technologies for Data Science | 3       | 60       |
|             | Total                                                      | 24      | 390      |

#### Semester III

| Course Code | Course Name                                                                                   | Credits | Lectures |
|-------------|-----------------------------------------------------------------------------------------------|---------|----------|
| ITS0901     | Enabling Technologies for Data Science 2                                                      | 4       | 60       |
| ITS0902     | Machine Learning 2 including Deep<br>Learning                                                 | 4       | 60       |
| ITS0903     | Data Visualization with Tableau & Modelling in Operations Management                          | 3       | 45       |
| ITS0904     | IPR / Cyber Security. Text Mining Advanced Analytics                                          | 4       | 60       |
| ITS0905     | Time series Analysis & Forecasting / Bio informatics / Big Data Technologies and Architecture | 4       | 60       |
| ITS09PR1    | Machine Learning 2 including Deep Learning & Elective 1                                       | 3       | 60       |
| ITS09PR2    | Enabling Technologies for Data Science 2 & Elective 2                                         | 3       | 60       |
| ITS09PR3    | Data Visualization with Tableau & Modelling in Operations Management                          | 3       | 60       |
|             | Total                                                                                         | 28      | 465      |

#### Semester IV

| Course Code | Course Name              | Credits    |
|-------------|--------------------------|------------|
| ITS10PJ     | Internship based Project | 20 Credits |

**10.1.8. Scheme of Evaluation:** First three semesters has: 2 CIAs (20 marks each) and an End Semester Examination (60 marks)

#### 10.2. M.Sc. IN BIOTECHNOLOGY

- 10.2.1. Introduction: Genetic engineering has revolutionized biotechnology in the past three decades. India has witnessed a rapid growth in the biotechnology sector with a prominent presence in Recombinant Vaccines, Biosimilars and Transgenic Cotton. With numerous comparative advantages in terms of research development (R & D) facilities, knowledge, skills and cost effectiveness, the biotechnology industry in India has immense potential to emerge as a global key player. To cater to this increasing need for trained professionals, The College began the MSc Biotechnology programme affiliated to the University of Mumbai from the academic year 2007-08.
- 10.2.2. Number of Seats: 30 students per year.

- **10.2.3.** Reservation of Seats: Refer 4.1.9 on page 25 and Table 8.1.11 on page 74
- **10.2.4. Selection Process:** Admission to the course will be purely merit based in accordance with the marks obtained in Biotechnology at the T.Y.B.Sc. examination. Applications for the course will be available Online.

#### 10.2.5. Eligibility Criteria

- 10.2.5.1. B.Sc. Biotechnology (3 year integrated course) degree examination of University of Mumbai or any other University recognized as equivalent thereto, with at least 6 units in Biotech (i.e. minimum required for majoring in the subject) OR With three units in Biotechnology at the T.Y.B.Sc in combination with three units of any other major subject at the T.Y.B.Sc.
- **10.2.5.2.** For Eligibility / Transfer / Migration Certificates: Refer 8.1.6, 8.1.7. on page 74.
- **10.2.6. Fees:** The total fees, including deposit and laboratory fees, as sanctioned by the Board of Management, St. Xavier's College (Autonomous):

M.Sc. Part I : Rs.69,330 (approx.) M.Sc. Part II : Rs.66,773 (approx.)

#### 10.2.7. Syllabi per Semester

Semester I to III comprises of 4 theory courses (100 marks each) and practical courses (50 marks each). Semester III also includes an internal project. Semester IV comprises of 2 theory papers (100 marks each), 2 practical courses (50 marks) and research project (300 marks)

#### Semester I

| Code     | Course Title                                                    | L/W | Credits |
|----------|-----------------------------------------------------------------|-----|---------|
| SBTS0701 | Biomolecules                                                    | 4   | 4       |
| SBTS0702 | Immunology                                                      | 4   | 4       |
| SBTS0703 | Genetics                                                        | 4   | 4       |
| SBTS0704 | Cellular Processes                                              | 4   | 4       |
| SBTS07PR | Techniques in Biotechnology and Scientific Communication Skills | 16  | 8       |

#### Semester II

| Code     | Course Title                   | L/W | Credits |
|----------|--------------------------------|-----|---------|
| SBTS0801 | Metabolism                     | 4   | 4       |
| SBTS0802 | Animal Biotechnology           | 4   | 4       |
| SBTS0803 | Molecular Biotechnology        | 4   | 4       |
| SBTS0804 | Advanced Analytical Techniques | 4   | 4       |
| SBTS08PR | Biotechnology                  | 16  | 8       |

#### Semester III

| Code     | Course Title                            | L/W | Credits |
|----------|-----------------------------------------|-----|---------|
| SBTS0901 | Biostatistics and Bioinformatics        | 4   | 4       |
| SBTS0902 | Drug Development                        | 4   | 4       |
| SBTS0903 | Bioprocess Technology                   | 4   | 4       |
| SBTS0904 | Environmental Biotechnology             | 4   | 4       |
| SBTS09PR | Bioinformatics and Research Methodology | 16  | 8       |

#### Semester IV

| Code       | Course Title             | L/W             | Credits |
|------------|--------------------------|-----------------|---------|
| SBTS1001   | Entrepreneurship and IPR | 4               | 4       |
| SBTS1001PR | Entrepreneurship         | 8               | 4       |
| SBTS1002PR | Research Project         | 4 – 5<br>months | 16      |

**Note:** In Semester IV, the students have to do a **research project for a period of 5 months** at various research centers / National Institutes like BARC, NIRRH, TIFR, NCL Pune, ACTREC, NIO Goa and others.

**10.2.8.** Semester I, II & III Credit distribution is shown in Table 10.2.8.

**Table 10.2.8** 

| Subject | Theory         | Practicals | Total |
|---------|----------------|------------|-------|
| Course  | 01, 02, 03, 04 | 01         |       |
| L/W     | 16             | 16         | 32    |
| Credits | 16             | 08         | 24    |

# **10.2.9.** Table 10.2.9. shows Semester IV Credit distribution **Table 10.2.9.**

| Subject | Theory | Practicals | Research Project | Total |
|---------|--------|------------|------------------|-------|
| Course  | 01     | 01         |                  |       |
| L/W     | 04     | 08         | 4 to 5 months    |       |
| Credits | 04     | 04         | 16               | 24    |

#### 10.2.10. Scheme of Evaluation

**10.2.10.1.** Theory Courses: 2 CIAs and 1 ESE per course per semester.

**10.2.10.2. Practical Courses**: 1 CIA and 1 ESE per course per semester.

**10.2.10.3.** Evaluation of the semester IV project is based on the dissertation submitted, a presentation and *viva-voce*.

#### 10.2.11. Facilities of the Department

- **10.2.11.1.** It is well equipped for teaching Modern Biology. It has an independent Bioinformatics Lab for the students and an in-house Library facility.
- **10.2.11.2.** It has access to the Common Instrumentation Facility with sophisticated instruments to carry out teaching, as well as research, in the biological sciences.
- **10.2.11.3.** It has a Department library.

#### 10.2.12. Extracurricular Activities

- **10.2.12.1. Palindrome:** Students organize an intercollegiate fest, 'Palindrome' to explore the various facets of Biotechnology through workshops and events. They also publish the Department Magazine, 'Palindrome', which is a theme-based collation of articles, reviews and research abstracts.
- **10.2.12.2.** An **Industrial Visit** is organized to various Biotechnology related industries locally or Interstate for Semester I students.

#### 10.3. M.Sc. IN PHYSICS (ASTROPHYSICS)

- 10.3.1.Introduction: Astronomy and Astrophysics has always attracted physics students. There have been tremendous discoveries in recent years which have changed our understanding of the universe. This has been possible due to ingenious use of information technology and use of satellites for astronomical observations among other developments. With numerous advantages in terms of geographical position on the earth, many research institutes, knowledge, skills and cost effectiveness, Astronomy and Astrophysics in India has immense potential to emerge as a global key player. In Mumbai there are many amateur astronomy clubs, but no educational institute offers a Master's course at present. To cater to this increasing need for trained professionals, St. Xavier's College (Autonomous), Mumbai, has started the MSc in Physics (with specialization Astrophysics) programme affiliated to the University of Mumbai from the academic year 2019-20.
- 10.3.2. Number of Seats: 20 students per year.
- 10.3.3. Reservation of Seats: Refer 8.1.11, page 74.
- 10.3.4.Selection Process: B.Sc. students with Physics as one of the major subjects at the final year or equivalent from any recognized university are eligible. The selection criteria (with weightages) are: BSc Grades / Marks 30%, Recommendation Letter, Statement of Purpose & Relevant Competitive exams' score / rank 20%, Co-curricular (e.g., science projects / research) &

Extracurricular activities - 30%, Subject Interview - 20%. Applications for the course will be available online.

#### 10.3.5. Eligibility Criteria

- **10.3.5.1.** Bachelor's degree in science with Physics as one of the major subjects at the final year or equivalent from any recognized university.
- **10.3.5.2.** For Eligibility / Transfer / Migration Certificates: Refer 8.1.6, 8.1.7 on page 74.
- **10.3.6. Fees:** As sanctioned by the Board of Management, St. Xavier's College: M.Sc. Part II: Rs. 95,000/- and M.Sc. Part II: Rs. 95,000/-

#### 10.3.7. Syllabi per Semester

10.3.7.1. There will be eight general physics and four astrophysics theory courses (100 marks each) and laboratory courses corresponding to each of them (50 marks each) in the first three semesters. Students will work on a MSc Thesis or dissertation in the last semester which will be from any Physics or Astrophysics area. For this project work, students can go to several research institutes in the country or can work under the guidance of the in-house faculty. Semester wise Credit distribution is shown below:

#### Semester I

| Course Code | Course Title                            | L/W | No. of Credits |
|-------------|-----------------------------------------|-----|----------------|
| SPHY0701    | Mathematical Methods                    | 4   | 4              |
| SPHY0702    | Classical Mechanics                     | 4   | 4              |
| SPHY0703    | Quantum Mechanics                       | 4   | 4              |
| SPHY0704    | Astronomy and Astrophysics: An Overview | 4   | 4              |
| SPHY07PR    | Practical                               | 16  | 8              |

#### Semester II

| Course Code | Course Title                             | L/W | No. of Credits |
|-------------|------------------------------------------|-----|----------------|
| SPHY0801    | Statistical Mechanics                    | 4   | 4              |
| SPHY0802    | Electrodynamics and Solid State Physics  | 4   | 4              |
| SPHY0803    | Atomic, Molecular & Nuclear Physics      | 4   | 4              |
| SPHY0804    | Electronics and Digital Image Processing | 4   | 4              |
| SPHY08PR    | Practical                                | 16  | 8              |

#### Semester III

| Course Code | Course Title                                | L/W | No. of Credits |
|-------------|---------------------------------------------|-----|----------------|
| SPHY0901    | Physics of Radiation and Matter             | 4   | 4              |
| SPHY0902    | Stellar structure and Evolution             | 4   | 4              |
| SPHY0903    | Galaxies: Formation, structure and dynamics | 4   | 4              |
| SPHY0904    | General Relativity and Cosmology            | 4   | 4              |
| SPHY09PR    | Practical                                   | 16  | 8              |

#### Semester IV

| Course Code | Course Title | No. of Credits |
|-------------|--------------|----------------|
| SPHY10PROJ  | Dissertation | 24             |

#### 10.3.8. Scheme of Evaluation

- **10.3.8.1.** For theory courses (per course per semester): CIA (40 Marks) written test + assignment + review of research article and End Semester Examination (60 Marks) written test.
- **10.3.8.2.** Practical Courses (per course per semester): Experiment based exam, project evaluation (includes exhibit, presentation in seminar PROBE), field trip (includes night sky observation).

#### 10.3.8.3. Evaluation of the Semester IV Dissertation

| Time of Evaluation       | Components of<br>Assessment                      | Average Marks<br>out of 100<br>evaluated by | Weightage in<br>Total Marks |
|--------------------------|--------------------------------------------------|---------------------------------------------|-----------------------------|
|                          | The Thesis Proposal                              | Supervisor                                  | 15%                         |
| Throughout<br>Semester X | Mid semester Report and<br>Presentation          | Referees +<br>Supervisor<br>(Average)       | 20%                         |
|                          | Continuous evaluation for semester IV and thesis | Supervisor                                  | 15%                         |
| End of                   | MSc Thesis                                       | Referees<br>(Average)                       | 20%                         |
| Semester X               | Defence and viva voce                            | Discipline wise<br>Committee                | 30%                         |

#### 10.3.9. Teaching Pedagogy of the Department

- **10.3.9.1.** Emphasis on problem solving in theory universal practice for physics, useful for entrance exams.
- **10.3.9.2.** Zero rote learning for the written exams
- **10.3.9.3.** Practical course experiments directly related to the theory course
- **10.3.9.4.** Project based learning The course-wise projects train students to understand, plan and carry out an experiment on their own. Also enhances their interest and understanding of the theory course.
- 10.3.9.5. This training is very useful for starting independent research The final semester project is expected to be their MSc thesis containing good quality as well as quantity of work. A strong experimental, computational, or theoretical physics content is a must for this work.
- 10.3.9.6. Students should decide on their supervisor and their thesis topic (in consultation with the supervisor) before the semester starts. A student can choose to work with a faculty of the department or a professor from a research institute/university other than Xavier's for his/her dissertation. Every student will follow the General Guidelines provided for the same.
- **10.3.9.7.** Students will be encouraged to take up internships in the summer between 1st and 2nd year.

#### 10.3.10. Resources of the Department

- **10.3.10.1.** Large Labs: There are 5 labs to cater to various research needs.
- **10.3.10.2.** Computer Lab: There is a dedicated computer lab integrated with the Physics lab to take care of the computing needs of our students.
- **10.3.10.3.** Department Library: We have a small department library for the referencing needs of our students.
- 10.3.10.4. Sophisticated Equipment: We have high-end equipment such as Hall effect apparatus, Photoelectric effect apparatus, Zeeman effect apparatus and a six inch Telescope with auto tracking for night sky observations.
- **10.3.10.5.** Dedicated Lab Staff: We have a well-trained and dedicated lab staff to help our students.

#### 10.3.11. Co-curricular Activities of the Department

- **10.3.11.1.** The Department organises an exhibition of physics' experiments called 'Jigyasa', to show case 'possibilities in Physics' in August.
- **10.3.11.2.** A research seminar 'PROBE' is organised in February every year, where students present their projects as research papers through oral / poster presentations.
- **10.3.11.3.** Students will be taken for a field trip to visit some Astronomy / Astrophysics research institute.

#### 11.1. M.A. IN PUBLIC POLICY

- 11.1.1. Introduction: As public policy is an integral aspect of governance and routine living, it is necessary for the academic world to critically engage with it. Currently, in India, there is a dearth of post-graduate degree courses in public policy. It is for these reasons that the College launched a multi-disciplinary Master in Public Policy (MPP) Course in 2013. The course is ideal for Civil Servants, NGO/Development practitioners or those who aspire to join government services; those who aspire to research and publish in the field of Public Policy, especially those who wish to join policy research centres / organizations and those who wish to work in the field of Corporate Social Responsibility; Communications / Media related work around policy issues; consulting for Public Sector.
- 11.1.2. Number of Seats: 60 Students.
- **11.1.3.** Lecture Timings: Evenings (5 pm to 8 pm); 2 lectures per day, on all working days of the week.

#### 11.1.4. Fees

- **11.1.4.1.** For MPP I & II: Rs. 75,000/- per academic year (Payable in 2 installments).
- **11.1.5. Reservation of Seats:** Refer 4.1.9 on page 25 and Table 8.1.11 on page 74.

#### 11.1.6. Selection Process

- **11.1.6.1.** Online Application Forms available on College website from the second half of April. Last date for submission is the third Sunday of May (5 pm IST). The online Application Fee is Rs. 500.
- **11.1.6.2.** Along with the Application Form, the academic exercises announced (as part of the Entrance Exams) for that academic year would have to be uploaded for evaluation.
- **11.1.6.3.** The shortlisted candidates are interviewed (personally or through videoconferencing).
- **11.1.6.4.** Post the interviews, the admissions are finalized.

#### 11.1.7. Eligibility Criteria

- **11.1.7.1.** Students with a Bachelor's Degree in any faculty or discipline, with a minimum of 50% marks can apply for this course.
- **11.1.7.2.** Candidates who have appeared for their VI semester, but have not yet received their Degree results are eligible to apply for admission. Provisional admission would be offered to such admitted students, till the original results are not presented to the College.

- **11.1.7.3.** The Grades awarded by some Universities are converted to percentages according to a formula provided by their respective Universities or by the Association of Indian Universities, New Delhi for foreign students.
- **11.1.7.4.** For Eligibility / Transfer / Migration Certificates: Refer 8.1.6, 8.1.7. on page 74. (Note: Read B.Sc. as B.A. and M.Sc. as M.A.)

#### 11.1.8. Syllabi per Semester:

Note: L = Contact Hours / Week and SS = Self-Study Hours / Week

#### Semester I

| •••••••  | •                         |            |         |
|----------|---------------------------|------------|---------|
| Code     | Course Title              | (L + SS)/W | Credits |
| PPCC0701 | Public Policy Analysis    | 4 + 1      | 5       |
| PPCC0702 | Ethics and Redistribution | 4 + 1      | 5       |
| PPCC0703 | Law and Public Policy     | 4 + 1      | 5       |
| PPCC0704 | Research Methodology I    | 4 + 1      | 5       |

#### Semester II

| Code     | Course Title                  | (L + SS)/W | Credits |
|----------|-------------------------------|------------|---------|
| PPCC0801 | Economics I                   | 4 + 1      | 5       |
| PPCC0802 | Research Methodology II       | 4 + 1      | 5       |
| PPEC0801 | Environment and Public Policy | 4 + 1      | 5       |
| PPEC0802 | Gender and Public Policy      | 4 + 1      | 5       |
| PPEC0803 | Public Health Policy          | 4 + 1      | 5       |

Note: Students choose ANY TWO from PPEC801 to PPEC803

#### Semester III

| Code     | Course Title                          | (L + SS)/W | Credits |
|----------|---------------------------------------|------------|---------|
| PPCC0901 | Economics II                          | 4 + 2      | 6       |
| PPCC0901 | Development Theory (for 2019-20 only) | 4 + 2      | 6       |
| PPCC0902 | Project Planning and Evaluation       | 4 + 2      | 6       |
| PPEC0901 | Urban Policy                          | 4 + 2      | 6       |
| PPEC0902 | Rural Policy                          | 4 + 2      | 6       |
| PPEC0903 | Foreign Policy                        | 4 + 2      | 6       |

Note: Students choose ANY TWO from PPEC901 to PPEC903

#### Semester IV

| Code     | Course Title                               | (L + SS)/W | Credits |
|----------|--------------------------------------------|------------|---------|
| PPCC1001 | Development and Public Policy              | 4 + 2      | 6       |
| PPCC1001 | International Economics (for 2019-20 only) | 4 + 2      | 6       |
| PPCC1002 | Dissertation                               | 0 + 14     | 14      |
| PPEC1001 | Globalization and Labour                   | 4 + 2      | 6       |
| PPEC1002 | Media Policy                               | 4 + 2      | 6       |
| PPEC1003 | Education Policy                           | 4 + 2      | 6       |

Note: Students choose ANY TWO from PPEC1001 to PPEC1003

**11.1.8.1.** The Self-Study Hours of each student are monitored by the concerned Lecturer via the quality of the student's participation in the class room deliberations.

- **11.1.8.2.** In the case of Dissertation (PPCC.10.02) the student is expected to meet the supervising lecturer at least once a week throughout Semester IV. Each of these meeting is recorded and weighted for final marking.
- **11.1.8.3.** Table 11.1.8.3. shows the Credit distribution per semester.

SS/Course | Total L/W | Total Credits Semester L/Course Sem. I (4 Courses) 04 01 20 20 Sem. II (4 Courses) 04 01 20 20 Sem. III(4 Courses) 04 02 24 24 Sem. IV (4 Courses) 04 02 18 18 Sem. IV Dissertation 14 14 14 **Total Credits 96** 

Table 11.1.8.3.

- **11.1.9. Scheme of Evaluation:** Each semester has: 2 CIAs (20 marks each) and 1 ESE (60 Marks)
  - **11.1.9.1.** Compulsory Internship between the II and III Semesters. Students work with organizations connected with various aspects of public policy.
  - **11.1.9.2.** Our students have interned with the Thane Municipal Corporation, Centre for Social Research (Delhi), various State and Central Government Ministries and NGOs involved in various types of social work and action.

#### 11.2. M.A. IN PSYCHOLOGY: LIFESPAN COUNSELLING

- 11.2.1. Introduction: In India, the dearth of mental health professionals is a known concern that ironically goes hand-in-hand with the increasing number of citizens with mental health issues. One factor that contributes to this state of affairs is the lack of opportunities to gain a high quality education in the field of mental health. So as to contribute to bridging this gap, the Department of Psychology, St. Xavier's College (Autonomous) has started a new Master's degree course M.A. Psychology: Lifespan Counseling in June 2019. This course has been designed with the primary objective of creating competent mental health practitioners.
- **11.2.2. Number of seats:** The intake is a maximum of 30 students per year.
- **11.2.3. Reservation of seats:** Refer 4.1.9 on page 25 and Table 8.1.11 on page 74
- **11.2.4. Selection Process**: Admission to the course is merit-based. Eligible students must fill in the online application form and then appear for the entrance

examination held on campus. A merit score is then assigned to every student that is weighted as follows: Their marks in the third year of their Bachelor's degree course (40%) + Their marks on the entrance examination (60%).

- **11.2.5.** Eligibility Criteria: Students with a Bachelor's degree in any faculty or discipline having studied at least one paper in Psychology during the three years of their undergraduate course can fill out the online application.
- **11.2.6. Fees:** As sanctioned by the Board of Management of St. Xavier's College (Autonomous), Mumbai: M.A. Part I: Rs. 92,000/- & M.A. Part II: Rs. 92,000/-

#### 11.2.7. Semester-wise Syllabi

#### **SEMESTER I**

| Code     | Course Title                                       | Hrs/Wk | Credits |
|----------|----------------------------------------------------|--------|---------|
| APSY0701 | Behavioral Neuroscience                            | 2      | 2       |
| APSY0702 | Cultural Context of Counseling                     | 2      | 2       |
| APSY0703 | Counseling Process and Skills                      | 4      | 4       |
| APSY0704 | Theoretical Approaches in Psychotherapy            | 4      | 4       |
| APSY0705 | Research Methodology and Statistics in Psychology  | 4      | 4       |
| APSY0706 | Practicum: Group Process and Individual Counseling | _      | 4       |
|          | Dissertation: Proposal Presentation                |        | 1       |

#### SEMESTER II

| Code     | Course Title                                             | Hrs/Wk | Credits |
|----------|----------------------------------------------------------|--------|---------|
| APSY0801 | Normal & Abnormal Development in Childhood & Adolescence |        | 4       |
| APSY0802 | Psychological Assessment in Childhood & Adolescence      | 4      | 4       |
| APSY0803 | Counselling Special Groups in Childhood & Adolescence    |        | 4       |
| APSY0804 | Psychotherapeutic Techniques I                           | 4      | 4       |
| APSY0805 | Practicum: Fieldwork + Case presentations                |        | 8       |
|          | Dissertation: Method Presentation                        | _      | 1       |

#### **SEMESTER III**

| Code     | Course Title                                                  | Hrs/Wk | Credits |
|----------|---------------------------------------------------------------|--------|---------|
| APSY0901 | Normal and Abnormal Development in Young and Middle Adulthood | 4      | 4       |
| APSY0902 | Psychological Assessment in Young and Middle Adulthood        | 4      | 4       |
| APSY0903 | Counselling special groups in Young and Middle Adulthood      | 4      | 4       |
| APSY0904 | Psychotherapeutic Techniques II                               | 4      | 4       |
| APSY0905 | Practicum: Fieldwork + Case presentations                     |        | 8       |
|          | Dissertation: Analysis Presentation                           |        | 1       |

#### SEMESTER IV

| Code     | Course Title                                      | Hrs/Wk | Credits |
|----------|---------------------------------------------------|--------|---------|
| APSY1001 | Normal and Abnormal Development in Late Adulthood | 4      | 4       |
| APSY1002 | Psychological Assessment in Late Adulthood        | 4      | 4       |
| APSY1003 | Counselling special groups in Late Adulthood      | 4      | 4       |
| APSY1004 | Psychotherapeutic Techniques III                  | 4      | 4       |
| APSY1005 | Practicum: Fieldwork + Case presentations         |        | 8       |
| APSY1006 | Dissertation: Report Submission                   |        | 1       |

- **11.2.8. Credit Distribution:** The course consists of 96 credits. Each credit equals 15 hours. The credit distribution across the course is as follows:
  - **11.2.8.1.** Semester-wise: 21 credits (Semester I) + 25 credits (Semester II) + 25 credits (Semester IV)
  - **11.2.8.2.** Theory to Fieldwork ratio: 64 credits (Theory) + 28 credits (Fieldwork) + 4 credits (Research)

#### 11.2.9. Scheme of Evaluation

- **11.2.9.1.** For each theory paper, the evaluation weightage is divided as follows: 40% to CIA and 60% to End Semester Examinations (ESE).
- **11.2.9.2.** For fieldwork, evaluation is divided as 40% to case presentations (CIA), 60% to case file (ESE).
- **11.2.9.3.** For the research dissertation, evaluation is divided as one presentation to the expert panel per semester + report submission.

# 12. Ph.D. PROGRAMMES

#### 12.1. Ph.D. Programme Details

- **12.1.1.** The College has Ph.D. programmes in the following subjects:
  - **12.1.1.1. Science:** Botany; Chemistry; Geology; Life Science & Biochemistry; Zoology.
  - **12.1.1.2. Arts:** Ancient Indian History, Culture & Archaeology; History; Avesta Pahlavi.
  - **12.1.1.3.** Commerce: Management and Accounts.
- **12.1.2.** Table 12.1.2. contains the names of the college faculty who are recognized Research Guides (vis-à- vis the University of Mumbai):

Table 12.1.2.

| Sr. No. | Name of Research Guides       | Subjects     |
|---------|-------------------------------|--------------|
| 1       | Dr. Rajendra D. Shinde        | Botany       |
| 2       | Dr. Hrishikesh P. Samant      | Geology      |
| 3       | Dr. Pralhad Rege              | Chemistry    |
| 4       | Dr. Ashma Aggarwal            | Chemistry    |
| 5       | Dr. Pravin Henriques          | Geology      |
| 6       | Dr. Priya Sundarrajan         | Life Science |
| 7       | Dr. Radhekrishna Dubey        | Physics      |
| 8       | Dr. (Ms.) Madhuri S. Hambarde | Zoology      |
| 9       | Dr. Karuna Gokarn             | Microbiology |
| 10      | Dr. (Ms.) Anita Rane-Kothare  | AIHCA        |
| 11      | Dr. (Sr.) Anila Verghese      | History      |
| 12      | Dr. (Ms.) Sonali Pednekar     | History      |
| 13      | Dr. Arvind Dhond              | Commerce     |
| 14      | Dr. Aditi Sawant              | Economics    |

**12.1.3.** Table 12.1.3. indicates the various research spaces / facilities that have received recognition from the University of Mumbai:

Table 12.1.3.

| Sr. No. | Subjects          | Specialization | No. of<br>Seats | Sanction No. & Date                                         |
|---------|-------------------|----------------|-----------------|-------------------------------------------------------------|
| 1       | AIHCA             | AIHCA          | 10              | No. 7963, dt 7/9/1999 No. Th /                              |
| 2       | History           | History        | 30              | 5910, dt 12/7/1999, Read with<br>No. Th / 6381,dt 21/9/1988 |
| 3       | Avesta<br>Pahlavi | Avesta Pahlavi | 03              | Permanent Recognition                                       |

### 12. Ph.D. PROGRAMMES

| 4 | Botany                         | Botany       | 20 | No. Th. / ICD/2012-13 / 2603 dt 30/7/13. Permanent Recognition |
|---|--------------------------------|--------------|----|----------------------------------------------------------------|
| 5 | Chemistry                      | Chemistry    | 20 | No Th / 2057 dt 18/3/1997<br>Permanent Recognition             |
| 6 | Geology                        | Geology      | 10 | Permanent Recognition                                          |
| 7 | Life Science &<br>Biochemistry | Life Science | 05 | Th / ICO / 2019-20 / 2080 dt.<br>01/08/2019                    |
| 8 | Zoology                        | Zoology      | 04 | Th / 10635 of 2004 dt.<br>14/07/2004                           |

#### 12.1.4. Qualifications

M.Sc. / M.A. with C.S.I.R. / U.G.C. J.R.F. / N.E.T., **OR** Maharashtra S.E.T.; **OR** University of Mumbai – P.E.T.

#### 12.1.5. Criteria for Registration

As per procedures laid down by the University of Mumbai.

#### 12.1.6. Admission Procedures

All admissions to the above courses begin only after the qualifying examination (refer Section12.1.4.) results are declared.

#### 12.1.7. Fees

As directed by University of Mumbai. Separate Laboratory Fees need to be paid to St. Xavier's College (Autonomous), Mumbai.

#### 12.1.8. Eligibility Certificate

Refer 8.1.6, 8.1.7. on page 77.

**12.1.9. Departments' Information:** Details of depts. which are eligible for guiding Ph.Ds. in St. Xavier's College (Autonomous), Mumbai, as of May 2019:

#### 12.1.10. Department of Botany

- **12.1.10.1.** Recognition as Research Lab: Permanent (under University of Mumbai) (Blatter Herbarium)
- **12.1.10.2.** Number of Seats: 20 (13 Registered and 07 Vacant)
- **12.1.10.3.** Recognized Research Guides (by University of Mumbai): Prof. (Ms) Ujwala Bapat (Rtd.), Dr. Rajendra Shinde.

#### 12.1.11. Department of Chemistry

- **12.1.11.1.** Recognition as Research Lab: Permanent (under University of Mumbai) (Nadkarny-Sacasa Laboratory
- **12.1.11.2. Number of Seats:** 20. (02 Registered and 18 Vacant)
- **12.1.11.3.** Recognized Research Guide (by University of Mumbai): Prof. Freddy Havaldar (Rtd.); Dr. Pralhad Rege.; Dr. Ashma Aggarwal

# 12. Ph.D. PROGRAMMES

### 12.1.12. Department of Geology

- **12.1.12.1.** Recognition as Research Lab: Permanent (under University of Mumbai).
- **12.1.12.2. Number of Seats:** 10. (00 Registered and 10 Vacant).
- **12.1.12.3.** Recognized Research Guides (by University of Mumbai): Dr. Hrishikesh P. Samant, Dr. Pravin Henriques.

### 12.1.13. Department of Life Science and Biochemistry

- **12.1.13.1.** Recognition as Research Lab: Permanent (under University of Mumbai)
- **12.1.13.2. Number of Seats:** 05. (00 Registered and 05 Vacant)
- **12.1.13.3.** Recognized Research Guide (by University of Mumbai): Dr. (Ms.) Priya Sunderrajan.

### 12.1.14. Department of Zoology:

- **12.1.14.1.** Recognition as Research Lab: Permanent (under University of Mumbai)
- **12.1.14.2. Number of Seats:** 04. (03 Registered and 01 Vacant)
- **12.1.14.3.** Recognized Research Guide (by University of Mumbai): Dr. (Ms.) Madhuri S. Hambarde.

### 12.1.15. Department of Ancient Indian History, Culture and Archeology:

- **12.1.15.1.** Recognition as Research Centre: Permanent (under University of Mumbai)
- **12.1.15.2. Number of Seats:** 10. (02 Registered and 08 Vacant)
- **12.1.15.3.** Recognized Research Guide (by University of Mumbai): Dr. (Ms.) Anita Rane-Kothare

### 12.1.16. Department of History:

- **12.1.16.1.** Recognition as Research Centre: Permanent (under University of Mumbai)
- **12.1.16.2.** Number of Seats: 30 (02 Registered and 28 Vacant)
- **12.1.16.3.** Recognized Research Guides (by University of Mumbai): Dr. (Sr.) Anila Verghese (Rtd), Dr. (Ms) Sonali Pednekar

#### 13.1. PG DIPLOMA IN BIOINFORMATICS

13.1.1. Introduction: Bioinformatics has emerged as a field concerned with storage, manipulation, and extraction of valuable information from Contemporary Biology, intertwined with technology. Bioinformatics research is poised to become one of the fastest emerging markets in India. To cater to changing trends in biological science research and incorporation of machine learning, the Diploma in Bioinformatics, a one-year programme, aims to train the young mind with basics and advanced data analysis methods and tools in biological science. The course will be an advantage and asset for learners intending to be associated with industries as well as research and development in the field of Applied Biology.

#### 13.1.2. Curriculum:

- **13.1.2.1.** The sixty-five-credits course with 10 modules will be dealt with in regular theory, practical and project-based learning. The modules will be covered in 2 semesters of 3 4 months each.
- **13.1.2.2.** Lectures and Practicals will be held (3 days/week 3hours/day) Online mode

### 13.1.2.3. Modules:

| DBI01 | Introduction To Bioinformatics         |              |
|-------|----------------------------------------|--------------|
| DBI02 | Biological Databases And Data Mining   | (1 Credit)   |
| DBI03 | Analysis Of Biological Sequences       | (4 Credits)  |
| DBI04 | Biostatistics And Bioinformatics       | (10 Credits) |
| DBI05 | Structural Bioinformatics              | (6 Credits)  |
| DBI06 | Bioinformatics In Drug Designing       | (8 credits)  |
| DBI07 | Omics In Biology                       | (8 Credits)  |
| DBI08 | Next Generation Sequencing Informatics | (10 Credits) |
| DB09  | Coding For Biologists – Bioprogramming | (8 Credits)  |
| DBI10 | Project                                | (10 Credits) |
|       |                                        |              |

- **13.1.2.4.** Minimum 75% attendance, class participation, submission of regular assignment and expert guided method of evaluation are the minimum requirements for the completion of the course.
- **13.1.2.5. Duration:** The course will start from August 2020 till April 2021.
- **13.1.2.6. Evaluation:** At the end of every module, a written test / practical test or any other mode of evaluation depending on the needs and learning objective specified for the module, will be administered to the students. In addition, lab exercises and assignments submitted during the course will be evaluated. Completion of the guided project by the students on any of the modules and the presentation will also form a part of the evaluation.

### 13.1.2.7. Eligibility Criteria

- **13.1.2.7.1.** Students who have completed a Bachelor's Degree or Master's Degree in biological science streams.
- 13.1.2.7.2. Students who are currently pursuing M.Sc. I / II year in Biological Sciences (specialization in subjects of Biotechnology / Microbiology / Biochemistry / Life Science / Botany / Zoology) / BTech/MTech/B Pharm / MPharm
- **13.1.2.8. Course Fees**: Rs 65,000/- (Payable in two instalments at the point of admission and prior to December 2020)
- 13.1.2.9. Number of seats: 30 seats
- 13.1.2.10. Contact Person
  - **13.1.2.10.1.** Dr. Karuna Gokarn, HOD, PGDBT; karuna.gokarn@xaviers.edu; 9820590072.
  - **13.1.2.10.2.** Ms. Norine D'Souza, Faculty, PGDBT; norine.dsouza@xaviers.edu; 9819970529.

#### 13.2. DIPLOMA COURSE IN CLINICAL RESEARCH

- 13.2.1. Introduction: Clinical research is a branch of healthcare science that determines the safety and effectiveness of medications, devices, diagnostic products and treatment regimens intended for human use. Clinical trials are conducted in a highly regulated and controlled environment and forms an integral part of the drug development process. Before a new drug is marketed, it has to be proven safe and efficacious, using controlled clinical trials. This course is designed to equip candidates with the knowledge and skills to pursue any of the following functions within the clinical research industry, viz., Clinical Operations, Data Management and Clinical Study Co-ordinator. The job opportunities for Clinical Operations (Clinical Trial Assistant / Clinical Research Associate) and Data Management exists within Pharmaceutical or Biotechnology companies as well as Contract Clinical Research Organizations (CROs). The job opportunities for Clinical Study Co-ordinators exists at Hospitals and Institutions conducting clinical research.
- **13.2.2. Curriculum:** The course consists of 6 months of class-room training over 24 weekends and four to six months of internship within the clinical research industry. The curriculum is has six modules:

| Module 1: Clinical Research: Overview: Ethics, Guidelines & Regs.  | (11 credits) |
|--------------------------------------------------------------------|--------------|
| Module 2: Clinical Trial Planning and Design                       | (9 credits)  |
| Module 3: Clinical Trial Conduct, Compliance and Quality Assurance | (9 credits)  |
| Module 4: Pharmacovigilance                                        | (4 credits)  |
| Module 5: Data Analysis & Management in Clinical Research          | (10 credits) |
| Module 6: Clinical Research Management & Interpersonal Skills      | (5 credits)  |

The teaching methodology includes lectures by Industry Professionals, class-room discussions and debates, group assignments and case studies. The Data Analysis and Management Module includes hands-on training in Data Management activities. Evaluations are conducted by a combination of written tests, presentations and performance in class-room and home based assignments.

### 13.2.3. Course Eligibility

- **13.2.3.1.** Students with a minimum of a bachelor's degree in any biological science will be eligible to apply for the course; however, students with a Master's Degree will be given preference.
- **13.2.3.2.** A maximum of 25 students will be selected for each batch, based on their academic background and a screening interview.
- **13.2.4.** Course Structure and Evaluation: The course will be conducted at the St. Xavier's College Campus and will comprise of:
  - **13.2.4.1.** 24 Weekend lectures; Saturday 4 hours (2 pm to 6 pm); Sundays 6 hours (9.00 am to 3.00 pm) for 24 credits.
  - **13.2.4.2.** Home assignments and assessments (10 hours per week); 24 credits over 24 weeks. 4 to 6 months' industry internship program / dissertation project; 64 to 96 credits.
  - **13.2.4.3.** Final assessment and Presentations: 8 credits.
  - **13.2.4.4.** All students from each batch will be recommended for internship positions to the clinical research industry for a period of 4 months. At the end of the internship, each student will be asked to submit a report and make a presentation to the group. Evaluation will be made based on the written test and the presentation, judged for its content & delivery.
- **13.2.5. Course Fees:** Rs.1,22,000 consolidated (Inclusive of GST). This includes tuition fees, course materials & handouts, refreshments during lectures, video conferencing as applicable, and lecture room facilities.
- 13.2.6. Contact Details: Dr. (Ms.) Seema Das or College Website.

#### 13.3. DIPLOMA IN FORENSIC SCIENCE AND CRIMINAL LAW

- **13.3.1. Conducted by:** Dept. of Zoology and Forensic Science, St. Xavier's College (Autonomous), Mumbai.
- 13.3.2. About the Program: This course has been formulated with the aim to provide an introduction and orientation to the functioning of the Indian Criminal Justice delivery system, and the role of forensic science plays in this process. With the use of case studies, mock crime scene and various practicals, it gives the students the opportunity to hone in the basic skills necessary for investigation. This course is apt for all interested professionals from the fields of Police, Security, Legal Management, Media, Sociology as well as any citizen or student keen to learn more about forensic science and the law.

#### 13.3.3. Course Content:

- 1. Foundations of Criminal law, Crime Scenes & Crime Scene Processing
- 2. Investigation procedures Crime Scene to Courtroom
- 3. Forensic Biology & Human Forensics
- 4. Medico-legal Investigations
- 5. Document Analysis
- 6. Cyber Forensics
- 7. Media and the Law
- 8. End of Year Project and Moot Court
- 9. Practicals
- **13.3.4. Duration:** One academic year, Part Time.
- **13.3.5.** Timings: Monday, Tuesday, Wednesday evenings.
- **13.3.6.** Fees Structure: Rs. 27,200 (including registration).
- **13.3.7. Pre-registration (Online)forms:** www.xaviers.edu (in College Run Courses).

### 13.3.8. Contact Details:

Dr. (Ms.) Pushpa Sinkar (98203-84648, pushpa.sinkar@xaviers.edu);
Ms. Riva Pocha (98210-40421, riva.pocha@xaviers.edu);
Ms. Sejal Gupta (9820949850, sejal.gupta@xaviers.edu);
Ms. Alethea Vaz (9819706026, alethea.vaz@xaviers.edu).

#### 13.4. ON-LINE CERTIFICATE COURSE IN FORENSIC SCIENCE

- **13.4.1.** The objectives to make quality forensic education easily accessible by:
  - **13.4.1.1.** Facilitating distance learning for students interested in forensic science, living in different parts of India, with limited funds.
  - **13.4.1.2.** Providing students interested in careers in forensic science a basic understanding of crime scene related forensic science practice, while they are studying other subjects at the graduate / post graduate level.
  - **13.4.1.3.** Familiarizing law enforcement professionals and law students with a basic understanding of forensic sciences, while allowing them the flexibility of a non-classroom teaching mode.

#### 13.4.2. Course Content

- 1. An Introduction to Forensic Science
- 2. Ethics and Research Methods
- 3. Understanding the Indian Police and Legal System
- 4. Crime Scene Processing & Investigation Techniques
- 5. Forensic Instrumentation Techniques & Applications
- 6. Impression Evidence
- 7. Biological Evidence Types, Handling & Analysis
- 8. Medical Jurisprudence
- 9. Role of Forensic Science in Counter-Terrorism
- 10. Emerging Trends in Forensic Science

- **13.4.3.** Eligibility Criteria: Minimum HSC certificate or equivalent.
- **13.4.4. Duration:** 6 Months (twice a year)
- **13.4.5.** Fees: Course Fees: Rs. 15,000/- Demand Draft, drawn in favour of:
- The Bombay St. Xavier's College Society (Online Payment also available)

**Processing Charges:** Rs. 500/- (by cash for domestic students); Rs. 1000/- (by cash for international students).

### 13.4.6. Application forms available on the College website

xaviers.edu 
CLICK ON Courses and admissions 
CLICK ON Online Certificate Program in Forensic Science.

#### 13.4.7. Contact Details

- 1. Program Facilitator: Dr. Pushpa Sinkar Landline: (022)22620662 Ext 233 pushpa.sinkar@xaviers.edu
- 2. Faculty & Administrator: Ms. Alethea Vaz alethea.vaz@xaviers.edu
- 3. Program Co-ordinator & Faculty: Ms. Riva Pocha riva.pocha@xaviers.edu
- 4. Faculty: Ms. Sejal Gupta sejal.gupta@xaviers.edu

#### 13.5. DIPLOMA IN GEMMOLOGY

- **13.5.1.** The Gemmology course has been specifically designed for anyone who may be interested in the study of gems and minerals. This three months course includes theory and practical hands on training. It covers a wide variety of gems commonly encountered in the gem and jewellery market like Rubies, Sapphires, Amethysts, Topaz, Quartz, Pearls etc. including some rare gemstones too.
- **13.5.2.** Starting from the rough 'mineral' the course goes right up to teaching the fundamental character of gems and the most modern techniques used for their identification. This course is designed for persons interested in jewellery designing, sales professionals or making one a more confident buyer.
- **13.5.3. Duration** : 3 months
- **13.5.4. Timings:** This is an evening course and classes are held from Monday to Friday for 1½ hour duration. Date of commencement is end June.
- **13.5.5. Fees:** Rs. 40,000 + GST
- **13.5.6.** Contact Details: Dr. Pravin Henriques or College Website

# 13.6. CERTIFICATE COURSE IN PRACTICAL GEM APPRECIATION AND IDENTIFICATION

**13.6.1.** This 20-hour, one month (evening) certificate course is designed to widen the knowledge of anyone interested in gemstones. It is particularly recommended for the consumer who wishes to make informed decisions when purchasing fine gemstones. It stresses the 'how to' of gem identification. Learning basic

instrumentation will show you how a gemologist can distinguish between natural, synthetic and imitation gems. Gem testing instruments are provided, but students should have their own pocket instruments.

- **13.6.2. Duration:** 20 hours. Held during the vacations
- 13.6.3. Timings: Evening
- **13.6.4.** Fees: Rs. 10.000 + GST
- **13.6.5.** Contact Details: Dr. Pravin Henriques or College Website.

# 13.7. CERTIFICATE COURSE IN PLANTSMANSHIP WITH BASIC GARDEN HARDSCAPING MATERIALS AND TOOLS

- **13.7.1.** Eligibility: (10 + 2) from a recognized Authority ie Board or University.
- **13.7.2. Duration:** This is a one semester course with a duration of approximately 4.5 months i.e., 36 days over the weekend [Saturdays and Sundays].
- **13.7.3. Contact hours:** 10 hours per week. The Total Number of Hours = 180.
- **13.7.4.** Credits: Total Number of Credits = 180 hours 12 credits; (15 hours = 1 Credit).
- 13.7.5. Number of Modules in the course: 4.
- **13.7.6. Number of Students:** Maximum number of students = 30. The minimum number of students required to break even = 25
- **13.7.7. Fees:** Rs 15,000.00 (inclusive of GST)
- **13.7.8.** Location: Course to be conducted at St. Xavier's College, Mumbai in collaboration with L.S.Raheja School of Architecture, Mumbai.

### **13.8. CERTIFICATE COURSE IN BASIC PYTHON** (Introduction to Python Programming)

- **13.8.1. Learning Objectives:** To introduce students to various Python concepts.
- 13.8.2. Expected Learning Outcomes of this course:
  - **13.8.2.1.** Students understand the concepts of programming before actually starting to write new programs.
  - **13.8.2.2.** Students comprehend what happens in the background when the programs are executed.
  - **13.8.2.3.** Students develop logic for problem solving.
  - **13.8.2.4.** Students get familiar with the basic constructs of programming such as data, operations, conditions, loops, functions etc.
  - **13.8.2.5.** Students apply the problem solving skills using syntactically simple language i.e., Python (version: 3.X or higher)
- **13.8.3. Duration:** 10 weeks. 2 lectures per week of Theory and 2 Practical sessions
- **13.8.4. Evaluation:** Practical Examination: 80 marks, Viva: 10 marks, Journal: 10 marks.

### 13.9. POST GRADUATE DIPLOMA IN COUNSELLING PSYCHOLOGY (XICP)

- **13.9.1.** Course Objective: This course, offered by the Xavier Institute of Counselling Psychology (XICP) aims to address the dearth of mental health professionals and to equip psychologists with the necessary knowledge and skills to enhance therapeutic counselling. Students on having completed the course emerge as well-trained counsellors who can effectively tackle the increasing societal stress related problems.
- **13.9.2.** Course Conceived and Designed by: Fr. Berchmans D'souza S.J., in the year 1992, it has been modified and updated by Ms. Sujata Abraham and Ms. Linda Dhakul.
- **13.9.3. Director:** Dr. (Fr.) Keith D'Souza S.J.
- **13.9.4. Coordinator:** Dr. Noellene Fialho. Phone: +91 9324084592, Email: xicp92@gmail.com
- **13.9.5. Modules:** 7 Counselling Psychology Papers equivalent to 21 credits (15hrs per credit):
  - 13.9.5.1. CPP 01 Micro-Counselling Skills
  - 13.9.5.2. CPP 02 Principles and Techniques of Counselling Process
  - 13.9.5.3. CPP 03 Development and Counselling Across the Lifespan
  - 13.9.5.4. CPP 04 Psychopathology
  - 13.9.5.5. CPP 05 Personality Psychology and Contemporary Psychotherapies
  - 13.9.5.6. CPP 06 Career Psychology
  - 13.9.5.7. CPP 07 Career Practicum
- **13.9.6. Duration:** Ten months from July of the current academic year to April of the subsequent academic year (with breaks for Diwali and Christmas).
- **13.9.7.** Lectures: Mondays, Wednesdays and Fridays (4:00 pm to 7:00 pm).
- **13.9.8. Practicals:** There are various practical aspects to the training the students receive outlined as follows:
  - **13.9.8.1.** Students have to go through personal counselling themselves during the course.
  - **13.9.8.2.** Students undergo a supervised internship including 40hrs of counselling in a school, college, NGO or any other mental health set up.
  - **13.9.8.3.** Students volunteer for approximately 10 hours at an Old Age or Geriatric Care Home.
  - **13.9.8.4.** A supervised practicum in career counselling is held in April. Career / Psychometric tests are conducted from 8.00 a.m. to 12.30 p.m. on two days and results are given on the 3<sup>rd</sup> day. Students have to be at the college from 7:45 a.m. to 3:00 p.m. on both these days to administer the tests and from 8:00 a.m. to 9:00 a.m. on the 3<sup>rd</sup> day for a report-giving session with the parents and clients.
- **13.9.9.** Eligibility: P.G. Degree in Psychology, Social Work or Human Development.
- **13.9.10. Fees:** Rs. 65,000/- including GST.

- 13.9.11. Number of Seats: 25 students.
- **13.9.12. Contact Details:** Dr. Noellene Fialho. Phone: +91 9324084592 Email: xicp92@gmail.com
- **13.9.13.** Website: https://sites.google.com/xaviers.edu/xicp/pgcourse

### 13.10. CERTIFICATE COURSE IN PERSONAL COUNSELLING

- **13.10.1. Course Objective:** This course, offered by the Xavier Institute of Counselling Psychology (XICP) is based on the Carkhuff Model of Counselling. Using simulative, exploratory methods it gives the students a chance to introspect as well as enhance their helping skills aiding them in whatever profession they may be.
- **13.10.2. Course Conceived and Designed by:** Fr. Joaquim Fuster S.J., in the year 1978, it has been modified and updated by Ms. Sujata Abraham and Dr. Noellene Fialho.
- 13.10.3. Director: Dr. (Fr.) Keith D'Souza S.J.
- 13.10.4. Coordinator: Dr. Noellene Fialho.
- **13.10.5. Duration:** 22 sessions (2hrs each). Held twice a year (August to October and January to March).
- **13.10.6. Timings:** Tuesdays and Thursdays (5:00 pm to 7:00 pm).
- 13.10.7. Eligibility: Higher Secondary School Certificate.
- **13.10.8. Content:** The 22 sessions cover the following content:
  - **13.10.8.1.** Personal Growth of the Counsellor
  - **13.10.8.2.** History and Meaning of Counselling
  - **13.10.8.3.** Role of a Counsellor
  - **13.10.8.4.** Models of Counselling (Focus on the Carkhuff Model)
  - 13.10.8.5. Counselling Skills
  - 13.10.8.6. Stages of Counselling
- 13.10.9. Fees: Rs. 20,000/- including GST.
- 13.10.10. Number of Seats: 25 students.
- **13.10.11. Contact Details:** Dr. Noellene Fialho. Phone: +91 9324084592 Email: cpc.xaviers@gmail.com
- **13.10.12.** Website: https://sites.google.com/xaviers.edu/xicp/personal-counselling-course

#### 13.11. POST GRADUATE DIPLOMA: EXPRESSIVE ARTS THERAPY

- 13.11.1. Introduction: The objective of the course is to open up this highly specialized discipline to Indian postgraduates and to develop competent practitioners in the field of Expressive Arts Therapy. The course focuses on equipping participants with a theoretical foundation and hands-on skills, in socially challenging environments within educational and developmental settings and supplement their existing capacities. Modules will be conducted by internationally certified visiting faculty from across the country.
- **13.11.2.** Number of seats: Maximum of 20 students per year.

- **13.11.3. Selection Process:** Shortlisted eligible students who have filled the online application form will be called for an experiential and theoretical interview along with submitting an audition video. The merit score is based on: academics, statement of purpose, relevant personal and professional experiences, video score and interview score. For out- station applicants, online interviews are held.
- **13.11.4. Eligibility Criteria:** Students with a Bachelor's degree in any faculty or discipline can fill out the online application and there is no age restriction for admission.
- **13.11.5. Fees:** As sanctioned by the Board of Management of St. Xavier's College (Autonomous): Rs. 2,12,000/- (plus taxes as applicable).

### 13.11.6. Semester-wise Syllabi

#### SEMESTER I

| Code | Course Title                                      | Credits |
|------|---------------------------------------------------|---------|
| 101  | Expressive Arts Therapy Theoretical Foundation- I | 5       |
| 102  | Expressive Arts Therapy Skills- I                 | 5       |
| 103  | Counselling Theories Process and Skills-I         | 5       |
| 104  | Fieldwork Orientation and Development             | 5       |
| 105  | Research: Design and Methodology                  | 4       |
|      | Total                                             | 24      |

#### SEMESTER II

| Code | Course Title                                       | Credits |
|------|----------------------------------------------------|---------|
| 201  | Expressive Arts Therapy Theoretical Foundation- II | 5       |
| 202  | Expressive Arts Therapy Skills- II                 | 5       |
| 203  | Counselling Theories Process and Skills-II         | 5       |
| 204  | Fieldwork- Practicum                               | 5       |
| 205  | Research: Paper Submission                         | 4       |
|      | Total                                              | 24      |

- **13.11.7. Credit Distribution:** The course consists of 48 credits. Each credit equals 15 hours. Fieldwork orientation and practicum is 125 hours in two semesters.
- 13.11.8. Duration of the Course: 1 year
- 13.11.9. Timing:

Semester I - Thursday, Friday Saturday: 2pm to 8pm for all courses.

Semester II - Thursday, Friday Saturday:

For courses 201, 202 and 203: 2pm to 8pm

For courses 204 and 205: timings will vary based on fieldwork

**13.11.10. Scheme of Evaluation:** For each theory paper, the evaluation is divided as follows: 60 marks per semester per paper and 40 marks per semester per paper: case studies, presentations, group facilitation.

13.11.11. Contact Details: Co-ordinator, Ms Devika Mehta, M.A. (Indian Folk Dance), M.A. Clinical Psychology, M.Sc. (Dance Movement Psychotherapy – UK). Her email id is: devika.mehta@xaviers.edu.

# 13.12. CERTIFICATE COURSES IN ANCIENT INDIAN HISTORY, CULTURE AND ARCHAEOLOGY

- 13.12.1. Conducted by the Department of Ancient Indian History Culture. For further details please check the College Website. These courses have been designed to develop appropriate talents of students having interests in the field of Ancient Indian History, Culture and Archaeology. Applicants could join for any number of the four courses offered.
- **13.12.2.** Eligibility: This course is open to students of any faculty and the applicants could be completing either an Under-Graduation or a Postgraduate Degree.
- **13.12.3. Duration:** 3 months (From last week of July).
- **13.12.4. Timings:** Evenings, once a week, as per the A.I.H.C.A. M.A. Time Table
- 13.12.5. Fees: Rs 1000 per Course
- 13.12.6. Course Description:
  - 13.12.6.1. Epigraphy and Numismatics of Ancient India: This course introduces the various scripts used in Ancient India and the role of coins in the Indian context. Students will be taught three ancient scripts: Brahmi, Kharoshti and Persian.
  - **13.12.6.2. History of Performing Arts & Theatre in Ancient India:** This course is designed to enlighten students about the synergy between fluid and static arts and thus broaden their horizon and innate understanding this subject.
  - **13.12.6.3. Maritime Heritage of Ancient India:** This course helps in understanding the maritime tradition that existed in India from the proto-historic period.
  - **13.12.6.4. Brief Study of the Comparative Mythology of the World:** Various mythologies of world civilizations are classified. A comparative analysis of Indian and other world mythologies is also dealt with.
  - **13.12.6.5. Basic Elements of Archaeology:** This course helps in understanding the change from traditional archaeology to new archaeology, its relations with sciences, explorations and excavation techniques with field visits.
- **13.12.7. Contact Details:** Dr. (Ms.) Anita Rane-Kothare or College Website.

#### 13.13. DIPLOMA IN INTER-RELIGIOUS TRADITIONS

13.13.1. Rationale for the Course: Religion has been a source of meaning and purpose for the vast majority of humankind since ancient times. There have been several religious traditions—small and big, simple and complex, highly organized and lesser so—which have evolved over the centuries and even the millennia. While religion promises to be a rich resource for civic peace and harmony, it has not

always been so. There have been several instances of crippling repression within religious communities and also serious conflicts between communities with disparate belief systems. While the need for understanding, collaboration and fecundity between these traditions has always been important, this is felt even more in our age of instant global communication, when conflicts can exacerbate rapidly.

Besides the need for peace and equity between diverse religious communities, there is also a more obvious need for adherents of different faiths to learn more about their own faith traditions. Quite often, people are unaware of the nuances and depths of wisdom and practice within their own traditional histories. What results is a dysfunctional cocktail of a simplistic approach towards faith, superstitious religious practices, and the acceptance and espousing of fundamentalist beliefs.

There is an urgent need to restore the perceptual image and the more pressing ground reality of religion as a resource for personal and collective wisdom, freedom and empathy. Religious traditions need to be transformed into social resources for greater personal and social wellbeing. It is with this intent that the course in "Inter-Religious Traditions" has been curated. The purpose is not only to provide participants with an opportunity to learn at some depth about various religious traditions, but more importantly, to recognize that various traditions have been influenced by a variety of social forces, as well as by other religious and cultural traditions. It is hoped that participants will develop not only knowledge about several religious traditions, but also an empathy towards those of other faiths—and also towards those who struggle with faith and have abandoned the horizon of faith for various reasons.

Besides an introduction to several religious traditions, there will be student projects on traditions of their choice, as well as field trips to different places of religious worship. Thus, the course attempts at going beyond a mere study of religious traditions, in order to include several experiential components of religious belief and practice.

- **13.13.2.** Accordingly, the main **objectives of the course** are as follows:
  - **13.13.2.1.** Valuing religious traditions as a source of meaning and purpose in human history.
  - **13.13.2.2.** Becoming aware of the intricacies and nuances of belief and practice within different religious traditions.
  - **13.13.2.3.** Understanding how different traditions have developed over time.
  - **13.13.2.4.** Recognizing how different traditions have influenced one another.
  - **13.13.2.5.** Appreciating the need for better inter-religious relations as a social resource in facilitating civic peace and harmony.
- **13.13.3. Coordinator**: Ms. Shilpa Chheda [Heras]

- **13.13.4. Duration:** From June to February [Weekly four hours Tuesday and Friday, from 3.00 to 5.00 p.m.]
- **13.13.5. Hours**: 128 hours [8 modules of 16 hours each each module could be offered as a distinct Honour's course]
- **13.13.6. Fees:** General/Public: Rs. 15,000 /- [including GST]; Student: Rs. 7,500 /- [including GST]
- 13.13.7. Eligibility: Higher Secondary School Certificate
- **13.13.8. Evaluation:** 5 short essays [100 marks] + Final theory exam [100 marks]
- 13.14. For Courses conducted by XIC, please refer the XIC website: www.xaviercomm.org

**Keys:** \* = Recognized by Univ. of Mumbai for PG teaching at M.A., M.Sc., M.Com. + = As Research Guides for Ph.D; @ = Honorary NOTE: The Lecturers' names are listed as per Seniority in St Xavier's College (Autonomous), Mumbai 14.1. FACULTY OF ARTS DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHEOLOGY +\* Ms. Anita Rane-Kothare, M.A. Dip. Pali. Ph.D. Assoc. Prof. & Head of Dept. \* Ms. Radha Kumar, M.A., Ph.D. Assoc. Prof. Mr. Jason Johns M.A. Asst. Prof. (Ad hoc) 14.1.2. **DEPARTMENT OF COMMERCE (FOR ARTS)** Mr. Saniiv P. Jhaveri, M.Com., F.C.A. Assoc. Prof. (Part-Time) Asst. Prof. Ms. Suvaiba Pirani, M.Com., Ph.D. DEPARTMENT OF ECONOMICS 14.1.3. +\* Ms. Aditi P. Sawant, M.A., Ph.D. Asst. Prof. & Head of Dept Ms. Manali Pawar, M.A. Asst. Prof. Ms. Aparna Kulkarni, M.A. Asst. Prof. Bro. Vivian Almeida SJ. M.A. Asst. Prof (Ad hoc) 14.1.4. **DEPARTMENT OF ENGLISH** Ms. Pearl Pastakia, M.A., M.Phil., Ph. D. Assoc. Prof. & Head of Dept. Ms. Rashmi Lee George, M.A., Ph.D. Asst. Prof. Asst. Prof. Ms. Prasita Mukherjee, M.A., Ph.D. 14.1.5. **DEPARTMENT OF FRENCH** Ms. Alpana. Palkhiwale, M.A. Assoc. Prof. & Prof-in-Charge 14.1.6. DEPARTMENT OF HINDI Mr. Bhagwati Upadhyay, M.A., Ph.D. Asst. Prof. & Prof.-in-Charge (Ad hoc) 14.1.7. **DEPARTMENT OF HISTORY** \* Mr. Avkash D. Jadhav, M.A. Ph.D. Assoc. Prof.& Head of Dept Asst. Prof. (Ad hoc) Mr. Arun Singh M.A DEPARTMENT OF POLITICAL SCIENCE 14.1.8. Ms. Pratiba Naitthani, M.A., B.Ed., Ph.D. Asst. Prof. & Head of Dept. Ms. Shazia Shaikh, M.A. Asst. Prof. DEPARTMENT OF PSYCHOLOGY 14.1.9. Ms. Ruby Pavri, M.A., B.Ed. Assoc. Prof.& Head of Dept. Ms. Linda Dhakul, M.A., B.Ed. Asst. Prof. Fr. Dean Fernandes S.J., M.A. Asst. Prof. Ms. Danielle Pereira, M.A., Ph.D. Asst. Prof. (Ad hoc) Ms. Ruchi Brahmachari, M.A.; M.A. (S Illinois, USA) Asst. Prof. (Ad hoc) 14.1.10. DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY Ms. Pranoti Chirmuley, M.A., M.Phil, Ph.D. Asst. Prof & Head of Dept. Ms. Radhika Rani, M.A., M.Phil. Asst. Prof.

Asst. Prof

Asst. Prof. (Ad hoc)

Asst. Prof (Ad hoc)

Ms. Ankita Gujar, M.A., L.L.B.

Ms. Shahana Sen, M.A., Ph.D.

Ms. Arpit Gill M.A.

### 14.1.11. DEPARTMENT OF BA (MCJ)

Ms. S.P. Periyanayagi, B.Com., MBA, M.Phil. Asst. Prof. & **Head of Dept.**Ms. Akshara Jadhav, M.A., PGJMC. Asst. Prof.

#### 14.1.12. DEPARTMENT OF PUBLIC POLICY

Mr. Agnelo Menezes, M.A. Ph.D. Assoc. Prof. (Ad hoc) & **Head of Dept.**Ms. Nandini Naik, M.A., M.Phil. Asst. Prof.

#### 14.2. FACULTY OF SCIENCE

#### 14.2.1. DEPARTMENT OF BOTANY

\* Mr. Kevin J. D'Cruz, M.Sc. Assoc. Prof.

+\* Mr. Rajendra D. Shinde, M.Sc., Ph.D. Assoc. Prof.& **Head of Dept.**,

PRINCIPAL

\* Mr. Alok Gude, M.Sc. Asst. Prof.& In-Charge Head

Ms. Vijaya Lobo, M.Sc., Ph.D.

Mr. Rajdeo Singh, M.Sc., Ph.D.

Asst. Prof.
Asst. Prof.

Mr. Saif Khan, M.Sc. Asst. Prof. (Ad hoc)

#### 14.2.2. DEPARTMENT OF CHEMISTRY

Mr. Marazban S. Kotwal, M.Sc. Assoc. Prof.& **Head of Dept.\*** + Ms. Ashma Aggarwal, M.Sc., Ph.D. Asst. Prof.

Ms. Geeta N. Kotian, M.Sc., Ph.D.

Assoc. Prof.

Ms. Saima Khan, M.Sc.

Asst. Prof.

Ms. Abhilasha Jain, M.Sc. Ph.D.

Asst. Prof.

Asst. Prof.

Ms. Abhilasha Jain, M.Sc., Ph.D. Asst. Prof.

\* + Mr. Pralhad V. Rege, M.Sc., Ph.D. Asst. Prof.
Mr. Himanshu Gupta, M.Sc. Asst. Prof. (Ad hoc)

Ms. Nikhila Bhatt, M.Sc., Ph.D.

Ms. Neha Kapadia, M.Sc.
Mr. Kyles Myers, M.Sc.
Ms. Manik Rathod, M.Sc.
Asst. Prof. (Ad hoc)
Asst. Prof. (Ad hoc)
Asst. Prof. (Ad hoc)
Asst. Prof. (Ad hoc)

#### 14.2.3. DEPARTMENT OF GEOLOGY

+\* Mr. Hrishikesh P. Samant, M.Sc., M.Tech., Ph.D. Assoc. Prof. & Vice-Principal (Science)

+\* Mr. Pravin Henriques, M.Sc., Ph.D. Assoc. Prof.& In-Charge Head

\* Mr. Bobby P. Mathew, M.Sc., Ph.D. Assoc. Prof. \* Mr. Ashwin Pundalik, M.Sc., Ph.D. Asst. Prof.

Mr. John D'Souza, M.Sc. Asst. Prof. Ms. Shweta Gurav, M.Sc., Ph.D. Asst. Prof.

Mr. Siddharth Barua, M.Sc. Asst. Prof. (Ad hoc)
Ms. Rithika D'Souza, M.Sc. Asst. Prof. (Ad hoc)

#### 14.2.4. DEPARTMENT OF LIFE SCIENCES AND BIOCHEMISTRY

\* Ms. Seema Das, M.Sc., M.Phil, Ph.D. Assoc. Prof. & Head of Dept.

\* Ms. Nandita B. Mangalore, M.Sc., M.Phil., Ph.D.

\* Mr. Prashant S. Ratnaparkhi, M.Sc., Ph.D.

\* Ms. Priya Sundarrajan, M.Sc., Ph.D.

\* Ms. Sangeeta R. Shetty, M.Sc., Ph.D.

Assoc. Prof.

Assoc. Prof.

Assoc. Prof.

Assoc. Prof.

Ms. Radhika Tendulkar, M.Sc., Ph.D. Asst. Prof. Ms. Manasi K. Kanuga, M.Sc., Ph.D. Asst. Prof. Ms. Maya S. Murdeshwar, M.Sc., Ph.D. Asst. Prof. Mr. Binoj Kutty, M.Sc., Ph.D. Asst. Prof. Mr. Bhaskar Saha, M.Sc., Ph.D. Asst. Prof. Ms. Reanne Fronteiro, M.Sc., Ph.D. Asst. Prof. (Ad hoc) 14.2.5. **DEPARTMENT OF MATHEMATICS** Ms. Meenal Kolkar, M.Sc., M.Phil. Assoc. Prof. & Head of Dept. \* Mr. Ashok Bingi, M.Sc., Ph.D. Asst. Prof. Mr. Aditya Garq, M.Sc. Asst. Prof. Ms. Simi Cyriac, M.Sc., B.Ed. Asst. Prof. (Ad hoc) Mr. Rahul Katkam M.Sc. Asst. Prof. (Ad hoc) 14.2.6. DEPARTMENT OF MICROBIOLOGY \* Ms. Miriam Stewart, M.Sc. Assoc. Prof. & Head of Dept. \* Ms. Sangeeta Chavan, M.Sc., M.Phil. Assoc. Prof. +\* Ms. Karuna Gokarn, M.Sc., Ph.D. Assoc Prof, VP (Academics) Ms. Aparna Talekar M.Sc., Ph.D. Asst. Prof. Ms. Pampi Chakraborty, M.Sc., Ph.D. Asst. Prof. Ms. Pradnya Gogte, M.Sc., Ph.D. Asst. Prof. (Ad hoc) **DEPARTMENT OF PHYSICS** 14.2.7. Ms. Jyoti T. Singh, M.Sc., Ph.D. Assoc. Prof. & Head of Dept. \* Ms. Shyamala P. Bodhane, M.Sc., M.Phil., Ph.D. Assoc. Prof. \* Ms. K. Vedasankari, M.Sc., Ph.D Assoc. Prof. Mr. Rajesh Singh, M.Sc. Asst. Prof. Mr. Ajay Yadav, M.Sc. Asst. Prof. \* Mr. Rohan Jadhav, M.Sc., Ph.D. Asst. Prof. \* Ms. Leena Joshi, M.Sc., Ph.D. Asst. Prof. \* + Mr. Radhekrishna Dubey, M.Sc., Ph.D. Asst. Prof. 14.2.8. **DEPARTMENT OF STATISTICS** \* Ms. Myrtle C. Fernandes, M.Sc. Assoc. Prof. & Head of Dept. \* Ms. Pooja Ochaney, M.Sc. Assoc. Prof. \* Ms. Ayesha Dias, M.Sc. Assoc. Prof. \* Mr. Saju V. George, M.Sc., M.Phil. Assoc. Prof. \* Ms. S. Annapurna, M.Sc., D.C.S.T., D.O.R.M., Ph.D. Assoc. Prof. & Vice Principal (Arts) \* Ms. Piyali Unnikrishnan, M.Sc. Assoc. Prof. Mr. Mayur More, M.Sc. Asst. Prof. (Ad hoc) 14.2.9. DEPARTMENT OF ZOOLOGY Ms. Smita Krishnan, M.Sc., Ph.D. Assoc. Prof. & Head of Dept. + Ms. Madhuri P. Hambarde, M.Sc., Ph.D. Assoc. Prof. Ms. Pushpa U. Sinkar, M.Sc., Ph.D. Assoc. Prof. Mr. Conrad Cabral, M.Sc. Asst. Prof. Ms. Sujata Deshpande, M.Sc., Ph.D. Asst. Prof.

#### 14.2.10. DEPARTMENT OF BIOTECHNOLOGY

+\* Ms. Karuna R. Gokarn, M.Sc., Ph.D. Assoc. Prof, Head, VP (Academics)

Ms. Shiney Peter, M.Sc., Ph.D.

Ms. Norine D'Souza, M.Sc.

Asst. Prof.
Asst. Prof.

### 14.2.11. DEPARTMENT OF INFORMATION TECHNOLOGY

Mr. Thomas Roy, M.C.A. Asst. Prof. & **Head of Dept.** 

Mr. Subhash Kumar, M.C.A., M.Phil.

Ms. Lydia Fernandes M.Sc.

Ms. Rachana Pandey, M.Sc., B.Ed.

Asst. Prof.

Asst. Prof.

Asst. Prof.

Asst. Prof.

Mr. Aaron Johns M.Sc. Asst. Prof (Ad Hoc)

### 14.3. FACULTY OF COMMERCE

#### 14.3.1. DEPARTMENT OF MANAGEMENT STUDIES

Ms. Soni George Tharakan, B.Sc. Agri. (Hons), MMS Asst. Prof. & Head of Dept.

Ms. Neelam Shetty, M.Com., PGDBA, M.Phil, Ph.D.

Mr. Pritesh Arte, M.Com., L.L.B.

Asst. Prof.
Asst. Prof.

#### 14.3.2. DEPARTMENT OF COMMERCE AND ACCOUNTS

Fr. Conrad Pesso S.J., M.Com., ICWA, ACS, LLB, Ph.D. Asst. Prof. &

Vice-Principal (Commerce)

Mr. Rajinder Singh Saluja, M.Sc., M.Phil Assoc. Prof. + Mr. Arvind Dhond, M.Com., M.Phil., MFM., PGDFM., Ph.D. Assoc. Prof.

Mr. Sanjay Parab, M.Com, CS., Ph.D.

Assoc. Prof.

Mr. Syed Shakeel Hussain, L.L.M.

Mr. Kamaji Bokare, M.A., Ph.D.

Asst. Prof. (Part-Time)

Asst. Prof.

Mr. Jotiram J. Gaikwad, M.A., M.Phil, Ph.D.

Asst. Prof.
Asst. Prof.

Fr. Ambrose Machado S.J., M.Com. Asst. Prof (Ad hoc)

#### 14.4. RESEARCH DEPARTMENTS

### 14.4.1. HERAS INSTITUTE OF INDIAN HISTORY & CULTURE

\* Ms. Joan Dias, M.A., Ph.D. Director

(a) +\* Sr. Anila Varghese, M.A., Ph.D.
+\* Ms. Sonali Pednekar, M.A., Ph.D.
+\* Ms. Anita Rane-Kothare, M.A. Dip. Pali. Ph.D.
\* Ms. Radha Kumar, M.A., Ph.D.
Research Guide (History)
Research Guide (History)
Research Guide (AIC)
Assoc. Prof. (AIC)

Ms. Shilpa Chheda, M.A.(AIC), M.A. (Jain Philosophy) Secretary & Curator

#### 14.4.2. BLATTER HERBARIUM

+\* Mr. Rajendra D. Shinde, M.Sc., Ph.D. Director & Research Guide

#### 14.4.3. CAIUS RESEARCH LABORATORY FOR INTERDISCIPLINARY STUDIES

+\* Ms. Priya Sundarrajan, M.Sc., Ph.D. Director & Research Guide

#### 14.4.4. NADKARNY SACASA RESEARCH LABORATORY

+ Dr. Ashma Aggarwal

+ Mr. Pralhad Rege, M.Sc, Ph.D.

Director

Research Guide

#### 14.4.5. DEPARTMENT OF AVESTAPAHLAVI

@+\*Mr. K. M. Dastoor, M.A. Ph.D.

@ \*Mr. R. P. Karanjia, M.A., Ph.D.

@ \*Mr. P. M. Bajan, M.A. Ph.D.

### 14.5. DEPARTMENT OF INTER-RELIGIOUS STUDIES

Fr. Keith D'Souza, S.J. Ph.D.

Director

#### 14.6. LANGUAGE LAB.

Ms. Jyoti More, M.A.

Instructor

#### 15.1. GENERAL OFFICE:

Mr. Achyut Joshi Registrar (Ad hoc)
 Ms. Grizel A. Menezes Stenographer

3. Mr. Bipin B. Patil Senior Office Assistant

4. Mr. Vincent I. Pereira Office Assistant Mr. Anand Alphanso Office Assistant 6. Ms. Supriya R. Saraf Office Assistant 7. Ms. Flavia D'Mello Office Assistant 8. Ms. Shainy O. Lopes Office Assistant 9. Ms. Delina B. Lopes Office Assistant **10.** Ms. Namrata Naik Office Assistant 11. Ms. Shivali Mayekar Office Assistant

#### 15.2. TREASURER'S OFFICE:

Dr. (Fr.) Conrad Pesso, SJ
 Mr. Peter D'Monte
 Mr. Vijayrao Thapala
 Treasurer
 Superintendent
 Head Clerk

Mr. Dixon F. Colaco
 Mr. David Patil
 Mr. Ganesh Padrat
 Mr. Sameer Padrat
 Mr. Sameer Padrat
 Mr. Shweta Jadhav

9. Mr. Rocky Vaz Office Assistant (Commerce Section)

10. Ms. Snehal Kamat Office Assistant
11. Ms. Rutika Gawade Office Assistant

#### 15.3. LIBRARY STAFF:

Ms. Sonali Paradkar
 Mr. Vivek Tambe
 Assistant Librarian
 Mr. Ashok G. Rambade
 Mr. Bharat Hejmadi
 Mr. Jay Thorat
 Mr. Caitano F. Simoes

Mr. Caitano F. Simoes
 Mr. Sudhakar Damle
 Mr. Rajaram B. Agre
 Mr. Peter A. Fernandes
 Library Attendant
 Library Attendant
 Library Attendant

**10.** Mr. Lawrence D'Costa Library Attendant (Commerce Section)

**11.** Mr. Julio Pereira Library Attendant

**12.** Mr. Truman Borges Library Attendant (Commerce Section)

13. Mr. Kishore C. Chaphe
14. Mr. Prakash G. Rambade
15. Mr. Deepak S. Chowgule
16. Mr. Uttam Jadhav
17. Mr. Adinath Raut
Library Attendant
Library Attendant
Library Attendant
Library Attendant

#### 15.4. LABORATORY ASSISTANTS:

- 1. Mr. Raidhar Dabhade
- 2. Mr. Vijay A. Gurav
- 3. Mr. Prakash Dandge
- 4. Mr. Manohar Velive
- **5.** Mr. Elias Joseph Abreo

### 15.5. LABORATORY ATTENDANTS:

- **1.** Mr. Shantaram Tamankar
- 2. Mr. Hanumanth Chowgule
- 3. Mr. Ramchandra Chandurkar
- 4. Mr. Subhash A. Kalekar
- **5.** Mr. Devchandra K. Gurav
- **6.** Mr. Prakash Agre
- 7. Mr. Sandeep B. Berde
- 8. Mr. Chandrakant Chandurkar
- 9. Mr. Ashwin W. Parmar
- 10. Mr. Melcome R. Abreu
- 11. Mr. Rajesh N. Athawale
- 12. Mr. Sanjay S. Geliye
- 13. Mr. Simon Joseph
- 14. Mr. landas Sydney Bangera
- **15.** Mr. Sanjay I. Chaudhary
- **16.** Mr. Sudhakar D. Kolge
- 17. Mr. Agnelo A. Fargose

- 6. Mr. Gurunath Dhuri
- 7. Mr. Anthony Thomas
- 8. Mr. Glesson Dias
- 9. Mr. Sanjay S. Karambele
- 10. Mr. Sandeep Kelwadkar
- 18. Mr. Jagdish B. Guldekar
- 19. Mr. Uddhav E. Patole
- 20. Mr. Dayanand Kumbhar
- 21. Mr. Sandeep P. Pawar
- 22. Mr. Sandeep Rambade
- 23. Mr. Sandip I. Patil
- 24. Mr. Aatish Shirke
- 25. Mr. Uttam Patil
- 26. Mr. Sachin Bhure
- 27. Mr. Macfedyan Noronha
- **28.** Mr. Kishore Sonavane
- 29. Mr. David Foss
- 30. Mr. Kishore Arbune
- 31. Mr. Nitin Lokhande
- **32.** Mr. Umesh Chavan
- **33.** Mr. Avinash Agre
- 34. Mr. Bharat Koli
- 35. Mr. Deepak Parit
- 36. Mr. Santosh Songale

#### 15.6. PEONS:

- 1. Mr. Sudhakar Gurav
- 2. Mr. Baju Solanki
- 3. Mr. Cajetan Fernandes
- 4. Mr. Prakash S. Chougule
- 5. Mr. Arun Jadhav
- 6. Mr. Devid S. Ghadge
- 7. Mr. Kevin N. D'Souza
- 8. Mr. Avitkumar Mangale
- 9. Mr. Yogesh Enamdar
- 10. Mr. Yogesh M. Gade (Comm.)

- 11. Mr. Amol Lohar
- 12. Mr. Vaibhav Patil
- 13. Mr. Uday Mane
- 14. Mr. Uttam Ghatkar
- **15.** Mr. Raian Gurav
- 16. Mr. Shishir Khedekar
- 17. Mr. Mahadev Sonule
- 18. Mr. Prabhanjan Gite
- 19. Mr. Vipin Prakash Nam
- 20. Mr. Gangaram Savant

#### 15.7. MULTI-MEDIA OPERATORS / TECHNICIANS:

- 1. Mr. Deb Shankar Das
- 2. Mr. Francis Kadam
- 3. Mr. Dinesh Mohite

15.8. EXAMINATION CENTRE:

1. Mr. Marazban Kotwal College Controller Of Exams

2. Ms. Fiona R. Crasto Office Assistant

15.9. KNOWLEDGE CENTRE:

Mr. Kevin D'Cruz
 Ms. Khyati Bhora
 Ms. Nilam S. Jadhav
 Mr. Swapnil Bagwe
 Mr. Yogendra Mohite
 Director
 Web Designer
 Office Assistant
 Technical Assistant
 Technical Assistant

6. Mr. Mayur Agre Peon

#### 15.10 CAMPUS MAINTENANCE STAFF:

Mr. Alvin Mendonsa Administrator
 Mr. Santosh Chavan Office Attendant

Ms. Seema Sisodiya
 Telephone Operator-Cum-Receptionist
 Telephone Operator-Cum-Receptionist

Mr. Karan Bahadur Support Staff
 Mr. Ravindra Yadav Support Staff

Mr. Kamal Maji
 Mr. Sanjay Sawant
 Mr. Narayan Rambade
 Mr. Pravin Waghela
 Mr. Martin Waghela
 Mr. George Kudel
 Mr. Dhirendra Kumar

#### 15.11. RESEARCH LABORATORY SUPPORT STAFF:

1. Mr. Pravin Kale Asst. Curator-Blatter Herbarium

2. Mr. Prashant Manchekar Attendant. Caius Lab.

Mr. Rajesh Mahadik
 Mr. Melvin Fernandes
 Ms. Janhavi Jadhav
 Attendant, Biotechnology Lab.
 Maintenance Engineer
 Assistant - Blatter Herbarium

**6.** Ms. Varada Chachad Assistant - Blatter Herbarium

#### 15.12. SOCIAL INVOLVEMENT PROGRAMME STAFF:

Dr. Agnelo Menezes Coordinator
 Ms. Jenipher D'Souza Social Worker
 Ms. Roshen Thomas Social Worker
 Ms. Amruta Bhovare Office Assistant

15.13. HOSTEL:

1. Dr. Agnelo Menezes Hostel Management Representative

15.14. HERAS:

1. Mr. Shannon Mendonca Asst. Librarian

2. Mr. Roshan D'Souza Peon

#### 15.15. XRCVC and INCLUSION CENTRE:

1. Dr. Sam Taraporevala Director

2. Mr. Aniket Gupta Executive Asst. & Manager (Admin & Finance)

3. Ms. Neha Tivedi Key Consultant Key Consultant 4. Ms. Calveena D'Sylva Mr. Keshavan Nadar Key Consultant Key Consultant Mr. Sushil Pandit 6. 7. Ms. Rebecca Carvalho **Key Consultant** Mr. Krishna Warrier Key Consultant Ms. Elisha Lopez 9. Key Consultant Mr. Vikas Dabholkar 10. Key Consultant

#### 15.16. INDIAN MUSIC GROUP:

Ms. Luiza Albuquerque Office Assistant

#### 15.17. XAVIER'S DEVELOPMENT PROGRAMME:

Dr. (Fr.) Keith D'Souza SJ Director Mr. Dominic D'Souza Manager

Ms. Bonisha Alphanso Executive Assistant

16.1. INTRODUCTION: For St. Xavier's College, like any other Jesuit Institution, discipline goes beyond the mere adherence to rules and regulations. Discipline is looked upon as a means to inculcate into one's being the spirit of integrity and academic honesty, respect for the dignity and rights of individuals and deference for public and personal property. The College Discipline Committee (CDC) along with every Staff member of the College is expected to contribute to the cultivation of such a discipline-spirit within the campus. Thus, staff members, on noticing disciplinary infringements, are authorized to intervene and take appropriate action in consultation with the CDC and ultimately the Principal. To ensure such a discipline environment the College has put in place Rules & Regulations

#### 16.2. GOVERNMENT REGULATIONS ON RAGGING AND SUBSTANCE ABUSE

- 16.2.1. Ragging, of whatever kind, is strictly forbidden and will result in the dismissal of the student who rags, even if the act is committed outside the college campus. As per Supreme Court order dated May 2007, the College authorities may also file an F.I.R. with the police, if a case of ragging is reported / detected.
- **16.2.2.** The possession and / or consumption of drugs, cigarettes or alcohol on campus will lead to immediate suspension or dismissal of that student at the discretion of the Principal. Physical violence also attracts the same penalty. In both cases the College may file an F.I.R. with the police.

### 16.3. COLLEGE IDENTITY CARD (IDC)

- **16.3.1.** Every student of this College is required to display the College issued IDC at the point of entry and whenever in the college campus.
- **16.3.2.** The Principal or any of the Vice-Principals will levy a fine of Rs. 100 (which will go towards the Students' Beneficiary Fund SBF) on any student who is found without the IDC being aptly displayed, when on the campus.
- **16.3.3.** The use of the IDC of another student and the lending of an IDC to another is unacceptable and will attract suspension from College.
- 16.3.4. If the College issued IDC is lost, the student is expected to register the loss with the Mumbai Police. Only against the Police Certificate will the student be issued a temporary IDC (for 15 days). After the lapse of 15 days, a proper duplicate IDC will be issued (provided that there are more than 2 months of the concerned academic year still remaining). The student would have to pay to get the temporary IDC (Rs. 100) as well as the duplicate IDC (Rs. 500) this money will go towards the SBF.

#### 16.4. USE OF FACILITIES

#### 16.4.1. Decorum in the Academic Environs

- **16.4.1.1.** Students should not disturb ongoing lectures if they arrive early for their lecture or while walking in the corridors when lectures are on, or while they await the lecturer in the classroom.
- **16.4.1.2.** Maintenance of classroom cleanliness is the responsibility of students who occupy those spaces. They are expected to inform the College Administrative Office if the classroom was untidy when they entered it.
- **16.4.1.3.** Switching off the classroom lights and fans when not in use is a good green practice that all classroom users should follow.
- **16.4.2.** In the College **Laboratories** students are expected to closely follow the instructions of the Staff-in-Charge. Strict action will be taken against those who flout the Laboratory Rules.
- **16.4.3.** The **Class Notice-Boards** must be visited by every student on every working day to check for notices and updates. The onus of updating one's self vis-àvis the notices rests on the students.
- 16.4.4. In the Canteen, students are expected to return the used plates and cutlery into the basket kept for that purpose. Similarly, used paper cups and plates and empty packets and bottles should be dumped into the (Red coloured) bins kept for that purpose. Keeping the Canteen clean and tidy (and so hygienic) is also the responsibility of the students. Wasting of food should be absolutely avoided.
- 16.4.5. Spaces for the Consumption of Eatables and Beverages are limited to the Canteen, the 'Woods' and the Students' Common Rooms. This is needed to ensure that ants, rats and other pests are not attracted into the academic and administrative spaces of the campus. This would not only render the campus safe and healthy but also clean and tidy.
- **16.4.6.** The College **Gym** is available to all students during the time announced by the Sports Director. Those using the gym facilities are urged to use them properly. Eatables are prohibited in the gym. Students are encouraged to participate in the various sports tournaments that college organizes.
- **16.4.7.** The College **Library** is a place of study and research. Refer to Section16.13, page 132 for the Library Rules.
- 16.4.8. Students' Common Rooms must be kept tidy so as to be pleasant to be in. The Students' Lockers have to be hired through the Treasurer's Office and then used appropriately and handled with care. The Common Rooms are kept closed on Sundays and holidays.

- **16.4.9. Toilets** are expected to be used in a hygienic manner. Users are expected to shut the taps after use as well as if they find them left open or dripping. It would save an important natural resource if such leakages are reported to the College Infrastructure Committee or Administrative Office.
- 16.5. USE OF UNFAIR MEANS AT EXAMS: If a student is detected using unfair means or is found in possession of a mobile / electronic gadget or is found within reach of material pertaining to the test / exam, then he / she will have to face the Unfair Means Committee constituted by the College. If the Committee finds the individual guilty, he / she will be given zero marks for that specific course or for all the exams of the concerned semester. Even those found abetting such behaviour will be given a similar penalty. Also refer 16.6.4. (page 128).

#### 16.6. MOBILE PHONE AND OTHER ELECTRONIC GADGETS

- **16.6.1.** The use of mobile phones and other electronic gadgets for any purpose during lectures and practicals is not allowed, unless the lecturer has permitted the use of such gadgets for the lecture / discussion.
- **16.6.2.** It is advisable that during lectures, such gadgets are kept in one's bag / pocket and not on / in the desk this would minimize the possibility of losing these gadgets. If a student is found using these gadgets during lectures his / her IDC is confiscated and given to the Principal / Vice-Principal for further action (including a fine of Rs.100 / infringement).
- **16.6.3.** If a student reports the loss of such gadgets in the campus, that student would be advised to file a case of theft with the Police. However, if a lost gadget is found and given to the Principal, then the student would have to pay a fine (of Rs. 100) to get repossession of that item.
- **16.6.4.** Students cannot wear smartwatches during any examination. If a student is found with any electronic gadget (except a non-programmable calculator) during an examination, he / she will be immediately reported. However, he / she will be given a new answer booklet and permitted to continue with the said exam. Subsequently, he / she will be required to appear before the Unfair Means Committee of the College.
- 16.7 COLLEGE / DEPARTMENT FESTS / PROGRAMMES have to be organized and executed under the supervision of either the Staff Committee appointed by the Principal or a faculty from the concerned department. The Principal must be kept informed about the content of these activities.
- **16.8 WOMEN STUDENTS** should not remain on the College premises after 9.00 p.m. unless they are attending evening courses in the Commerce Section or in the other Institutes on campus or have explicit permission of the Principal to do so.

- 16.9 The RIGHT TO DISSENT and the RIGHT TO RESOLVE CONFLICT through discussion and reason are acceptable means of protest. All protests should be routed through the Students' Council and should be governed by the Constitution of that Council. It is the Principal who ultimately decides if a protest flouts the College discipline.
- **16.10 DRESS CODE**: Students are expected to wear clothes that contribute to the academic atmosphere necessary on an Indian College Campus. Accordingly, sleeveless or short tops, as well as short dresses, shorts & ripped jeans are considered inappropriate.
- 16.11 CLASS PICNICS or outings are not permitted by the College at all. Parents are therefore warned that the College authorities do not assume any responsibility for picnics or outings organized by students on their own or by teachers in their personal capacity.
- 16.12 UNDERTAKINGS: At the time of admission, every student signs a declaration, on his / her Admission Form, that he /she will abide by all the Rules and Regulations of the College and will accept the decision of the Principal, in all matters, as final. He / She will also give an undertaking to accept the College Rules under Autonomy.

#### 16.13. LIBRARY RULES

- **16.13.1.** The College Library is open from 9.00 a.m. to 8.00 p.m. (Monday through Friday) and from 9.00 a.m. to 5.00 p.m. (Saturday) during the term. Vacation timings are different.
- **16.13.2.** While making use of the Library, students are required to wear their identity-card on their person at all times.
- **16.13.3.** All library services are provided only against valid Library Cards.
- **16.13.4.** Students are required to report loss of a book immediately to the Librarian in writing.
- **16.13.5.** No books or periodicals can be removed from the Library unless the loan has been registered at the Loan Counter.
- **16.13.6.** Readers must, on receiving a book, examine it, and report to the Library Assistant any damage found therein. If they fail to do so, they will be held responsible for any damage that may be detected later by the Library authorities.
- **16.13.7.** Books lost, damaged or defaced, must be paid for by the reader on whose name they were issued. The value of the books will be determined by the Librarian.

- 16.13.8. All loans must be returned by the due date (or time). Overdue charges will be imposed on all books not returned in time. Students who repeatedly fail to return books on time may be denied the use of the Library's Lending Facility.
- **16.13.9.** All books must be returned on or before the last date of the academic year or the last date of the examination of the student, whichever is later.
- **16.13.10.** Students, who fail to return books borrowed from the Library at least one week prior to the declaration of results, will be declared as 'Library Defaulters' and their results will be withheld until they get clearance from the Library.
- **16.13.11.** The Librarian reserves the right to recall any book or periodical at any time.
- **16.13.12.** To ensure that the Library is kept tidy all the time, furniture must not be rearranged and must be used only for its proper purpose.
- **16.13.13.** Eating and drinking of beverages is forbidden in the Library.
- **16.13.14.** For library access as visitors, please contact the College Librarian.
- **16.13.15.** Silence should be observed in the Library at all times.
- **16.13.16.** Disregard of Library Rules, indiscipline and misbehaviour will render students liable to be refused access to the Library altogether.

#### 16.14. QUALITY MECHANISMS AND BEST PRACTICES

- 16.14.1. St Xavier's College, over the years and especially under autonomy, has developed and adopted certain quality mechanisms and best practices to enhance teaching-learning processes and bench-mark them to global academic standards. Following are highlights of the Best Practices of the College:
  - **16.14.1.1.** An annual syllabi review as well as the Question Papers (CIAs and ESE) is undertaken by the Department Faculty and its External Experts from the Board of Studies.
  - **16.14.1.2.** The use of ICT in the teaching-learning process with the use of LCD facilities in all classrooms is encouraged.
  - **16.14.1.3.** To make the lectures participative, the use of the Constructionist Ideology of Education and not the Banking Philosophy of Education is followed.
  - 16.14.1.4. Special efforts are undertaken at Inclusive Education through the XRCVC, disabled-friendly campus, sensitization of faculty to the needs of slow learners and scholarships for the disadvantaged through the Student Beneficiary Fund.

- **16.14.1.5.** Study packs of essential readings, drawn from different sources are created, to cover the syllabus along with guided and critical study of these and further reference work.
- **16.14.1.6.** A 3-credit Cross Faculty Course is made obligatory for all students so as to encourage interdisciplinary learning.
- **16.14.1.7.** The use of Bloom's Taxonomy to evaluate Learning Objectives for the Teaching Learning Process and for Question Paper Setting is practiced.
- **16.14.1.8.** To ensure objective criteria for assessment, pre-announced Presentation / Assignment Evaluation Grids are used.
- 16.14.1.9. To ensure fairness in assessment Barcoding / Masking of Answer Papers before the assessment process begins is followed. Moderation of assessed papers through External Examiners or Double-Blind Evaluation is also practiced.
- **16.14.1.10.** To offer feedback to students on their performance their assessed answer papers are displayed to them. Students are also allowed to have a photocopy of the assessed answer paper and / or challenge the evaluation of the assessed paper through the proper procedure.
- **16.14.1.11.** To get regular student feedback about faculty on the teaching-learning process the Teacher Assessment Questionnaire (TAQ) is administered.
- **16.14.1.12.** To enable new faculty to settle in-house orientation programmes for them are organized and they are also offered Faculty-Mentorship as well as sit-ins during their lectures by the HoD.

#### 16.15. ENQUIRY AND PROJECT-BASED LEARNING PROCESSES

- **16.15.1.** The Honours Programme (HP) is conducted for the academically better students. The HP consists of 7 extra credits, earned over the 3 years, including an introduction to research. Relevant courses are also conducted under the Learning for Life Programme.
- **16.15.2.** Field Trips, industrial visits and guest lectures are organized to make academics more experiential and inquiry-based. Students are encouraged to take up Summer Internships / Projects so as to experience industry and corporate entities in the real world.
- **16.15.3.** Annual Department Seminars (usually at the College Khandala Villa) are organized to help students build up their confidence and skills at making academic presentations.
- **16.15.4.** Annual thematic Department Journals are published containing students' articles. This helps in exposing students to writing research papers and even in handling editorial tasks.

- **16.15.5.** Regular Faculty Seminars and Workshops are organized to upgrade the pedagogical skills of the Faculty and thus help them to evolve better methods and processes of teaching and learning.
- **16.15.6.** To support research among Faculty, the College offers them help in applying for State, Central Government, UGC and University funding for Minor and Major Research Projects. Faculty members are also encouraged to participate in Conferences and to serve as Resource Persons in other institutions.
- **16.15.7.** Infrastructural support in the form of research facilities like the Heras Institute, Blatter Herbarium, NSRL and Caius are made available to faculty members.
- **16.15.8.** The practice of following Laboratory-Safety Guidelines as well as Biosafety Guidelines for Microbiological work in the College is obligatory. The latter Guidelines have been compiled by the Dept. of Microbiology and passed through the Bioscience Faculty involved in research and the members of the Institutional Biosafety Committee (IBSC) of the college.
- **16.15.9.** The College publishes '**Xplore**', the annual peer-reviewed Research Journal by the Faculty in order to promote the research culture among faculty members.

#### 16.16. SOFT SKILL DEVELOPMENT AND COLLATERAL PROGRAMMES

- **16.16.1.** The mandatory Social Involvement Programme exposes students to social realities hereby provoke in them a consciousness to serve society.
- **16.16.2.** Language and Soft-Skills are developed through the Language Lab, the special communication skills courses, presentations as part of CIA and through participation in extracurricular activities.
- **16.16.3.** The College has a Counselling Centre for Aptitude Testing, Career Guidance and for Personal Counselling of students and parents.
- **16.16.4.** Students are mentored by Faculty, in the groups assigned to each of the faculty members.
- **16.16.5.** The Placement Cell of the College trains students in the soft skills needed for applications and interviews and to facilitate interaction with the corporate world for internships and final placements.
- **16.16.6.** International programmes are offered to expand the horizons of the Faculty and Students. By admitting foreign students to courses on the Campus cultural diversity is enhanced.
- **16.16.7.** Parent interactions are encouraged on a routine basis (through the internet or personally) or at the annual Parent-Teacher Meeting.

- **16.17. ANNUAL THEME:** In keeping with the vision-mission statement of the college the challenges thrown at us by the COVID-19 pandemic, the theme of the College for this year is **ACADEMIC ADAPTATION**. This theme challenges us to become:
  - **16.17.1.** Adept in the various virtual teaching-learning modalities across all disciplines as well as co-curricular and extra-curricular activities.
  - **16.17.2.** Sensitive to the needs of those around us both in our family as well as our neighbourhood.
  - **16.17.3.** Conscious of the national as well as global priorities and thereby make concerted efforts to contribute towards achieving these priorities.

# **17. COLLEGE CALENDAR (2020-21)**

### **ODD SEMESTER**

| July 2 | July 2020 |                                 |  |
|--------|-----------|---------------------------------|--|
| 15     | Wednesday | Lectures for TY 2020-2021 begin |  |
| 22     | Wednesday | Lectures for SY 2020-2021 begin |  |
| 30     | Thursday  | Practical's for SY, TY begin    |  |
| 31     | Friday    | Feast of St. Ignatius of Loyola |  |

| Augu | August 2020 |                             |  |
|------|-------------|-----------------------------|--|
| 01   | Saturday    | Bakri Id - holiday          |  |
| 12   | Wednesday   | lanmashtam i/ Dahi Kala     |  |
| 15   | Saturday    | Independence Day, holiday   |  |
| 16   | Sunday      | Parsi New Year Day, holiday |  |
| 22   | Saturday    | Ganesh Chaturthi, holiday   |  |
| 25   | Tuesday     | FY Orientation              |  |
| 26   | Wednesday   | FY Lectures begin           |  |
| 30   | Sunday      | Moharram, holiday           |  |

| September 2020 |            |                                          |
|----------------|------------|------------------------------------------|
| 01             | Tuesday    | Anant Chaturdashi                        |
| 02 to 09       | Wed - Wed  | CIA I for SY, TY                         |
| 25 to 01       | Fri - Thur | Additional exams for 2019-20 TY students |

| October 2020 |           |                                                                         |
|--------------|-----------|-------------------------------------------------------------------------|
| 02           | Friday    | Mahatma Gandhi Jayanti                                                  |
| 03 to 17     | Sat-Sat   | TY (2019-20) BA, BSc, BCom, BSc IT, BMS, BMM Even End Sem exams         |
| 10 to 17     | Mon - Sat | MA, MSc, MPP (2019-2020) Sem IV Even End Sem Exam                       |
| 19 to 24     | Mon- Sat  | CIA II for SY, TY & CIA (I+II – 25 marks extrapolated to 40) for FY     |
| 25           | Sunday    | Dussehra                                                                |
| 30           | Friday    | Id-E-Milad                                                              |
| 31           | Saturday  | TY (Sem VI) 2019-20 & MA, MSc, MPP Sem IV (2019-20) Results declaration |

# **17. COLLEGE CALENDAR (2020-21)**

| November 2020 |             |                        |
|---------------|-------------|------------------------|
| 14            | Saturday    | Diwali, Laxmi Pujan    |
| 16            | Monday      | Diwali, Bali Pratipada |
| 19 to 28      | Thurs - Sat | ESE Practical Exams    |
| 30            | Monday      | Guru Nanak Jayanti     |

| December 2020 |                |                                                       |
|---------------|----------------|-------------------------------------------------------|
| 01 to 02      | Tues-Wednesday | Study leave for students, Non-teaching days           |
| 03            | Thursday       | Feast of St. Francis Xavier and SUC - Traditional Day |
| 04 to 18      | Fri-Fri        | ESE Theory Examinations                               |
| 19 to 23      | Sat-Tues       | Paper corrections                                     |
| 23            | Wednesday      | Fellowship Programme #                                |
| 24            | Thursday       | Winter vacation commences                             |

### **EVEN SEMESTER**

| JANUARY 2021 |          |                                       |
|--------------|----------|---------------------------------------|
| 02           | Saturday | College reopens after winter vacation |
| 26           | Tuesday  | Republic Day                          |
| 25 to 26     | Mon, Tue | Jan Fest                              |

| February 2021 |            |                                        |
|---------------|------------|----------------------------------------|
| 06 to 12      | Sat-Friday | CIA I for FY, SY, TY                   |
| 13            | Saturday   | Parent - Teacher Meeting (online mode) |
| 19            | Friday     | Shivaji Jayanti holiday                |

| March 20 | 21           |                        |
|----------|--------------|------------------------|
| 11       | Thursday     | Maha Shivratri holiday |
| 15 to 20 | Mon-Saturday | CIA II for FY, SY, TY  |
| 29       | Monday       | Holi holiday           |

# **17. COLLEGE CALENDAR (2020-21)**

| April 2021 |              |                                        |
|------------|--------------|----------------------------------------|
| 02         | Friday       | Good Friday holiday                    |
| 13         | Tuesday      | Gudi Padwa holiday                     |
| 14         | Wednesday    | Ambedkar Jayanti celebrations, holiday |
| 21         | Wednesday    | Ram Navmi                              |
| 15 to 23   | Thurs-Friday | ESE Practical Exams                    |
| 25         | Sunday       | Mahavir Jayanti                        |
| 30         | Friday       | Last day of teaching                   |

| May 2021 |              |                                            |
|----------|--------------|--------------------------------------------|
| 01       | Saturday     | Maharashtra Day, holiday                   |
| 03 to 17 | Mon-Monday   | ESE exams for FY, SY, TY                   |
| 14       | Friday       | Ramzan-ld/ld-Ul-Fitr, holiday              |
| 20 to 21 | Thurs-Friday | Moderation of exam papers                  |
| 22       | Saturday     | Display of Answer papers - FY              |
| 24       | Monday       | Display of Answer papers - SY              |
| 25       | Tuesday      | Display of Answer papers - TY              |
| 26       | Wednesday    | Buddha Purnima, holiday                    |
| 29       | Saturday     | Declaration of results                     |
| 31       | Monday       | Meeting of Principal with teaching faculty |

| June 202 | 1           |                          |
|----------|-------------|--------------------------|
| 01 to 14 | Tues-Monday | Vacations                |
| 15       | Tuesday     | New academic year begins |

### Note:

- 1. # Fellowship Programme if we open the campus
- Listed dates are subject to the Govt. of Maharashtra's list of Public holidays for 2021 and the Govt. of Maharashtra's list of Public holidays for 2020-21
- The listed dates and events can change, subject to circumstances (especially the NAAC visit).

# **18. COLLEGE STUDENT ACHIEVERS (2019-20)**

## ANNUAL RESULTS OF ST. XAVIER'S COLLEGE (AUTONOMOUS) MARCH 2020

### POST-GRADUATE STUDENT TOPPERS ON THE BASIS OF C.G.P.A.

### **ARTS FACULTY**

| NAME OF STUDENT                                                                              | CGPA                  | NAME OF STUDENT                                                                    | CGPA                  |
|----------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------|-----------------------|
| M.A. A.I.H.C.A.<br>Liya Lizabeth Mathew<br>Taw Yalla<br>Pathare Gargi Haresh                 | 9.31<br>9.25<br>9.12  | M.A. Public Policy Niharika Tyagi Karnik Namita Atul Kammowanee Rochana D          | 9.42<br>9.31<br>9.13  |
|                                                                                              | SCIENCE F             | FACULTY                                                                            |                       |
| NAME OF STUDENT                                                                              | CGPA                  | NAME OF STUDENT                                                                    | CGPA                  |
| M.Sc. Biotechnology Gaud Divya Bachan Divekar Ruta Sunil Suvasia Prashant Vishnu             | 9.56<br>9.48<br>9.46  | M.Sc. Botany Fernandes Valeska Viana Maribelle Leocadia Shaikh Ena                 | 9.75<br>9.69<br>9.60  |
| M.Sc. Geology Dsouza Rithika Zeineiya Dias Dyneka Francis Siddharth Barua                    | 9.92<br>9.56<br>9.33  | M.Sc. Life Science<br>Vaidya Gaurav Kiran<br>Shaikh Misbah Ashfaque<br>Sharon Alex | 10.00<br>9.83<br>9.71 |
| M.Sc. Microbiology Mirgule Juili Ekanath Saraff Mrunmayee Harendra Kalambe Pratiksha Prakash | 10.00<br>9.94<br>9.77 |                                                                                    |                       |

# 18. COLLEGE STUDENT ACHIEVERS (2019-20)

### UNDER-GRADUATE STUDENT TOPPERS ON THE BASIS OF C.G.P.A.

| NAME OF STUDENT                                                                                                              | CGPA                                 | NAME OF STUDENT                                                                                               | CGPA                         |
|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------|
| T.Y.B.A. Pathare Saniya Ajay Kavungal Divya Dinesh Venkateswaran Sruthi Solanki Kashish Yudhviram Sonavane Siddhita Surendra | 3.92<br>3.90<br>3.90<br>3.89<br>3.89 | T.Y.B.Com. Aaraadhya Srivastava Sweezel Valiaveetil Ankita Singh                                              | 3.86<br>3.85<br>3.48         |
| <b>T.Y.B.M.M.</b> James Amanda Seraphina Sharan Anushka Kaur Guneet                                                          | 3.80<br>3.77<br>3.75                 | <b>T.Y.B.M.S.</b> Khanna Aayush Vig Rishabh Florence Alphonso                                                 | 3.96<br>3.85<br>3.79         |
| <b>T.Y.B.V.</b> (Software Development) Khan Sikander Shakil Malkapurwala Rukaiya Juzer Barkat Sania Aftab                    | 3.76<br>3.73<br>3.68                 | T.Y.B.V. (Tourism) Fernandes Drisya Remy Rodricks Rhea Maria Saluja Chirag Shinde Gargi Avinash               | 3.72<br>3.72<br>3.71<br>3.66 |
| T.Y.B.Sc.  Makani Zeheb Ahmad Gupta Disha Rahul Goregaokar Neha Shailesh Arora Riyansha Anil Johri Tanishka Rakesh           | 3.96<br>3.95<br>3.95<br>3.95<br>3.93 | <b>T.Y.B.Sc.</b> (Information Technology) Sharma Akshay Jain Chirag Manoj Patil Rohan Vishnu Mansury Mahjabin | 3.94<br>3.94<br>3.89<br>3.88 |