

# ST. XAVIER'S UNIVERSITY, KOLKATA

## Syllabus for Xavier Engineering Admission Test (XEAT) – 2026

- B.Tech. in Computer Science and Engineering**
- B.Tech. in Information Technology**
- B.Tech. in Electronics and Communication Engineering**
- B.Tech. in Computer Science and Engineering (AI & ML)**

### **General Guidelines:**

Total Marks – 100

Time - 2 hours

Question Pattern - MCQ

Test Environment: Internet Based Test

Subjects:

1. Mathematics - 40 marks
2. Physics - 30 marks
3. English - 30 marks

Each question will carry one mark and there will no negative marking.

**Mathematics** (40 Marks): Sets, Relations, Functions, Complex Numbers, Quadratic Equations, Matrices, Determinants, Permutations, Combinations, Binomial Theorem and its simple applications, Sequence and Series, Limit, Continuity and Differentiability, Integral Calculus, Differential Equations, Co-ordinate Geometry, Vector Algebra, Statistics and Probability, Trigonometry

**Physics** (30 Marks): Units and Measurements, Kinematics, Laws of Motion, Work, Energy and Power, Rotational Motion, Gravitation, Properties of Solids and Liquids, Thermodynamics, Kinetic Theory of Gases, Oscillations and Waves, Electrostatics, Current Electricity, Magnetic Effects of Current and Magnetism, Electromagnetic Induction and Alternating Currents, Electromagnetic Waves, Optics, Dual Nature of Matter and Radiation, Atoms and Nuclei, Analog and Digital Electronics.

**English** (30 Marks): Theory & Grammar, English Composition, Reading Comprehension, Communicative English, Soft Skills