

ENGINEERING SCHOLARSHIP EXAM - SYLLABUS 2026

I. Section A: Aptitude (10 x 1)

- Average & Percentages
- Time, Speed & Distance
- Time & Work
- Coding & Decoding
- Logical Reasoning (Arrangements & Blood Relation)

II. Section B: Mathematics (15 x 2)

- **Algebra:** AP, GP, Equations, Series
- **Calculus:** Derivatives (basic differentiation)
- **Trigonometry:** Trigonometric ratios, identities, maxima
- **Coordinate Geometry:** Straight lines, midpoint, circle
- **Probability:** Basic probability concepts
- **Permutation & Combination:** Selection and arrangement problems
- **Mensuration:** Polygon angle sum

III. Section C: Physics (10 x 2)

- **Mechanics:** Motion, Work, Energy, Momentum, Projectile motion
- **Thermodynamics:** Laws of thermodynamics, heat, Carnot engine
- **Waves & Oscillations:** SHM, sound
- **Electricity:** Ohm's law, resistance
- **Gravitation:** Escape velocity

IV. Section D: Chemistry (10 x 2)

- **Atomic Structure:** Atomic number, Bohr model, periodic trends
- **Chemical Bonding:** Ionic bonding, molecular shapes
- **Thermodynamics:** Enthalpy, energy changes
- **Physical Chemistry:** Gas laws (Boyle's law, ideal gas equation)
- **Organic Chemistry:** Alkanes, polymers
- **General Chemistry:** Oxidation, catalysts, water hardness

V. Section E: English Communication

(10 x 2)

- **Reading Comprehension:** Main idea, inference, vocabulary in context
- **Vocabulary:** Synonyms, antonyms
- **Grammar:** Tenses, subject-verb agreement, sentence correction
- **Voice:** Active & passive
- **Conditionals:** Basic sentence structures
- **Idioms & Phrases**
- **Sentence Arrangement & Logical Order**

VI. Section F: Science & Tech Awareness

(5 x 2)

- Fundamentals of AI, Robotics, Cyber Threats & Security Awareness, Industrial Automation.