

AP EAPCET Syllabus

Exam Pattern Overview

- Total Questions: 160
- Subjects: Mathematics, Physics, Chemistry (Engineering stream)
- Marking Scheme: +1 mark for each correct answer, No negative marking
- Duration: 3 hours
- Mode: Online (Computer-Based Test)
- Language: English and Telugu

Mathematics (80 Questions)

Number System & Algebra

- Real Numbers & Sets
- Polynomials, Quadratic Equations
- Progressions: Arithmetic, Geometric
- Matrices, Partial Fractions

Coordinate Geometry & Geometry

- Basics of Coordinate Geometry
- Plane Geometry, Mensuration
- Areas, Surface Areas & Volumes

Trigonometry

- Ratios, Identities
- Heights & Distances
- Applications in real-world scenarios

Advanced Topics

- Permutations & Combinations
- Binomial Theorem

- Logarithmic & Exponential Series

Statistics & Probability

- Data Handling, Mean, Median, Mode
- Probability, Random Variables
- Basic Mathematical Modelling

Physics (40 Questions)

Mechanics

- Units & Dimensions
- Motion, Laws of Motion, Friction
- Work, Energy, Power

Heat & Waves

- Thermodynamics
- Sound Waves, SHM

Optics

- Light: Reflection, Refraction
- Human Eye, Color

Electricity & Magnetism

- Current Electricity, Ohms Law
- Simple Circuits, Magnetic Effects
- Electromagnetic Induction
- Energy Sources

Chemistry (40 Questions)

Basic Concepts

- Atomic Structure
- Periodic Classification of Elements
- Chemical Bonding & Molecular Structure
- Chemical Equations, Acids, Bases, Salts

Applied Chemistry

- Metallurgy Principles
- Organic Chemistry: Carbon Compounds, Fuels
- Electrochemistry

Environmental & Industrial Chemistry

- Water Technology
- Polymers, Corrosion
- Environmental Pollution and Control