VITEEE 2027 Syllabus (Subject-wise)

Mathematics, Physics, Chemistry, Biology, Aptitude and English topics for VITEEE.

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Mathematics (40 questions)

Class 11 and 12 topics.

Unit	Topics
Algebra	Matrices and determinants, complex numbers, quadratic equations, sequences and series, permutations and combinations, binomial theorem
Calculus	Limits, continuity, differentiation, applications of derivatives, integration, definite integrals, differential equations
Coordinate geometry	Straight lines, circles, parabola, ellipse, hyperbola
Vectors and 3D	Vector algebra, scalar and vector products, lines and planes
Probability and statistics	Probability, distributions, mean and variance
Trigonometry	Identities, equations, inverse trigonometric functions

Physics (25 questions)

Class 11 and 12 topics.

Unit	Topics
Mechanics	Laws of motion, work-energy-power, rotation, gravitation
Properties of matter	Elasticity, fluids, thermal properties
Electricity and magnetism	Electrostatics, current electricity, magnetic effects, EMI, AC
Optics	Ray optics, wave optics
Modern physics	Dual nature, atoms and nuclei, semiconductors, communication

Chemistry (25 questions)

Class 11 and 12 topics.

Unit	Topics
Physical	Atomic structure, thermodynamics, equilibrium, electrochemistry, kinetics, solutions
Inorganic	Periodic properties, coordination compounds, p/d/f-block elements
Organic	Isomerism, hydrocarbons, functional groups, polymers, biomolecules

Biology (BPCEA only, 40 questions)

Class 11 and 12 topics.

Unit	Topics
Cell and genetics	Cell biology, molecular biology, genetics
Physiology	Plant and human physiology
Biotechnology	Principles and applications
Ecology	Ecosystems, biodiversity, environment

Aptitude (5 questions)

Short reasoning and data questions.

Unit	Topics
Data interpretation	Tables and graphs, data sufficiency
Reasoning	Syllogisms, number series, coding-decoding, clocks and calendars

English (5 questions)

Basic comprehension and grammar.

Unit	Topics
Comprehension	Short passages
Grammar	Error spotting, sentence completion, pronunciation