Topics & Sub-Topics for Undergraduate Admission Test

GIKI Syllabus: BS Programs (Engineering and Computing – AI, CE, CS, DS, SE, CyS)

	Topic	Sub Topics
Mathematics	Number Systems, Set Theory, Functions	Real Nos., Complex Nos., Sets, Functions, Linear Equations, Matrices, Determinants, Simultaneous Equations, Polynomials,
	Quadratic Equations	Solution of Equations, Relationship b/w Roots & Coefficients
	Sequence & Series	AP, GP, HP, Basic Statistics, Probability, Permutations, Combinations
	Mathematical Induction	Mathematical Induction, Binomial Theorem, Binomial Series
	Trigonometry	Trigonometric Equations, Functions, Inverse Functions, Angles, Applications
	Differential Calculus	Functions, Limits, Differentiation
	Integral Calculus	Integration, Areas, Volumes
	Analytic Geometry	Analytic Geometry, Conic Sections
	Vectors	Vectors in Plane & Space, Scalar/Vector/Triple Product of Vectors
	Misc.	Assorted topics in Mathematics

	Topic	Sub Topics
Physics	Measurements & Vectors	SI, Errors, Physical Quantities, Vectors, Equilibrium
	Motion & Work	Force, Linear Motion Circular Motion, Work, Power, Energy, Fluid Dynamics
	Waves & Oscillation	Propagation of Waves, Superposition of Waves, Stationary Waves, Doppler's Effect, SHM, Free & Forced Oscillation
	Optics	Principles, Instruments
	Heat & Thermodynamics	Kinetic Theory of Gases, Laws of Thermodynamics, Entropy
	Electricity	Electrostatics, Current, DC, AC, Potential, Laws, Electromagnetism, EM Induction, Electronics, Devices
	Modern Physics	Relativity, Quantum Theory, Atomic Physics, Nuclear Physics
	Misc.	Assorted topics in Physics

	Topic	Sub Topics
English Language	Reading Comprehension	Content & Context Understanding, Idiomatic & Colloquial Use of Language, Inference & Deductive Reasoning
	Vocabulary	Synonyms, Antonyms
	Correct Usage	Tense Agreement, Usage, Language Patterns
	Misc.	Assorted topics in English Language