



Lumbini Technological University
Institute of Engineering & Information Technology
4 Years B.Tech. in Computer Science & Artificial Intelligence (B.Tech. in CS & AI)
Entrance Examination
Syllabus

Marking Schema of B.Tech in CS & AI Entrance Exam.

S.N	Subject	Marks	No of Questions
1	Mathematics	25	25
2	Physics	25	25
3	Chemistry	25	25
4	English	15	15
5	Computer	10	10

The full marks of Entrance exam is 100 and each question have weightage of 1 marks and exam will complete in 2 hours.

Physics:

Physical science and measurement, Laws of motion, Rotational motion, Thermodynamics, Electronic devices, Electromagnetic induction and alternating currents, Oscillations and waves, Current electricity, Optics, Work, Electrostatics, Energy and power, Kinetic theory of gases, Kinematics, Gravitation, Properties of solids and liquids.

Chemistry:

Physical Chemistry: Basic concepts in chemistry, Atomic structure, Chemical thermodynamics, Equilibrium, Chemical kinetics, Chemical bonding, molecular structure, States of matter, etc. **Inorganic Chemistry:** Elements and periodicity in properties, Hydrogen, D- and F- block elements, Environmental chemistry, Block elements (alkali and alkaline earth metals), Block elements group 13 to group 18, etc. **Organic Chemistry:** Purification and characterization of organic compounds, Organic compounds containing halogens, Chemistry in everyday life, some basic principles of organic chemistry, Organic compounds containing nitrogen, etc.

Mathematics:

Algebra, Trigonometry, Coordinate Geometry, Calculus and Vectors.

English:

Grammar (part of speech, articles, transformation, question tags, suffix and prefix, conditionals, prepositions, reported speech, causative verb, relative clause, word stress rule and syllables, subject-verb agreement, active and passive voice, direct and indirect speech, collective noun), writing (essay, story, email, and letter), narration (sequence of events, describe tables, graphs and charts), article reading (read, analyze, interpret, evaluate and summarize information), and structure and organization of the text.

Computer:

General Knowledge