



অসম দক্ষতা বিশ্ববিদ্যালয়

Assam Skill University

(A State University established under Assam Act No. IX of 2020)
[Recognised Under Section 2(f) of the UGC Act, 1956]
[AICTE Approved Id – 1-44753529533 and HEI Code - U-1372]

Syllabus for Entrance Examination BTech Lateral Admission in Information Technology

Part I: Mathematics – 30 Marks

Unit 1: Number Systems & Algebra

Real numbers, Euclid's division lemma, Polynomials and factorization, Linear equations in two variables. Quadratic equations

Unit 2: Geometry & Mensuration

Triangles (similarity, Pythagoras theorem), Circles (tangents, properties), Surface areas and volumes (cube, cuboid, cylinder, cone, sphere)

Unit 3: Trigonometry

Trigonometric ratios, Identities and simple applications, Heights and distances

Unit 4: Statistics & Probability

Mean, median, mode, Probability (basic concepts)

Part II: Computer Science & Programming – 30 Marks

Unit 1: Fundamentals of Computers

Basics of computer systems (input/output devices, memory, CPU), Types of software (system software, application software), Operating system basics

Unit 2: Programming Fundamentals

Algorithm and flowchart, Basic programming concepts: variables, data types, operators, Control structures: Conditional statements (if, if-else, switch), Loops (for, while, do-while)

Unit 3: Problem Solving & Logic

Basic problem-solving techniques, Pseudocode, Debugging concepts

Unit 4: Introduction to Programming Language (C)

Basic syntax, Input/output statements, Simple programs (sum, factorial, prime number, etc.)

Part III: General Aptitude – 40 Marks

Unit 1: Quantitative Aptitude

Percentage, ratio and proportion, Profit and loss, Time, speed and distance Time and work, Simple and compound interest

Unit 2: Logical Reasoning

Number series, Coding-decoding, Blood relations, Direction sense, Analogies and classification

Unit 3: Verbal Ability

English grammar (tenses, articles, prepositions), Vocabulary (synonyms, antonyms), Sentence correction, Reading comprehension



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Unit 4: General Awareness:

Current affairs (national and international), Basic science awareness, Important days and events