

Syllabus for BCA & MCA

PART 1

WEIGHTAGE 70%

Verbal Ability

Vocabulary: Pure and Contextual (Phrasal Verbs, Idioms, Root Words, One word Substitution and Synonyms & Antonyms,) Gramatical Error based questions on (Pronoun and Antecedents, Tenses, Parallel Construction, Conditionals, Subject Verb Agreement), Reading Comprehension, Verbal Reasoning (Parajumbles, Critical Reasoning).

Logical Reasoning

Arrangement (Linear, Circular, Tabular, Any other type), Blood Relation, Grouping and Team Formation, Coding Decoding, Series Completion, Direction Sense, Puzzles, Syllogism, Data Sufficiency, Data Interpretation.

Quantitative Ability

Number System, Percentage, Profit Loss, Simple Interest and Compound Interest, Ratio Proportion, Averages, Mixtures and Solutions, Time, Speed and Distance, Time and Work, Basic Algebra, Permutation and Combination, Probability, Set Theory, Clocks, Calendar, Logarithms.

PART 2

WEIGHTAGE 30%

Fundamental of Computer Science

1. Computational Thinking and Programming

Basics: Variable naming conventions, Data Types, Operators, Control Flow: If-Else statements, Nested loops, for and while loops, break/continue statements, Functions: Built-in vs. User-defined functions, arguments, parameters, and scope (Global vs. Local), string manipulations, and array/list handling.

2. Data Structures & Algorithms (Basics)

Searching: Linear Search and Binary Search, Sorting: Bubble Sort and Insertion Sort, Abstract Data Types: Basic understanding of Stacks (LIFO) and Queues (FIFO), Dry Running: Predicting the output of given code snippets (Testing logical accuracy).

3. Logical Reasoning & Pseudo-code

Pattern Recognition: Completing sequences or identifying logical errors in flowcharts, Pseudo-code interpretation: Solving logic-based problems presented in plain English rather than a specific programming language.