Syllabus for PGET

M. Tech (AI & DS) Program

Quantitative Aptitude and Reasoning:

Number and Letter Series, Ratios, Percentages, Exponents, Logarithms, Sequences and Series, Mensuration, Statistics, Verbal Ability and Reasoning, Quantitative Ability and Reasoning, Logical Connectives, Binary Logic, Logical Sequences and Matching, Seating Arrangements, Coding-Decoding, Decision Making, Data Interpretation and Analysis, Analytical Reasoning, Analogies, Assertion and Reason, Situation and Reaction, Logical Deduction, Argument Construction, Argument Evaluation, Divergent and Lateral Thinking, and Creativity.

Mathematics:

Number representation, binary arithmetic; Boolean algebra, Set, Relation, Function, Lattices, Permutations and Combinations. Probability theory: conditional probability, Bayes' theorem, probability distributions, Statistics: fundamentals, measurement of central tendency, sampling theory, sampling distributions, Matrix manipulation, Linear equation.

Basic Computer Knowledge & Programming Fundamentals:

Processors, Primary and Secondary Memory Devices, I/O Devices, System and Application software, Operating Systems, File Systems, Databases, Internet and World Wide Web and general knowledge about Latest Technological advancements in fields of Computer related areas. Basic programming in C & C++, use of Data Structures like Arrays, Linked lists, Stacks, Queues, Fundamental Algorithms of Sorting and searching.