

Written Test Pattern

1. Applicants who have a valid score card in national level exams like GATE/UGC-NET/CSIR-NET/NBHM, etc. are exempted from the written test. Such applicants are expected to produce the valid score card while reporting at the institute.
2. The Question Paper consists of two-parts. Part A consists of 50 Multiple Choice Type Questions, each carrying 1 mark. For every incorrect 1-mark question, 1/3 marks are deducted.
3. Part B consists of 10 Multiple Choice Type Questions, each carrying 5 marks. No negative marking for Part B questions.
4. The duration of the examination is 180 mins.

List of Subjects and their Syllabus for Entrance Exam

The following subjects shall comprise the PhD Admission Test CSE - 2025

- (i) Discrete Mathematics
- (ii) Data Structures and Algorithms
- (iii) C programming
- (iv) Computer Organization

Syllabus

Discrete Mathematics: Logic, Sets, Relations, Functions, Graphs

Data structure and algorithms: Linear ADTs – Stacks, Queues, List, Priority Queue ADT - Heaps, Non-Linear ADTs – Trees and Graphs, Searching and Sorting

Computer Organization: Fixed point and floating point representation, Binary Arithmetic (addition, subtraction, multiplication, division), Cache memory

C programming: Input/Output statements, Selection (IF/Switch Case) and Repetition Statements (For/While loop), Structures, Pointers