

Written Test Pattern and Syllabus

1. Applicants who have qualified and 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 two-parts. Part A consists of 50 Multiple Choice Type Questions, each carrying 1 mark. Part B consists of 10 Multiple Choice Type Questions, each carrying 5 marks.
3. The written test has NEGATIVE MARKING. For every incorrect 1-mark question, $1/3$ marks are deducted and for every incorrect 5-mark question, $5/3$ marks are deducted.
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 - 2024

- (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