

Computer Science

The Computer Science subject test would consist of multiple choice questions from the foundation courses of Computer Science. Topic-wise question distribution will be as follows:

- Discrete Structures (25 – 30)%
 - A. Functions, relations and sets
 - B. Basic logic
 - C. Proof techniques
 - D. Basics of counting
 - E. Graphs and trees
 - F. Discrete probability
- Programming and problem solving (25 – 30)%
 - A. Programming Fundamentals: fundamental programming constructs, basic algorithms and problem solving, fundamental data structures, recursion, event-driven programming, object-oriented programming
 - B. Programming Languages: features, paradigms, implementation techniques
- Algorithms and Complexity (20 – 25)%
 - A. Advanced data structures and algorithms (including graph algorithms), algorithmic strategies, basic computability and complexity
 - B. Automata theory and formal languages
- Systems (15 – 22)%
 - A. Architecture: digital logic and digital systems, machine level representation of data, assembly level machine organization, interfacing and communication
 - B. Operating Systems: operating system principles, concurrency, scheduling and dispatch, and memory management
 - C. Networking
- Additional Topics (8 – 12)%
 - A. Software Engineering
 - B. Database systems
 - C. Linear Algebra and calculus

The format of the questions will be similar to the GRE CS Subject Test. A sample test can be downloaded from the link: https://www.ets.org/Media/Tests/MFT/pdf/mft_samp_questions_compsci.pdf