

All India SDE test series

Get referred to top tech companies

10-week program



th Test Syllabus

Active Date: 22nd June 2019, Active till: lyr post subsc.

Theme: Through my actions.

Topic #1 - Logic building for programming

- Solve problems logically with pointers and dynamic memory.
- ✓ Solve problems logically with classes.
- Solve problems logically with recursion.

Topic #2 - Logical reasoning.

- Establish logical relations between various events through logical reasoning.
- ✓ Solve syllogism-based problems to derive a correct conclusion from given premises.

Topic #3 - Core computer science - Data structures.

- Identify data structures in a given real-world application and understand their workings.
- Implement graph, matrix, and other advanced data structures through real-world coding challenges.

Topic #4 - Core computer science - Algorithms.

- Solve problems involving number theory and bitwise algorithms.
- ✓ Solve problems involving tree or binary-search-based-tree algorithms.

Topic #5 - Core computer science - Dynamic programming.

- Answer what exactly dynamic programming is.
- ✓ Identify problems that can be solved using dynamic programming.
- ✓ Write code to implement dynamic programming for a given DP-based problem.

Topic #6 - Core computer science - System design.

- Understand the design logic of globally popular products like Google Drive, Uber and Dropbox.
- Establish your confidence and skills in performing the gathering and clarifying of requirements.

Topic #7 - High-order thinking.

- Use the knowledge level of bloom taxonomy and comprehend the knowledge to justify certain possibilities.
- Think of an application level from the knowledge and comprehension level of bloom taxonomy for the given case study

Topic #8 - OS/DBMS/Networking

OS:

- 1. Introduction of Operating System
- 2. Types of Operating Systems
- 3. Functions of Operating System

DBMS:

- 1. Entity Relationship Model
- 2. Relational databases
- 3. SQL queries

NETWORKING:

- 1. Basics of computer networks
- 2. OSI reference models
- 3. LAN, Node, Routers, WAN, TCP/IP

Topic #9 - Tech interview round & tech puzzles.

- Answer common technical questions asked from candidates' recent projects.
- Answer architecture-based questions concerning your views on performance and optimization.
- Solve a technical puzzle with pen and paper.
- ✓ Write a pseudocode for a given technical question or a technical programming puzzle.

Topic #10 - HR interview round & business puzzles.

- Answer STAR-based questions asked by HR managers.
- Solve a business puzzle using pen and paper.