

Math Section:

○ Algebra

1. Logarithmic
2. Quadratic equations and Inequalities
3. Progression
4. Determinant
5. Matrix
6. Set Theory
7. Permutation and combination
8. Probability
9. Statistics

○ Calculus

1. Function
2. Limit
3. Continuity
4. Differentiability
5. Differentiation
6. Application of Derivative
7. Indefinite integrals
8. Definite Integral
9. Area Under Curve
10. Differential Equation

○ Coordinate Geometry

1. Rectangular Cartesian System
2. Straight line
3. Pair of Straight line
4. Circle
5. Parabola
6. Hyperbola
7. Ellipse

Logical Reasoning:

1. Geometrical Designs and Identification
2. Selection of related letters / words / numbers / figures
3. Identification of odd thing / item out from a group
4. Direction Sense Test
5. Completion of numerical series based on the numerical pattern and logic of series
6. Fill in the blanks of the series based on the numerical pattern and logic of the series
7. Syllogisms, Identification of logic and selection of correct answers based on the logic

Computer:

Operating system:

1. Main functions of operating system
2. Processes
3. Interprocess communication
4. Concurrency
5. Synchronization
6. Deadlock
7. CPU scheduling
8. Input Output scheduling
9. Resource scheduling
10. Deadlock and Scheduling algorithms
11. Banker's algorithm for deadlock handling
12. Memory management and virtual memory
13. File Systems
14. Input Output Systems
15. DOS
16. UNIX and Windows

Data Structure:

1. Arrays and their Applications
2. Sparse Matrix
3. Stacks
4. Queues
5. Priority Queues
6. Linked Lists
7. Trees
8. Forest
9. Binary Tree
10. Threaded Binary Tree
11. Binary Search Tree
12. AVL Tree
13. B Tree
14. B+ Tree
15. B* Tree
16. Data Structure for Sets
17. Graphs
18. Sorting and Searching Algorithms
19. Hashing
20. Functions
21. Recursion
22. Parameter Passing

Digital Fundamentals:

1. Data Types
2. Number Systems and Conversion
3. Complements
4. Fixed Point Representation
5. Error Detection Codes
6. Computer Arithmetic Algorithms
7. Digital Computers
8. Logic Gates
9. Boolean Algebra
10. Map Simplifications
11. Combination Circuits
12. Flip-Flops
13. Sequential Circuits
14. Integrated Circuits
15. Decoders
16. Multiplexers
17. Registers and Counters
18. Memory Unit

