

OCTOBER 2012

**P/ID 17460/RCK/  
P/CAK**

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Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Give a note on different data types.

Or

(b) Distinguish between local and global variables.

2. (a) What are linked lists? List out the different types of linked lists.

Or

(b) Write about the priority in evaluation of expressions.

3. (a) Explain the linked representation of binary trees.

Or

(b) Draw a full binary tree of depth 9 with sequential node number.

4. (a) Explain internal sorting with example.

Or

- (b) Describe about sorting large objects.

5. (a) Explain the process of hashing.

Or

- (b) What are splay trees? Explain.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Explain the different notations used in Data Structures.
7. Discuss on Time Complexity Analysis.
8. Define a stack and explain the various operations in stack.
9. Explain the usage of circular queues.
10. Discuss on the application of trees.

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11. Explain the implementation of Minimum Cost Spanning Trees.
  12. Explain sorting with tapes.
  13. Compare and contrast any two sorting methods with example.
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