

Note : 1) All questions are compulsory.

2) Figures to the right indicate full marks.

JDS 3

Q. 1 Attempt Any Two :

10

- 1) Explain different operators in Java.
- 2) Write short note on 'Java buzz words.'
- 3) Explain the concept of method overloading with an example.
- 4) Explain constructor and its types with an example.

Q. 2 Attempt Any Two :

10

- 1) Explain User defined package with an example.
- 2) Explain different types of inheritance in Java.
- 3) Explain following keywords :
  - i) try-catch
  - ii) throws
  - iii) finally
- 4) Explain multilevel inheritance in java. With an example.

Q. 3 Attempt Any Two :

10

- 1) Explain File output stream class with its constructors.
- 2) Explain Reader class and its different methods.
- 3) Explain character stream classes.
- 4) Write short note on Buffered reader Class.

Q. 4 Attempt Any Two :

10

- 1) Write an algorithm to insert element in queue.
- 2) Write short note on algorithm and its notations.
- 3) Explain different data structure operations.
- 4) Write an algorithm for Binary Search.

Q. 5 Attempt Any Two :

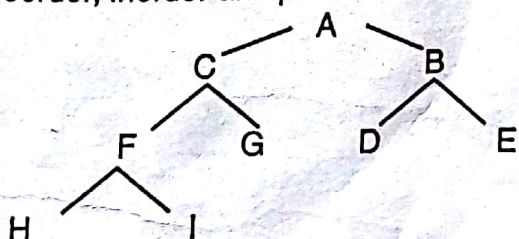
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- 1) Binary tree T has g nodes. Generate the tree according to inorder and postorder of a tree.

Inorder : EFCKAHDBG

Postorder : DGHBFKECA

- 2) Explain representation of linked list.
- 3) Explain preorder, inorder and postorder of the following tree :



- 4) Write an algorithm to insert element in the middle of linked list.

P.T.O.



**Q. 6 Attempt Any two :**

- 1) Write an algorithm for Insertion Sort.
- 2) Write warshall's algorithm for finding shortest path.
- 3) Explain graph and its different types.
- 4) Write an algorithm to insert element in heap.

**Q. 7 Attempt any three :**

- 1) Explain Java's finalize () method with an example.
- 2) Explain how the multiple inheritance can be implement in Java.
- 3) Explain Byte stream classes.
- 4) Write an algorithm for Push operation of stack.
- 5) Write an algorithm to delete element form linkedlist.
- 6) Write an algorithm for Bubble sort.

— The End —