[10]

NOTE: 1) All Questions are compulsory.

2) Figures to the right indicate full marks.

O.1. Attempt any two

a) Write short note on Java Buzzwords.

- b) Explain constructors and its types.
- e) Explain different operators in java.
- d) Explain one dimensional array with an example.

Q. 2. Attempt any two

[10]

- a) Explain different types of inheritance in java.
- b) Explain user defined package with an example.
- e) List the built in exceptions in java.
- d) Explain following keywords:
  - 2) throws 1) try-catch

3) finally

Q. 3. Attempt any two

[10]

- a) Explain ByteStream classes.
- b) Explain different methods of FileReader class.
- c) Write short note on BufferedReader.
- d) Explain FileOutputStream class with its constructor.

Q. 4. Attempt any two

[10]

- a) Explain linear array with an example.
- b) Write an algorithm for binary search.
- c) Write short note on algorithm and its notations.
- d) Write an algorithm to insert element in queue.

Q. 5. Attempt any two

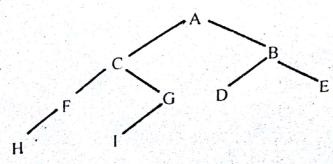
[10]

a) Write short note on traversing in linked list. b) Binary tree T has 9 nodes. Generate the tree according to inorder and postorder of tree.

: EFCKAHDBG Inorder

c) Write an algorithm to insert an element in linked list at the beginning.

d) Explain preorder, inorder and postorder of following tree:



a) Write warshall's algorithm for finding shortest path. b) Explain different types of graphs. c) Write an algorithm to insert element in heap. d) Write an algorithm for insertion sort. IDS-2 Q. 7. Attempt any three a) Explain how the multiple inheritance can be implemented in java. b) Explain CharacterStream classes. c) Explain java finalize () method with an example. d) Write an algorithm to delete element from queue.

Q. 6. Attempt any two

1151

[10]