

2017

Time : 3 hours

Full Marks : 75

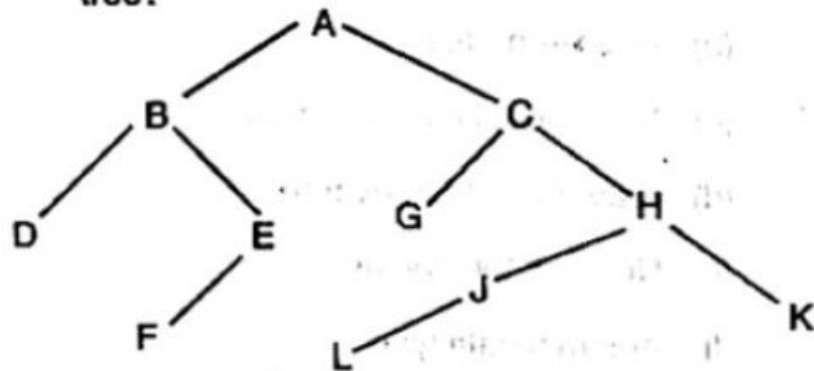
Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer any five questions.

GROUP-A

1. What is a binary tree? Differentiate between strictly binary tree and complete binary tree. What will be the inorder traversal of the given tree?



121/8/16/6

(1)

(Turn over)

2. Construct the tree if preorder and inorder traversal of binary tree is given.

Preorder – ABCDFHJMKEGILN

Inorder – ADJMHKFCINLGEB

3. Define a queue. How does it differ from a stack? Describe the insert and delete operation on a queue.
4. Compare the advantages and disadvantages of implementing stack as an array with implementing a stack as a linked list.
5. Write short notes on any three of the following :
- (a) Heap sort
 - (b) Header nodes
 - (c) Non linear Data Structure
 - (d) Traversal of Binary tree
 - (e) Network topologies
 - (f) Abstract data type

121/8/16/6

(2)

Contd.