

SAMPLE MODEL PAPER
Department of Computer Science and Engineering MNIT
PhD Entrance Test Examination 2021-22

Date:

Max. Marks:5

Name of Candidate: _____

Form No./ID : _____

Note: Each question carries one mark. There is no negative marking.

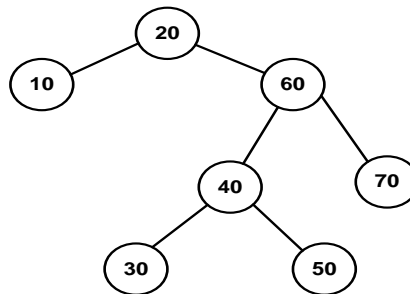
Q1. The relation "is an ancestor of" in a rooted tree, is always

- (1) Symmetric
- (2) Transitive**
- (3) A and B
- (4) Neither A nor B

Q2. In a universal hashing table of size 50 Given only that the hash value for the key "Bunty" is 25, the probability that the hash value for "Shunty" is 25?

- (1) 1/25
- (2) 1/50**
- (3) 1/2
- (4) 1/4

Q3. What would the value of the root after deletion of the node 20 using usual BST algorithm ?



- (1) 10
- (2) 30**
- (3) 40
- (4) 50

Q4. Which of the following tree guarantee that only O(1) rotations will occur when a deletion occurs?

- (1) AVL Tree
- (2) SPLAY Tree
- (3) Red Black Tree**
- (4) All of these

Q5. If a function is placed before void main(), which of the following is not required?

- (1) Void
- (2) Return
- (3) Definition
- (4) Declaration**