

## CS-301 Final Term Exams Preparation Virtual University

Sr	Questions	Answers Choice
1	What requirement is placed on an array, so that binary search may be used to locate an entry?	A. The array elements must form a heap. B. The array must have at least 2 entries C. The array must be sorted. D. The array's size must be a power of two.
2	A complete binary tree of height ____ has node between 16 to 31.	A. 2 B. 3 C. 4 D. 5
3	Consider the following infix expression: $x - y * a + b / c$ Which of the following is a correct equivalent expression(s) for the above?	A. $x y - a * b + c /$ B. $x * y a - b c / +$ C. $x y a * - b c / +$ D. $x y a * - b / + c$
4	A complete binary tree of height 3 has between _____ nodes.	A. 8 to 14 B. 8 to 15 C. 8 to 16 D. 8 to 17
5	A complete binary tree is a tree that is ____ filled with the possible exception of the bottom level.	A. partially B. completely C. incompletely D. partly
6	Which of the following statement is true about dummy node of threaded binary type?	A. This dummy node never has a value B. This dummy node has always some dummy values C. This dummy node has either no value or some dummy value D. This dummy node has always some integer value
7	A Threaded Binary Tree is a binary tree in which every node that does not have a right child has a THREAD (in actual sense, a link) to its _____ successor	A. levelorder B. Preorder C. Inorder D. Postorder
8	Which of the following statement is correct property of binary trees?	A. A binary tree with internal nodes has $N+1$ internal links B. A binary tree with N external nodes has $2N$ internal nodes. C. A binary tree with N internal nodes has $N+1$ external node. D. None of above statement is a property of the binary tree.
9	While building Huffman encoding tree the new node that is the result of joining two nodes has the frequency.	A. Equal to the small frequency B. Equal to the greater C. Equal to the sum of the two frequencies D. Equal to the difference of the two frequencies
10	Use of binary tree in compression of data is known as _____	A. Traversal B. Heap C. Union D. Huffman encoding