

## CS-301 Final Term Exams Preparation Virtual University

Sr	Questions	Answers Choice
1	In a min heap , preculatDown procedure will move smaller value_____ and bigger value_____.	A. left,right B. right,left C. up,down D. down,up
2	Consider the following postfix expression S and the initial values of the variable, $S = A B - C + D E F - + ^$ Assume that $A=3, B=2, C=1, D=1, E=2, F=3$ What would be the final output of the stack?	A. 1 B. 2 C. 0 D. -1
3	In a selection sort of n element ,how many times the swap function is called the execution of the algorithm?	A. n-1 B. 0 C. n log n D. 1
4	If the bottom level of a binary tree is NOT completely filled, depicts that the tree is NOT a	A. Expression tree B. threaded binary tree C. complete binary tree D. perfectly complete binary tree
5	Which of the following is a property of binary tree?	A. A binary tree of N external nodes has N internal node. B. A binary tree of N internal nodes has $N+1$ external node C. A binary tree of N external nodes has $N+1$ internal node D. A binary tree of N internal nodes has $N-1$ external node.
6	Which of the following statements is correct property of binary trees?	A. A binary tree with N 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 nodes. D. None of above statement is a property of the binary tree
7	Consider te following array 23 15 5 12 40 10 7 After the first pass of a particular algorithm, the array looks like 15 5 12 23 10 7 40 Name the algorithm used	A. Heap sort B. Selection sort C. Insertion sort D. Bubble sort
8	Which of the following heap method increase the value of key at position „p” by the amount „delta”?	A. increaseKey(p,delta) B. decreaseKey(p,delta) C. preculatDown(p,delta) D. remove(p,delta)
9	Which one of the following is TRUE about iteration?	A. Iteration extensively uses stack memory B. Threaded Binary Trees use the concept of iteration. C. Iterative function calls consumes a lot of memory. D. Recursion is more efficient than iteration.
10	Which one of the following is TRUE about recursion ?	A. Recursion extensively use stack memory B. Threaded Binary Trees use the concept of recursion. C. Recursive function calls consume a lot of memory. D. Iteration is more efficient than iteration.