

Time: One Hour

Max. Marks: 25

Instruction:-

Solve any 25 Questions from Q1 to Q30

- 1 Which of the following data structure is non-linear type?
(A)Strings (B)Lists (C)Stacks (D)None of above
- 2 The post order traversal of a binary tree is DEBFCA. Find out the pre order traversal
(A)ABFCDE (B)ADBFEC (C)ABDECF (D)ABDCEF
- 3 The memory address of the first element of an array is called
(A)Floor address (B)Foundation address (C)First address (D)Base address
- 4 Which of the following data structures are indexed structures?
(A)Linear arrays (B)Linked lists (C)Both of above (D)None of above
- 5 When new data are to be inserted into a data structure, but there is no available space; this situation is usually called
(A)Underflow (B)Overflow (C)Housefull (D)Saturated
- 6 The situation when in a linked list START=NULL is
(A)Underflow (B)Overflow (C)Housefull (D)Saturated
- 7 Which of the following name does not relate to stacks?
(A)FIFO lists (B)LIFO list (C)Piles (D)Push-down lists
- 8 A data structure where elements can be added or removed at either end but not in the middle
(A)Linked lists (B)Stacks (C)Queues (D)Deque
- 9 The operation of processing each element in the List is known as
(A)Sorting (B)Merging (C)Inserting (D)Traversal
- 10 Which of the following sorting algorithm is of divide-and-conquer type?
(A)Bubble sort (B)Insertion sort (C)Quick sort (D)All of above
- 11 What is the meaning of FIFO?
(A)First In Fast Out (B)Fast In First Out (C)First In First Out (D)None of the above
- 12 Which of the following data structure is linear type?
(A)Strings (B)Lists (C)Queues (D)All of above
- 13 To represent hierarchical relationship between elements, which data structure is suitable?
(A)Deque (B)Priority (C)Tree (D)All of above
- 14 An algorithm that calls itself directly or indirectly is known as
(A)Sub algorithm (B)Recursion (C)Polish notation (D)Traversal algorithm
- 15 Two dimensional arrays are also called
(A)Tables arrays (B)Matrix arrays (C)Both of above (D)None of above
- 16 When new data are to be inserted into a data structure, but there is no available space; this situation is usually called
(A)Underflow (B)Overflow (C)House full (D)Saturated
- 17 The term "PUSH" and "POP" is related to the
(A)Array (B)Lists (C)Stacks (D)All of above
- 18 Identify the data structure which allows deletions at both ends of the list but insertion at only one end.
(A)Input restricted Deque (B)Output restricted Deque (C)Priority queues (D)None of above
- 19 An algorithm is
(A)a piece of code to be executed (B)a loosely written code to make final code (C)a step by step procedure to solve problem (D)All of the above
- 20 Application of Quick sort is
(A)Card Sorting (B)Data Processing (C)Graphic card (D)Tape sorting
- 21 Which of the following data structure can't store the non-homogeneous data elements?
(A)Arrays (B)Records (C)Pointers (D)None
- 22 Two main measures for the efficiency of an algorithm are
(A)Processor and memory (B)Complexity and capacity (C)Time and space (D)Data and space
- 23 The complexity of Bubble sort algorithm is
(A) $O(n)$ (B) $O(\log n)$ (C) $O(n^2)$ (D) $O(n \log n)$
- 24 Which data structure allows deleting data elements from front and inserting at rear?
(A)Stacks (B)Queues (C)Deque (D)Binary search tree
- 25 Which of the following is two way list?
(A)Grounded header list (B)Circular header list (C)Linked list with header and trailer nodes (D)None of above

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26 Which is/are the application(s) of stack

- (A)Function calls (B)Large number Arithmetic (C)Evaluation of the arithmetic expressions (D)All of the above

27 After each iteration in bubble sort

- (A)At least one element is at its sorted position (B)One less comparison is made in the next iteration (C)Both A & B are true (D)Neither A or B are true

28 Linked lists are best suited

- (A)for relatively permanent collections of data (B)for size and data in the structure are constantly changing (C)for both of above situation (D)for none of above situation

29 Which of the following data structure is not linear type?

- (A)Trees (B)Strings (C)Lists (D)Stacks

30 Binary search algorithm cannot be applied to

- (A)Pointer array (B)Sorted binary trees (C)Sorted linear array (D)Sorted linked list