

1. In which order elements can be inserted and deleted from stack?
 - a. Last In First Out
 - b. First In First Out
 - c. Both a and b
 - d. All of the above

Answer: a

2. Which of the following data structure allows to insert and delete elements from single end?
 - a. Stack
 - b. Linear Queue
 - c. Circular Queue
 - d. All of the above

Answer: a

3. Which of the following is condition for stack full? (n – number of elements in array)
 - a. $\text{Top} == -1$
 - b. $\text{Top} == n$
 - c. $\text{Top} == n - 1$
 - d. None of the above

Answer: c

4. If following set of operations is done on stack on given data set, what will be the topmost element in the stack?

Data set – 9, 6, 7, 3, 4, 2, 8, 1

Operations – push, push, push, peek, push, pop, pop, push, peek, pop, push

2
6
9

Stack

- a. 4
- b. 3
- c. 2
- d. None of the above

Answer: c

5. Which of the following is circular queue empty condition?

- a. $\text{front} == \text{rear} \ \&\& \ \text{rear} != -1$
- b. $\text{front} == \text{rear} \ \&\& \ \text{rear} == -1$
- c. $\text{front} == \text{rear} \ \&\& \ \text{front} != -1$
- d. $\text{front} == \text{rear} \ \&\& \ \text{front} == -1$

Answer: b

6. In queue data structure elements can be inserted from ____ end and elements can be removed from ____ end.

- a. front, rear
- b. rear, front
- c. Both a and b
- d. None of the above

Answer: b

7. Which of the following condition shows linear queue is empty?

- a. $\text{front} == \text{rear}$
- b. $\text{front} != \text{rear}$
- c. $\text{rear} < \text{front}$
- d. $\text{front} > \text{rear}$

Answer: a

8. Select correct statement

- a. We cannot insert and delete data from both ends in deque
- b. Elements are removed from priority queue depending on their priority
- c. Both
- d. None

Answer: b

9. Prefix conversion of $a * b + c - d$ is

- a. $*-+abcd$
- b. $+-*abcd$
- c. $-+*abcd$
- d. None of the above

Answer: c

10. What is postfix conversion of given infix expression?

- a. $4563*/+9+7-$
- b. $456*3/+9+7-$
- c. $456*3+/9+7-$
- d. None of the above

Answer: b

11.If the elements "A", "B", "C" and "D" are placed in a queue and are deleted one at a time, in what order will they be removed?

- a. ABCD
- b. DCBA
- c. DCAB
- d. ABDC

Answer: a

12.Consider the following operation performed on a stack of size 5. Push(1); Pop(); Push(2); Push(3); Pop(); Push(4); Pop(); Pop(); Push(5); After the completion of all operation, the number of elements present in stack is?

5

- a. 4
- b. 3
- c. 2
- d. 1

Answer: d