Question **1**

Not yet answered

Marked out of 1.00

Flag question

In addition to the data and next components, the linked list must also contain what other components?

Select one:

- a. Sorting information about the list
- b. Head pointer to the first node
- c. The current node that was last accessed

Question **2**

Not yet answered

Marked out of 1.00

Flag question

What does the following fragment of code do with a linked list?

```
current = head;
while (current != NULL)
 { current = current->next; }
```

Select one:

- a. It traverses the list
- b. It initializes the list
- c. It counts the number of items in the list

Question 3

Not yet answered

Marked out of 1.00

Flag question

What is the functionality of the following code?

```
public void function(Node node)
{
        if(size == 0)
                head = node;
        else
        {
                Node temp,cur;
                for(cur = head; (temp = cur.getNext())!=null; cur = temp);
                cur.setNext(node);
        }
        size++;
}
```

Select one:

- a. Inserting a node at the end of the list
- b. Inserting a node at the beginning of the list
- c. Deleting a node at the beginning of the list
- d. Deleting a node at the end of the list

Question **4**

Not yet answered

Marked out of 1.00

Flag question

Linked Lists stores elements in a contiguous memory locations

Select one:

- ○ True
- ◉ False

Question 5

Not yet answered

Marked out of 1.00

Flag question

Assume that p and q are pointers. What will be the output after performing the following sets of operations on a given linked list?

```
struct node{
char data;
struct node *next;
};
```

Operations are

I. q=p→next→next;

II. p→next→next=q→next→next;

III. q→next→next→next→next=q→next;

IV. printf("%c", p→next→next→next→next→data);

Select one:

- a. error
- b. d
- c. e
- d. segmentation fault

Question **6**

Not yet answered

Marked out of 1.00

Flag question

Convert the following prefix expression to its infix equivalent

+-*^ABCD//EF+GH

Select one:

- a. A ^ B * C - (D + E) / F / (G + H)
- b. A ^ B * C - D + (E / F) / (G + H)
- c. A ^ B * C - D + E / F / (G + H)
- d. A ^ B * C - D + E / (F / (G + H))

Question 7

Not yet answered

Marked out of 1.00

Flag question

A stack follows what structure

Select one:

- a. FILO
- b. FIFO
- c. LILO
- d. LIFO

Question **8**

Not yet answered

Marked out of 1.00

Flag question

Which of the following is NOT a common application of stacks in computer science?

Select one:

- a. Storing browser history in web browsers
- b. Solving complex mathematical equations
- c. Implementing function calls and recursion
- d. Parsing expressions

Question 9

Not yet answered

Marked out of 2.00

Flag question

Convert the following prefix expression to it's postfix equivalent:

^-*+ABC-DE+FG

Select one:

- a. AB+C*DE-F-G+^
- b. GF+ED-CBA+*-^
- c. AB+C*D-E-FG+^
- d. AB+C*DE--FG+^

Question **10**

Not yet answered

Marked out of 1.00

Flag question

Which of the following is NOT a common operation in a queue data structure?

Select one:

- a. Front
- b. Shuffle
- c. Enqueue
- d. Dequeue

Question **11**

Not yet answered

Marked out of 1.00

Flag question

What does the given function do in general ?

```
void fun(Queue *Q)
{
    Stack S;  // Say it creates an empty stack S

    // Run while Q is not empty
    while (!isEmpty(Q))
    {
        // deQueue an item from Q and push the dequeued item to S
        push(&S, deQueue(Q));
    }

    // Run while Stack S is not empty
    while (!isEmpty(&S))
    {
      // Pop an item from S and enqueue the popped item to Q
      enQueue(Q, pop(&S));
    }
}
```

Select one:

- a. Removes the last from Q
- b. Makes Q empty
- c. Keeps the Q same as it was before the call
- d. Reverse the Q

Question 12

Not yet answered

Marked out of 1.00

Flag question

Which of the following is false?

A. Arrays are better than linked lists for sorting due to better data locality.
B. A doubly linked list takes at least twice the storage as of a singly linked list.
C. Given a fixed maximum size, a circular queue is preferrable to a normal queue

Select one:

- a. C
- b. B
- c. A

Question 13

Not yet answered

Marked out of 1.00

Flag question

Consider a standard Circular Queue implementation (which has the same condition for Queue Full and Queue Empty) whose size is 11 and the elements of the queue are $q[0], q[1], \ldots q[10]$.

The front and rear pointers are initialized to point at $q[2]$. In which position will the ninth element be added?

A. $q[0]$
B. $q[1]$
C. $q[9]$
D. $q[10]$

Select one:

- a. D
- b. A
- c. C
- d. B

Question 14

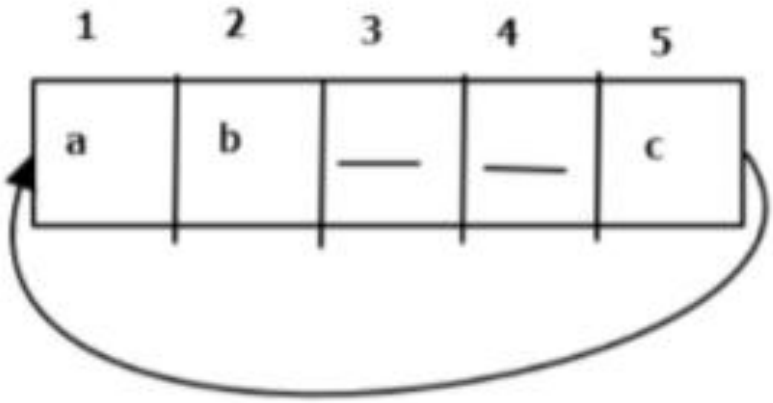
Not yet answered

Marked out of 1.00

Flag question

Assume Front at index 5 and Rear at index 2.

The initial configuration of circular queue as follows



What is status of states of queue contents after the following sequence of steps

enqueue x

dequeue

enqueue y

dequeue

dequeue

a)x,y,____,____,____

b)x,____,y,____,____

c)____,____,x,y,____

d)____,x,y,____,____

Select one:

- a. b
- b. c
- c. d
- d. a