Started on	Tuesday, 8 March 2022, 4:25 PM
State	Finished
Completed on	Tuesday, 8 March 2022, 4:32 PM
Time taken	7 mins 29 secs
Marks	5.00/5.00
Grade	**100.00** out of 100.00

Question **1**

Complete

Mark 1.00 out of 1.00

A priority queue is implemented as a max-heap. Initially, it has five elements. The level-order traversal of the heap is as follows: 30, 28, 25, 23, 22 Two new elements '20' and '27' are inserted in the heap in that order. The level-order traversal of the heap after the insertion of the element is:

Select one:

- **a. 30, 28, 27, 22, 23, 20, 25**
- **b. 30, 28, 27, 23, 22, 20, 25**
- **c. 30, 28, 27, 20, 22, 23, 25**
- **d. 30, 28, 27, 25, 23, 22, 20**

Question **2**

Complete

Mark 1.00 out of 1.00

The result evaluating the postfix expression 20 5 * 36 9 / - 3 * is

Select one:

- **a. 88**
- **b. 288**
- **c. 340**
- **d. 100**

Question **3**

Complete

Mark 1.00 out of 1.00

Assume that the operators +, -, × are left associative and ^ is right associative. The order of precedence (from highest to lowest) is ^, x , +, -. The postfix expression corresponding to the infix expression p + q × r - m ^ n ^ o is

Select one:

- **a. pqr × + mn ^ o^ -**
- **b. - + p × qr ^ ^ mno**
- **c. pqr × + mno ^ ^ -**
- **d. pq + r × m - n ^ o ^**

Question 4

Complete

Mark 1.00 out of 1.00

Consider empty Stacks S1 (Size = 4) and S2 (Size = 5) and a Queue Q1 (Size=5), perform the below given operations on S1 and Q1 alternatively and PUSH the POPed/Dequeued elements from S1 and Q1 to S2.

Stack Operations Queue Operations

1. Push L M A B 1. Enqueue P L Q S

2. POP 2 elements 2. Enqueue Y

3. PEEK() 3. Dequeue until FRONT = 4

what will be the output of POPed elements of 'S2' until S2 is empty.

Select one:

- **a. S Q L P A B**
- **b. B A L Q S Y**
- **c. B A P L Q S**
- **d. Q L P A B**

Question 5

Complete

Mark 1.00 out of 1.00

The five items: A, B, C, D, and E are pushed in a stack, one after other starting from A. The stack is popped four items and each element is inserted in a queue. The two elements are deleted from the queue and pushed back on the stack. Now one item is popped from the stack. The popped item is

Select one:

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