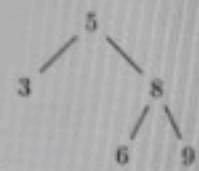
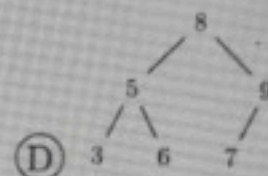
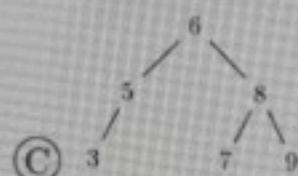
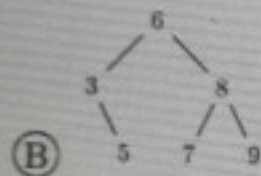
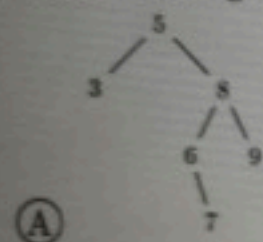


Choose the correct result in each of the following cases (follow the the convention of replacing with the smallest key in the right sub-tree when necessary):



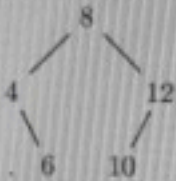
1. After inserting the key 7 in the AVL tree, the tree becomes:

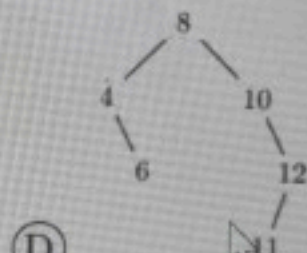
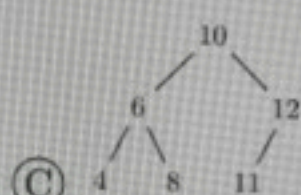
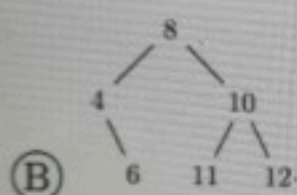
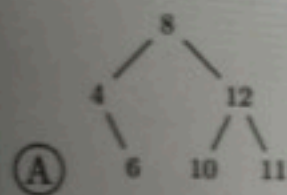


(E) None

- ☐ A  
☐ B  
☒ C  
☐ D  
☐ None

## QUESTION 2

2. After inserting the key 11 in the AVL , the tree becomes:



(E) None

☐ A

☐ B

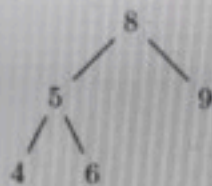
☐ C

☐ D

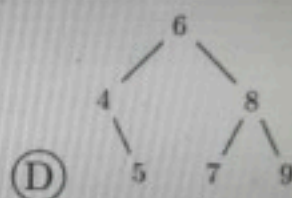
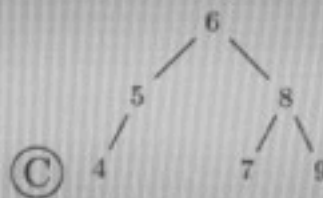
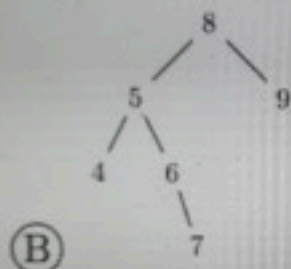
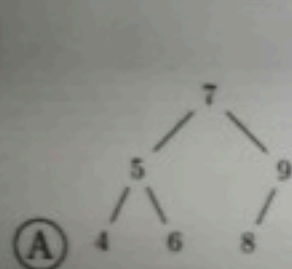
☒ None

## QUESTION 3

3. After inserting the key 7 in the AVL



, the tree becomes:



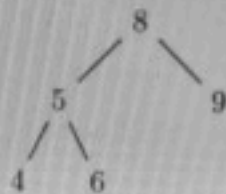
(E) None

- ☐ A  
☐ B  
☒ C  
☐ D  
☐ None

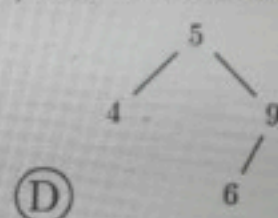
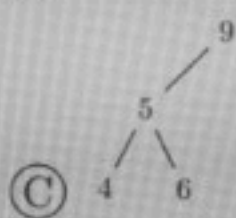
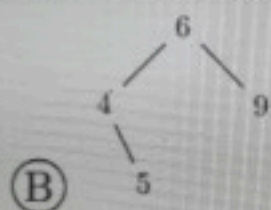
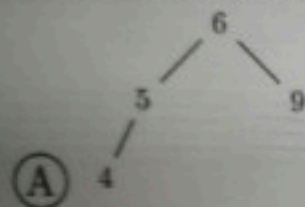


## QUESTION 4

4. After deleting the key 8 from the AVL



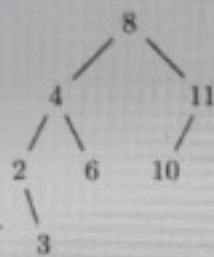
, the tree becomes:



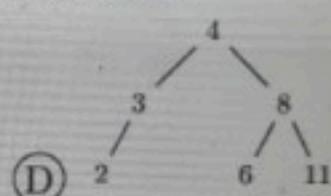
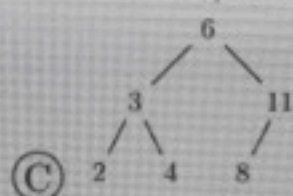
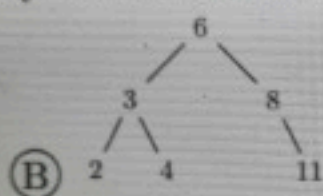
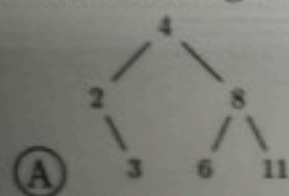
(E) None

- ☐ A
- ☐ B
- ☐ C
- ☒ D
- ☐ None

## QUESTION 5



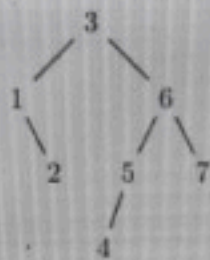
5. After deleting the key 10 from the AVL tree, the tree becomes:



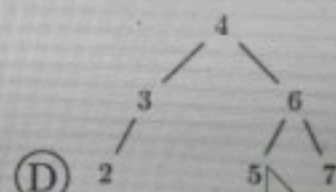
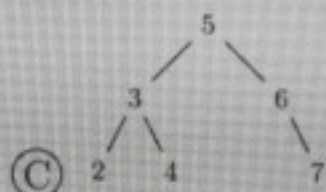
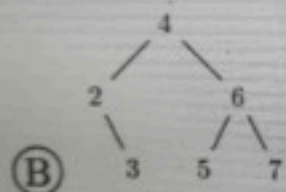
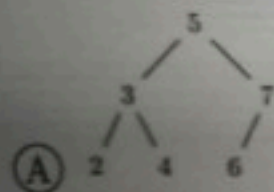
(E) None

- ☒ A
- ☐ B
- ☐ C
- ☐ D
- ☐ None

## QUESTION 6



6. After deleting the key 1 from the AVL , the tree becomes:



(E) None

- ☐ A  
☐ B  
☒ C  
☐ D  
☐ None

### QUESTION 7

Choose the correct result in each of the following cases (when possible, always borrow and transfer to the left). The order of the tree is  $M=3$ :

1. After inserting the key 5 in the B+ tree 

2	6	9
---	---	---

, the root of tree becomes:

- (A) 

5	
---	--

    (B) 

5	6
---	---

    (C) 

9	
---	--

    (D) 

6	
---	--

    (E) None

- ☐ A  
☐ B  
☐ C  
☒ D  
☐ None

### QUESTION 8

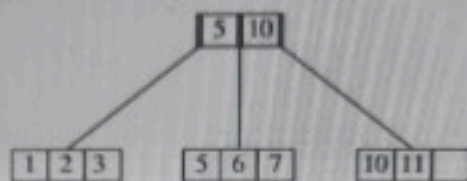
Click Save and Submit to save and submit. Click Save All Answers to save all answers.

Save All Answers



### QUESTION 8

2. After inserting the key 8 in the B+ tree, the **root** of the tree becomes:



- (A) 

5	7
---	---

 (B) 

6	10
---	----

 (C) 

5	10
---	----

 (D) 

5	8
---	---

 (E) None

- ☐ A  
☐ B  
☐ C  
☒ D  
☐ None

### QUESTION 9



### QUESTION 9

3. After deleting the key 10 from the B+ tree



, the **root** of the tree becomes:

- (A) 

5	11
---	----

 (B) 

5	
---	--

 (C) 

11	
----	--

 (D) 

5	6
---	---

 (E) None

- ☐ A  
☒ B  
☐ C  
☐ D  
☐ None

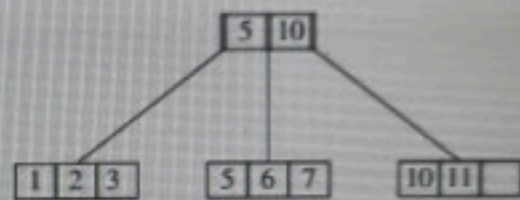
### QUESTION 10

Click Save and Submit to save and submit. Click Save All Answers to save all answers.

Save All Answers

## QUESTION 10

4. After deleting the key 11 from the B+ tree



, the root of the tree

- (A) 

5	
---	--

 (B) 

5	7
---	---

 (C) 

5	10
---	----

 (D) 

6	10
---	----

 (E) None

- ☐ A  
☒ B  
☐ C  
☐ D  
☐ None