DS DAYWISE QUIZ MCQS:

Q. What is time complexity of addition and deletion operations on an array?
A. O(1)
B. O(n)
C. O(log n)
D. none of the above
Answer: B

Q. On success malloc() function returns _____ and on failure it returns _____. A. true, false
B. starting addr of dynamically allocated block from heap section, -1
C. starting addr of dynamically allocated block from heap section, NULL
D. None of the above
Answer: C

Q. By Default all local variables belongs to _____ storage class, and global variables belongs to _____.
A. static, extern
B. extern, static
C. auto, extern
D. extern, auto
Answer: C

Q. What is the time complexity to add node into the singly linear linked list at last position?
A. O(n)
B. O(n^2)
C. O(1)
D. O(log n)
Answer: A

Q. On an array data structure searching operation can be performed efficiently in _____ time.
A. O(1)
B. O(log n)
C. O(n log n)
D. none of the above
Answer: B

Q. Which of the following statement is false about singly linear linked list?
A. In a SLLL, traversal can be done only in a forward direction.
B. In a SLLL, add and delete node at last position operations takes O(n) time.
C. In SLLL, add and delete node at first position operations takes O(1) time.
D. In SLLL, previous node of any node can be accessed from it.
Answer: D

Q. Which of the following statement is false in a Linked List ?
A. Linked List is a dynamic data structure.
B. Addition and Deletion operations are efficient and convenient in a Linked List than in an array.
C. Linked List elements can be accessed efficiently than array elements.
D. Linked List takes more space to store n elements than array.
Answer: C

Q. Which of the following operations in a SCLL takes O(1) time?
A. Add node at last position
B. Add node at first position
C. Delete node at last position
D. Delete node at first position
E. None of the above
Answer: E

Q. Which of the following statement is false?
A. Linked List elements gets stored into the heap section.
B. Add element into a linked list at specific position takes O(1) time.
C. Searching operations is efficient on array than linked list.
D. None of the above
Answer: B

Q. What is the time complexity to add node into the singly linear linked list at first position?
A. O(n)
B. O(n^2)
C. O(1)
D. O(log n)
Answer: C