QUIZIZZ

NAME : _____

CLASS : _____

DS Unit-1 Test-3
14 Questions

DATE : _____

1. **Which of the following is not a stable sorting algorithm?**

A Bubble sort

B Selection sort

C Quick sort

D None of these

2. **Which of the following is/are in-place sorting algorithm(s)?**

A Selection sort

B Bubble sort

C Quick sort

D Merge sort

3. **The worst-case time complexity of a quick sort algorithm?**

A O(nlogn)

B O(logn)

C O(n^2)

D O(n^2logn)

4. The no.of comparisons in first pass in bubble sort to sort **n** numbers is....?

A n

B n(n-1)/2

C n-1

D n^2

5. The maximum no.of swappings in first pass of selection sort to sort **n** numbers is....?

A 1

B n(n-1)/2

C n-1

D n^2

?

6. In quick sort, based on key or pivot element position, the list is partitioned into how many sub-lists?

A 1

B 2

C 3

D 4

7. **If the list is almost sorted, then which of the following algorithm gives the better performance?**

A Bubble sort

B Selection sort

C Quick sort

D All of these

8. **If the list is almost sorted, then which of the following algorithm is/are not suitable?**

A Bubble sort

B Selection sort

C Quick sort

D All of these

9. In bubble sort, what will be the sequence of the following elements after 7 passes?
20 15 14 45 11 18 78 95

---

10. In bubble sort, what will be the sequence of the following elements after 1st pass?
2 1 4 45 11 18 78 95

---

11. In selection sort, what will be the sequence of the following elements after 2nd pass?
8 6 3 7 63 4 10 103 61

---

12. The no.of passes in selection sort to sort **n** numbers is .....?

A n

B n-1

C n^2

D logn

13. The no.of swapings in selection sort to sort **n** numbers is .....?

A n

B n-1

C n^2

D logn

14. Write C code to swap two integers **a** and **b** by using a temporary variable **t**?

Answer Key

1. b	2. a, b, c	3. c	4. c
5. a	6. b	7. a	8. b, c
9.11 14 15 18 20 45 78 95	10.1 2 4 11 18 45 78 95	11.8 6 3 7 61 4 10 63 103	12. b
13. b	14. t=a;a=b;b=t;		