Roll No. २१८२३६००२०१

Total No. of Questions : 10]   [Total No. of Printed Pages : 4

EW-167

B.E. III rd Semester (New Scheme) CSE

Examination, 2021-22

Data Structure and Algorithms

Paper - CS-303

Time : 3 Hours]   [Maximum Marks : 60

Note :- All question carry equal marks.

1. How do you find the complexity of an algorithm? What is the relation between the line and space complexitives of an algorithm? Justify your answer with an example ?

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2. Explain AVL Trée insert the following elements in AVL search Tree.

48, 25, 10, 5, 7, 3, 28, 20, 8, 16

3. What do you understand by merge sort ? Write Algorithm to sort using merge sort? Take an example to explain your Answer?
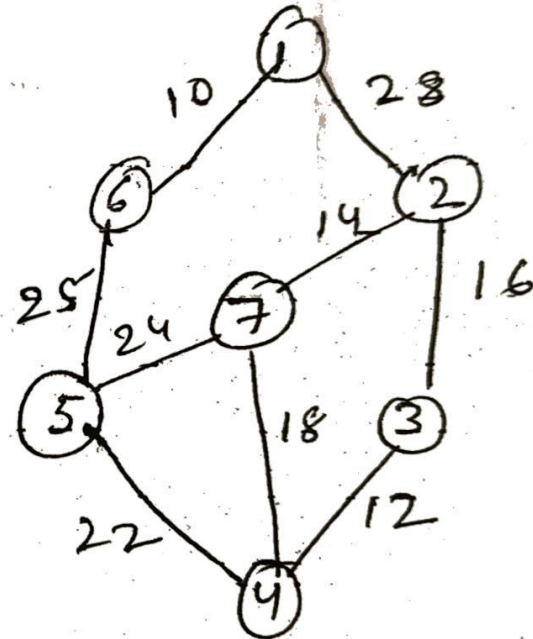
4. Sort using quick sort algorithm.

36, 25, 32, 5, 8, 65, 38, 47, 95

5. Define greedy strategy for knapsacic problem? With suitable example.

Note :- All question carry equal marks.

1. Explain various algorithm used in data structure ?

2. Explain quick sort Algorithm in detail. Analysis it complenins also?

3. Explain the concepts of mininum Spanning Tree. Solve the following graph using prime algorithm also analye is complexity.

4. Classify tree Traversal Algorithm? With suitable exmple?

5. Sort using quick sort algorithm.

   36, 25, 32, 5, 8, 65, 38, 47, 35

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