In semester Assessment
ST- (Semester-IV)
Design and Analysis of Algorithms

Branch: AIML **Date: 21/03/2022**
Div.: A **Timing: 2.30 pm to 3:30 pm**
Duration: I hour **Maximum Marks: 20**
Instructions –

1. All questions are compulsory
2. Assume suitable data wherever necessary and state the assumptions made.
3. Diagrams / sketches should be given wherever necessary.
4. Use of logarithmic table, drawing instruments and non-programmable calculators is permitted.
5. Figures to the right indicate full marks.
6. Scan the answer sheet in sequence and upload the Pdf. Pdf should be named as ST_AIML_ Roll No_Subject abbreviation_Student Name

Q.1) Objective Questions (10M)

Solve any 10 questions out of 12. (Each question carries 1 Mark)

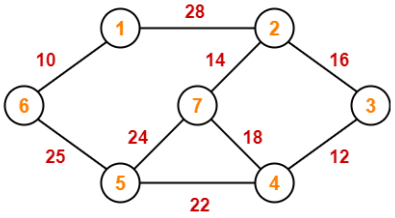
https://forms.gle/PGYbcYNGk1iwPrgy6

Q2 a) Write differences between Greedy and Dynamic method of problem solving. Give examples for each. [5 marks]

OR

Q2 b) Explain with example how dynamic programming approach is different from recursion? [5 marks]

Q3 a) What is a Minimum Spanning Tree (MST)? Construct a MST for the given graph using Kruskal's Algorithm. Calculate the weight of MST. [5 marks]



OR

Q3 b). Consider the following directed weighted graph. Find the shortest path distance between every pair of vertices using Floyd Warshall Algorithm. [5 marks]