

## CSE Department, B.I.T. Mesra - Deoghar

### QUIZ – II (SP-2025)

CS241, Design and Analysis of Algorithms

Max. Marks: 10

Duration: 45 Minutes

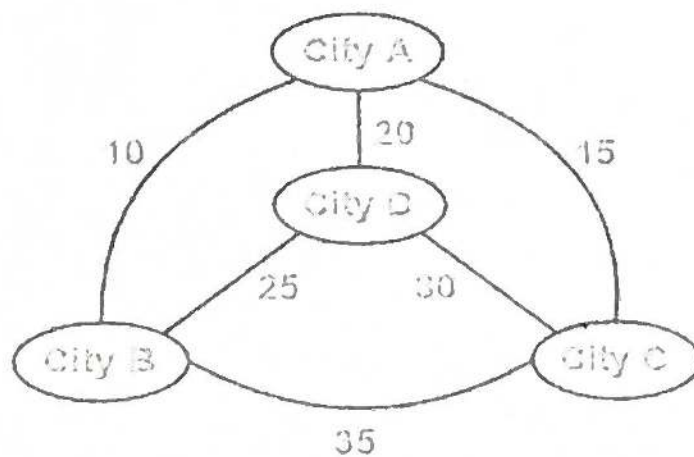
Semester: SP-2025

Branch / Class: B.Tech. IV CSE

Note:

- ✓ Attempt all questions.
- ✓ All questions carry equal marks.
- ✓ Describe your answer appropriately.
- ✓ You may take your suitable assumptions (if any)

**Question 1:** Solve the following Travelling Salesman Problem (TSP) by Constructing State-Space-Tree of branch and bound method and construct Least Cost Matrix: (5 Marks)



Travelling Salesman Problem

(G1)

**Question 2:** Construct Minimum Cost Spanning Tree (MCST) for above graph G1 of TSP using Krushkal's method and describe the steps of your approach / algorithm. [5 Marks]

Date of Exam: 04. 04. 2025

Questions paper prepared by: Dr. K. N. Mishra, CSE, BITD