# Dated: 16th May 2022

Mohammad Ali Jinnah University

**Department of Computer Science CS2420: Operations Research Semester Spring 2022**

# Due Date: 24th May 2022 (In class) Home Work # 7

**Total Points 60**

# TRANSPORTATION ALGORITHM (60 points, 10 points each)

**Home Work # 7**

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**ID:** FA19-BSSE-0014

**Teacher:** Dr. Abdul Qadar Kara

**Section:** BM

Solve the transportation problem for each of the following models. The number in the cell is the cost, the number left of each row is the supply and the number below each column is the demand.

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| 1 | 2 | 5 | 9 |
| 2 | 0 | 1 | 6 |
| 4 | 2 | 3 | 5 |
| 5 | 5 | 10 |  |

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| 10 | 2 | 4 | 8 |
| 2 | 4 | 3 | 5 |
| 1 | 0 | 2 | 6 |
| 7 | 6 | 6 |  |

Find the initial feasible solution generated using all three methods. Then, using these initial feasible solutions, find the optimal solution using Transportation Algorithm.

**Q.1**

**The Northwest Corner Method**

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**The Minimum Cost Method**

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**Vogel’s Approximation Method (VAM)**

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**Finding optimality:**

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**Q.2**

**The Northwest Corner Method**

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**The Minimum Cost Method**

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**Vogel’s Approximation Method (VAM)**

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**Finding optimality:**

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