[Summary]

[Transportation Problem (Part - 2)]

Subject:	Business Economics
Course:	B.A., 4th Semester, Undergraduate
Paper No. & Title:	Paper –403(Four Zero Three) International Economics
Unit No. & Title:	Unit – 2(two) Transportation & Assignment
Lecture No. & Title:	2(Two): Transportation Problem Part–2

SUMMARY

- Methods namely North West corner, Matrix minima and Vogel's are used for obtaining initial basic feasible solution.

- **Test for Optimality**

Optimality test can be performed if two conditions are satisfied i.e.

1. There are m + n – 1 allocations.

2. These m + n – 1 allocations should be at independent positions.

- Two methods commonly used to obtain optimal solution of the transportation problem are
  1. Stepping Stone Method 2. MODI method

- The **stepping-stone method** will help us move from an initial feasible solution to an optimal solution. It is used to evaluate the cost effectiveness of transporting goods via transportation routes not currently in the solution.
- The Modified Distribution Method **(MODI)** is a method for computing optimum solution of a transportation problem.
- In this method the sign of each opportunity cost is checked. If the opportunity costs of all the unoccupied cells are either positive or zero, the given solution is the optimum solution. On the other hand, if one or more unoccupied cell has negative opportunity cost, the given solution is not an optimum solution and further savings in transportation cost are possible.