5(a)

Transportation Problem

The transportation problem is a special type of linear programming problem where the objective is to minimise the cost of distributing a product from a number of sources or origin to a number of destinations.

These problem require a special method of solution.

The origin of a transportation problem is the location from which shipment are despatched.

The destination of a transportation problem is the location to which shipments are transported.

The unit transportation cost is the cost of transporting one unit of the consignment from an origin to destination.

TRANSPORTATION AND ASSIGNMENT

- The Transportation and assignment deal with assigning sources and jobs to destination and machines.
- The transportation are one of the linear programming problem.
- The transportation is to transport various amount of single homogeneous commodity. we are initially stored at various origins.
- In transportation number of sources and and the number of destination not need not be equal.
- In this the total supply and total demand are not equal.

- The assignment which finds many allocation in allocation and scheduling.
- In assigning salesman to different regions vehicles and drives to different routes.
- Assignment originates from the classical problem where the objective is to assign a number of origins (Job) to the equal number of destination (Persons) at a minimum cost. (or maximum profit)
- Assignment is done one basis, the number of sources and the number of destinations are equal. The cost matrix must be a square matrix.