[Glossary]

Assignment

Subject: Business Economics

Course: B.A., 4th Semester,
                                     Undergraduate

Paper No. & Title: Paper – 403
                                     Quantitative   Techniques
                                     for Management

Unit No. & Title: Unit - 2
                                     Transportation &
                                     Assignment

Lecture No. & Title: Lecture – 3
                                     Assignment

Glossary

An infeasible Assignment: Infeasible assignment occurs when a person is incapable of doing certain job or a specific job cannot be performed on a particular machine. These restrictions should be taken in to account when finding the solutions for the assignment problem to avoid infeasible assignment.

Assignment cost: Cost of assigning jobs/ tasks to persons /machines.

Assignment Problem: It is the special case of the transportation problem in which the objective is to assign a number of origins to the equal number of destinations at a minimum cost, minimum time or maximum profit.

Balanced assignment problem: This is an assignment where the number of persons is equal to the number of jobs.

Constraints: The conditions under which the objective function is to be optimized.

Dummy job/ person: Dummy job or person is an imaginary job or person with zero cost or time introduced in the unbalanced assignment problem to make it balanced.

Objective function: The objective of the assignment problem to maximize profit or minimize the cost.

Optimal Solution: If the minimum number of covering lines is equal to the number of rows then optimal solution is obtained.

Unbalanced assignment problem: If the number of rows is not equal to the number of columns then it is called an unbalanced assignment problem.

Uncovered elements: The elements which are not covered by lines drawn while obtaining optimal solution.