## **BS (4 Years) for Affiliated Colleges**



| Code     | Subject Title      | Cr. Hrs | Semester |
|----------|--------------------|---------|----------|
| STAT-412 | Operation Research | 3       | VII      |
| Year     | Discipline         |         |          |
| 4        | Statistics         |         |          |

## **Course Outlines**

Definition and nature of Operations Research (OR). Phases of an OR study. Modeling, constraints, objective and criterion. Problem formulation. Decision Variables, Objective function, Constraints Model building approach to problem solving. Types of models available for OR. Deterministic models, Stochastic Models. Examples of Models. Example of OR applications.

Introduction to linear programming. Graphical solution technique. Simplex Method, Application of Simplex Network.

## **Recommended Books**

• Taha, H.A. "Operations Research. An Introduction". Macmillan Publishing Company, New York, Fith Edition, 1994.