

SYLLABUS :-

Linear programming: Formulation of LP models, Graphical procedure of solution and Simplex method, Duality Concept and its applications, Dual Simplex Methods  
Linear Algebra, Revised Simplex Method, Sensitivity Analysis  
Transportation and Assignment problems, Network flow  
Linear programming approach to goal programming and gaming situations  
Integer Programming, Cutting plane algorithm and Branch and bound algorithm  
Probability and statistical methods: probability and conditional probability, random variables, density and distribution functions, Important statistical distributions and their properties, sampling and sampling distributions, point and interval estimation, tests of hypothesis, regression and correlation analysis, and analysis of variance  
Models and Modelling: model verification and validation, decision modelling for deterministic, uncertainty, risk and competitive situations.

Books

- Ravindran, A., Philips, D.T., and Solberg, J.J., Operations research, John Wiley and Sons.
- Taha H.A., Operation Research- An Introduction, PHI
- Hillier F.S. and Lieberman G.J., Introduction to Operation Research, McGraw Hill.
- Hadley G., Linear Programming, Addison-Wesley.