

SYLLABUS :-

Prerequisite: IM21003 Operations Research-1

Non-linear Programming: Kuhn-Tucker conditions, constrained and unconstrained optimisation, search techniques. Use of NPL computer software packages.

Dynamic Programming: Principle of optimality, stage coach problems, recursive relationship. Application to assignment problem, Knapsack problem, production-inventory problems.

Probabilistic OR models: Markov chains, Introduction to queuing theory, Single and multiple server models, Poisson and non-Poisson queues, Priority discipline models, Finite population models, Queuing costs and applications, Computer packages for solving queuing problems.

Books

- Operation Research- Principles and Practice, Ravindran, Phillip, Solberg, Wiley
- Operation Research- An Introduction, Taha, PHI
- Operation Research, Hillier and Lieberman