

OPERATIONS RESEARCH - II:

UNIT - I :

Game Theory - Terminologies of Game Theory, Two Person Zero-Sum Games, The Maximin-Minimax Principle, Games without Saddle points-Mixed Strategies, Graphical Solution of $2 \times n$ and $m \times 2$ games, Dominance Property. Introduction, Decision under Certainty, Decision under Risk, Decision under Uncertainty, Decision Tree.

UNIT - II :

Network Scheduling by CPM/PERT - Introduction, Basic Concept, Constraints in Network, Critical Path Method (CPM), PERT Network, PERT calculations, Time-Cost trade-off aspects in Network Technique, Advantage of Network (PERT/CPM).

UNIT - III :

Inventory Control

Introduction, Inventory Control, Selective Control Techniques, Types of Inventory, Economic Lot Size Problem, Problem of EOQ with shortage, Inventory Control Techniques - Uncertainty Demand, Stochastic Problem, Inventory Control with Price Breaks.

UNIT - IV :

Queuing Theory

Introduction, Terminologies in Queuing System, Characteristics of Queuing System, Poisson Process and Exponential Distribution, Classification of Queues, Definition of Transient and Steady states, Poisson Queues, Non-Poisson Queuing Systems, Cost-Profit Models in Queuing, Queuing Control.