M.Com - I
Semester No. I
Operations Research
CORE COURSE- 0901103

Course Content:

Module No.	Topics / Chapters Name
I	Introduction to O.R. • Concept • Nature • Significance • Scope • Limitations • O.R. models
II	Linear Programming • Concept of LPP • Advantages and Limitations • Graphical, Simplex Method and Big –M Method • Transportation Problem - Methods for solving TP - Unbalanced TP - MODI Method - Degeneracy - Prohibited Routes - Maximization Problem • Assignment Problem - Meaning - Unbalanced AP - AP with Restriction - Maximization Problems - Travelling Salesman Problem • Applications of TP and AP
III	Game Theory And Sequencing • Two persons zero sum game • Pure games with saddle point • Games without saddle point - Algebraic Method - Graphical Method - Conversation of Game problem into L. P. problem • Meaning and concept of sequencing

	• Processing ‘n’ jobs through two and three machines • Applications of sequencing techniques
IV	Net-work Analysis (PERT & CPM) • Understanding PERT • Characteristics of PERT • Advantages and limitations of PERT • Understanding CPM • Time calculations in network • Difference between PERT and CPM • Applications of PERT and CPM