

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

Course Content:

Module No.	Topics / Chapters Name	% Weightage
I	Introduction to O.R. <ul style="list-style-type: none"> • Concept • Nature • Significance • Scope • Limitations • O.R. models 	25%
II	Linear Programming <ul style="list-style-type: none"> • Concept of LPP • Advantages and Limitations • Graphical, Simplex Method and Big –M Method • Transportation Problem <ul style="list-style-type: none"> - Methods for solving TP - Unbalanced TP - MODI Method - Degeneracy - Prohibited Routes - Maximization Problem • Assignment Problem <ul style="list-style-type: none"> - Meaning - Unbalanced AP - AP with Restriction - Maximization Problems - Travelling Salesman Problem • Applications of TP and AP 	25%
III	Game Theory And Sequencing <ul style="list-style-type: none"> • Two persons zero sum game • Pure games with saddle point • Games without saddle point <ul style="list-style-type: none"> - 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 	25%

IV	Net-work Analysis (PERT & CPM) <ul style="list-style-type: none">• 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	25%
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