

Name of Faculty	Manish Gulyani			
Discipline	Department of Management Studies (MBA)			
Semester	Second Semester (II)			
Subject	Optimisation Models for Business Decisions (MBA-201)			
Lecture Required	Theory		Practical	
		Topic (Including Assignment/Test)	Practical Day	Topic (Including Assignment/Test)
3		Introduction, Meaning, Scope & Definition of Management Science	N/A	N/A
		Operations Research: Evolution		
		Methodology of O.R.		
		Role of OR in managerial decision making		
4		Linear programming: Meaning, assumptions, advantages, scope and limitations	1st	ClassTest
		Formulation of problem		
		Solution by graphical method		
		Solution by simplex method		
3		Cases in simplex method: infeasibility	N/A	N/A
		Integer Programming		
		Degeneracy		
		Unboundedness and multiple optimal solutions		
3		Duality	N/A	N/A
		Transportation problems		
		Transshipment problems		
		Special cases in transportation problems: unbalanced problems		
3		Degeneracy	1st	Assignment
		Maximization objective and multiple optimal solutions		
		Assignment problems including traveling salesman's problem		
		Special cases in assignment problems: unbalanced problems		
1		Case Study		Hungarian Process
3		Maximization objective and multiple optimal solutions	N/A	N/A
		PERT/CPM: Difference between PERT and CPM		
		Network construction		
		Calculating EST, EFT, LST, LFT		
3		Problem solving Session on	2nd	Linear Programming, Assignment Problem
		Floats	N/A	N/A
		Probability considerations in PERT		
		Critical Path Methods		

3	Time-cost trade-off	3rd	Assignment
	Decision theory		
	Decision making under uncertainty and risk		
	Decision making under certainty		
3	Bayesian analysis	N/A	N/A
	Decision trees		
	Pure strategy games		
	Mixed strategy games		
2	Principle of dominance	6th	Inventory Management
	Two person zero sum game		
	Arithmetic Method & Graphic Method		
	Problem Solving Session on		
1	Case Study :- Decision Tree	N/A	N/A
	Queuing theory: concept, assumptions and applications		
	Analysis of queue system		
	Poisson distributed arrivals and exponentially distributed service time models (MM1 and MMK);		
3	Simulation - meaning, Nature, Process	N/A	N/A
	Advantages, limitations and applications		
	Monti Carlo Simulation		
	Inventory Management - meaning, types, methods		
2	Techniques of Inventory Management	N/A	N/A
	Reasons for holding inventories		
	Economic Order Quantity		
	Revision Session		
2	Last Year Question Papers Discussion	N/A	N/A
	Revision Session		
	Economic Order Quantity		
	Reasons for holding inventories		