

COURSE CODE: 2CM2010314	Course Title: Demography-2
COURSE TYPE : SPECIALIZATION- STATISTICS	
COURSE OBJECTIVE: To present a clear, simple and systematic comprehensive explosion of the methods, principles and techniques and statistics in various discipline with special reference to commerce, management, economics and business.	

Teaching Scheme (Hours per week)		Evaluation Scheme (Marks)		
Lectures	Credit	University Assessment	Institutional Assessment	Total
4	4	60	40	100

Unit	Topic and Contents	Hours	Wt. (%)
1.	Optimization Techniques: integer programming (IP) problems- methods of solving IP problems and examples, balance and unbalanced transportation (TP), Method of finding of optimal solution of TP,. Formulation of non linear programming (NLP) problems and applications. Introduction to quadratic and fractional linear programming problems and examples.	15	25%
2.	Net work, PERT & CPM Analysis: Concepts of network, network diagram, definitions connected with network, time calculations, labeling method, matrix solution method, Critical Path Method, CPM & PERT Network problems, Crashing of activity.	15	25%
3.	Queuing theory and sequencing: Basic concepts of a queuing system- study of (M/M/1:∞/ FIFO) queues with simple properties. Application of queuing theory without any mathematical derivations. Problems of sequencing, - sequencing of n jobs on two or three machines.	15	25%
4.	Inventory Control: Cost associated with the inventory, classification of inventory system, Lot size models with and without storages (Back order policy only), inventory models under prise break under quantity discounts, deterministic inventory model under given- restrictions- ABC,VED, FSN Analysis. Concept of Just In Time (JIT).	15	25%

References Books:

1. Hadley G.S. Linear Programming, Eddision- Wesely.
2. N.Kumar and R.Mittal, Production Management, Anmol Publications Pvt.Ltd, New Delhi.
3. S.A Chunavala and D.R.Patel, Production and Operation Management, Himalaya Publishing House, New Delhi.