

Integrated MBA 5 Yrs Syllabus from Admission Batch 2016-17 onwards

SECOND YEAR DETAIL SYLLABUS

3rd Semester	16IMN301	Quantitative Methods-II	L-T-P 4-0-0	4 Credits	35 hrs
--------------------------------	-----------------	--------------------------------	------------------------	------------------	---------------

Module-I: Theory of Games:

Concept of Games; Two-Person Zero-Sum Games; Pure Strategies (Minimax and Maximin Principles); Games with Saddle Point; Mixed Strategies: Games without Saddle Point; The rules (Principles) of Dominance; Solution Methods games without Saddle Point(Algebraic Method, Arithmetic Method, Graphical Method, Linear Programming Method).

Module-II: Queuing Theory:

The Structure of Queuing System- Calling Population Characteristics, Queuing Process, Queue Discipline, Service Mechanism; Performance measures of Queuing System-Transition-State and Steady –State; Classification of Queuing Models; Solution of Queuing Models.

Module-III: Markov Chains:


Concept, Characteristics of a Markov Chain; Applications of markov Analysis; State and Transition Probabilities; Multi-Period Transition Probabilities-Procedure for formulate matrix of Transition Probabilities; Procedure for determining Steady-State (Equilibrium) Conditions.

Module-IV: Simulation

Definition of Simulation; Types of Simulation; Steps of Simulation Process; advantages and Disadvantages of Simulation; Stochastic Simulation and random numbers (Monte Carlo Simulation, random Number Generation). Simulation of Queuing Problems.

Books:

- Gupta & Hira, Operations Research, S.Chand.
- Sharma, Operations Research, Macmillan.


Director, Curriculum Development
O.P.J.S. University of Technology, Oshana
Raichur