F.Y.B.B.A. Semester-I   Effective from June 2011

Quantitative Methods-I

(Mathematics Oriented)

Objectives:

1. The course is designed to impart the basic knowledge of mathematics, to acquaint the students with the practical utility of the subject with special reference to business and commerce and equip them with those mathematical tools and techniques which shall provide them the necessary background for the applications of these techniques in different areas of management.

Pedagogic Tools:

Lectures, Practical examples from business world, assignments & presentations.

Chapter No	Chapter Title	Sub Topic	Weightage
1.	**Matrix**	1. Definition of Matrix and Different types of Matrix. 2. Addition, Subtraction, Multiplication of two Matrices 3. Examples	**25%**
2.	**Determinant**	1.Determinant of Matrix and its properties (without proof) 2. Minors, Inverse of a Matrix 3. Cramer's Rule 4. Practical Examples	**25%**

3.	**Operation Research**	A) **Linear Programming Problem**
		    1. What is LPP and different Definitions
		    2. Graphical Method
			15%

		B)**Transportation Problem**
		    1. What is Transportation Problem?
		    2. Matrix notation of Transportation Problem
		    3. N-W Corner Rule
		    4. Vogel's Method
		    5. Modified Method
			20%
			
			15%

		C) **Assignment Problem** 1.Solution of simple assignment problems in production function of management by Hungarian Method	

Reference Books:-
1. Business mathematics - D.C.Sancheti, V.K.Kapoor
2. Operation Research   -   Goyal & Mittal
3. Mathematics for Business Studies -   J.K. Thakral
4. Operation Research   -   J. K. Sharma