

F.Y.B.B.A. Semester-II

Effective from November 2011

Quantitative Methods-II (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.	Set Theory	<ol style="list-style-type: none"> 1. Definition of set and different types of sets 2. Venn Diagram, De Morgan's law 3. Law of algebra of sets and Cartesian product of two sets 4. Natural Numbers, Rational members, Real numbers, Absolute values and its properties 5. Examples 	10%
2.	Function	<ol style="list-style-type: none"> 1. Relation 2. Functions and different types of functions 3. Graphs of function 4. Function used in Economics 5. Examples 	25%
3.	Calculus	<p>A) <u>Limit</u></p> <ol style="list-style-type: none"> 1. Limit of a function, Limit of a addition, subtraction, product, quotient of two functions 2. Some special types of limit 3. Examples <p>B) <u>Differentiation</u></p> <ol style="list-style-type: none"> 1. Derivative of different types of functions. 2. Rules of differentiation (without proof) 3. Higher order derivatives 4. Maxima & Minima <p>C) <u>Integration</u></p> <ol style="list-style-type: none"> 1. Indefinite integrals 2. Standard integral and basic rules of integrals 3. Integration by parts 4. Integration by substitution 5. Definite integrals 6. Simple properties of definite integrals 7. Total revenue from marginal revenue & total cost from marginal cost 	<p>20%</p> <p>25%</p> <p>20%</p>

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