

<b>II – BBM</b>	<b>MATHEMATICS FOR COMPETITIVE EXAMS</b> <b>For the students admitted from the year</b> <b>2014</b>	<b>AMBM401</b>
<b>SEMESTER - IV</b>		<b>HRS/WK – 5</b>
<b>ALLIED</b>		<b>CREDIT – 4</b>

**(For BBM. II – Year)**

### **UNIT I:SET THEORY**

Basic concepts – Subsets – Operations and Applications – Cartesian Product – Relations – Properties – Functions.

### **UNIT – II:ANALYTICAL GEOMETRY**

Distance – Slope – Equation of Straight line – Interpretation – Break even analysis – Parabolas.

### **UNIT – III:DIFFERENTIAL CALCULUS**

Limits – Continuity – Average & Marginal concepts – Differential coefficient concepts – Simple applications to Economics.

### **UNIT – IV:MATRICES**

Addition of matrices –Scalar multiplication-Multiplication of a matrix by a matrix-Inverse of a matrix –Solution of a system of equation –Input output Analysis

### **UNIT – V:COMMERCIAL ARITHMETIC**

Percentages – Simple and Compound interests – Arithmetic and Geometric Series – Simultaneous Linear equations.

#### **TEXT BOOK :**

“An Introduction to Business Mathematics”, V. Sundaresan, S. D. Jaya Seelan, S. Chand & Company Ltd, New Delhi(2003).

Unit-I: Chap:2(Sec:2.1 – 2.7),

Unit-II: Chap:1(Sec:1.2-1.4,1.6-1.8),

Unit-III: Chap:3(Sec:3.1,3.2,3.4,3.5,3.11),

Unit-IV: Chap:8 (8.2-8.7),

Unit-V: Chap:7(7.1,7.2,7.3,7.5).

#### **REFERENCE BOOKS:**

1. “Business Mathematics”, Qazi Zameeruddin, V. K. Kahanna, S. K. Bhambri, Vikas Publishing Pvt Ltd, New Delhi (1995).
2. “Business Mathematics”, V. K. Kapoor, S. Chand & Company Ltd, New Delhi (1994).

## **QUESTION PATTERN**

**Time: 3Hrs  
Max. Marks:75**

**Section - A  
 $5 \times 2 = 10$   
Answer ALL Questions**

**Section - B  
 $3 \times 5 = 15$   
Answer any THREE Questions (Out of five)**

**Section - C  
 $5 \times 10 = 50$   
Answer ALL Questions (Either or Type)**