

## BBA

### III Semester

## 71315- Business Mathematics

1. **Objective**  
Sets  
Subsets  
Venn diagram  
Laws relating Operations  
Complex Number  
Algebraic Operations  
Theorems
2. **SOLUTION OF ALGEBRAIC AND TRANSCENDENTAL EQNS.**  
Basic properties of Equations.  
Transformation of equation  
Geographical Solution of equations.
3. **SIMULTANEOUS EQUATIONS**  
Solution of Simultaneous equations.
  - When both equations are linear
  - When one equation is linear and other one is quadratic.
  - When both equations are quadratic.
4. **PROGRESSION**  
Arithmetic progression & Arithmetic Mean  
Geometric progression & Geometric Mean
5. **LOGARITHMS AND EXPONENTIAL**  
Introduction  
Exponential Services  
Laws of operations  
Change of Base  
Logarithm tables  
Antilogarithms
6. **DETERMINANTS AND MATRICES**  
Matrix & types of matrices  
Multiplication of a Matrix  
Equality of Matrices  
Properties  
Symmetric & Skew Symmetric matrix  
Determinants & Inverse
7. **INTEGRATION**

Rules of integration  
Standard Results  
Integration by substitution  
Integration of Trigonometric functions  
Integration by parts  
Integration using partial function

**8. DERIVATIVE AND DIFFERENTIATION**

Derivative of a function of one variable  
Derivative of a power function  
Derivative of a sum of functions.  
Derivative of product of two functions.  
Derivative of functions of a function.  
Derivative of a Trigonometric function  
Differentiation  
Differentiation by method of Substitution  
Logarithmic differentiation  
Differentiation of implicit function.  
Partial differentiation  
Total differentiation

**Reference Books:**

Business Mathematics – V. K. Kapoor – Sultanchan & Sons

A Text Book of Mathematics & Statistics Paper II ( New Syllabus ) For XI & XII--

M.L. Vaidya ,M.K. Kelkar, P.S. Chirputkar, A.V. Rayarkar – Narendra Prakashan

A help book of Maths for class XII Part I Based on NCERT New Syllabus