

Course Code 105
BBA- Sem - I (CBCS 2019)
Foundation of Mathematics & Statistics

Credits : 4

UE + IA: 70:30

Course Type :

Core **Course**

Objectives:

- i) To develop knowledge of key theories, concepts in Mathematics.
- ii) To enhance ability to problem solving
- iii) To build ability to apply mathematical and statistical concept for business applications

Learning Outcomes:

- i) Students will be able to solve problems in Mathematics using appropriate concepts
- ii) Students will be able to effectively apply the statistical tools for business applications

Unit 1:

Profit and Loss, Discount, Commission, Brokerage, Rates and Taxes, Insurance, Partnership, Bill of Exchange, Stock and Shares, Payroll

Unit 2:

Simple interest and Compound interest and Annuity:

Simple interest, Compound Interest,, Interest Compounded Continuously, Compound Amount at changing rate, Introduction of Annuity, Amount and Present Value of Immediate or Ordinary Annuity, Annuity Due,

Unit 3:

Matrices and Determinants & Simultaneous Linear equations:

Definition of a Matrix, Matrix operations, Determinants, Properties of determinants. Applications in Business Problem, Solution of Simultaneous equations Linear Equation in two unknowns. Permutations and Combinations

Unit 4:

Introduction to Business Statistics

Definition, descriptive and inferential statistics in business, scope of statistics, Population and sample, data, types of data, sources of data, methods of data collection.

Unit 5:

Data presentations and graphical displays

Frequency, cumulative frequency distribution, Frequency distributions, importance of Diagrammatic and Graphic Representation of data, frequency polygons and frequency curves, histograms, Ogive Curves.

Reference Books :

1. Schaum Series , Basic Business Mathematics
2. Padmalochan Hazarika , A class textbook of Business Mathematics.
3. M. G. Dhaygude , Commercial Arithmetic and Statistics .
4. Business Statistics, S.C. Gupta
5. Eugene Don, Joel lerner , Basic Business Mathematics , Tata McGraw Hill Publication.
6. Dr. Padmalochan Hazarika, A textbook of Business Mathematics

Online Resources:

https://en.wikipedia.org/wiki/Business_mathematics
<https://www.universiteitleiden.nl/.../mathematics/mathematics-and-science-based-business-Mathematics> <https://www.tru.ca/distance/courses/math1091.html>

MOOCs:

[www:/Alison](http://www.alison.ac.uk/)
[www/SWAYAM](http://www.swayam.gov.in/)
[www/NPTEL](http://www.nptel.ac.in/)