Daffodil Institute of IT (DIIT)

BBA Program

Business Statistics-I

Course Code: 510119

Course Teacher: Md. Mokarram Hossain

Course Objectives: Statistical methods are applicable to a variety of fields of studies. These fields of Studies lean heavily upon Statistics. This course is going to help the students to apply statistics in business, to be equipped with statistical tools to solve mathematically formulated business problems, to be able to suggest qualitative models, to be able to pursue other advanced qualitative courses.

Introduction

Lecture 1:	Definition of Statistics, nature, scope, functions & limitations of Statistics. Use of Statistics in Business

Data Collection

Lecture 2:	Collection of primary & secondary data, Sources of primary & Secondary data, Presentation of secondary data. Classification & tabulation. Types of classification.

Presentation of data

Lecture 3:	Definition of frequency, frequency distribution, range, mid point, class limit, lower limit & upper limit, inclusive & exclusive type classification & class boundary.
Lecture 4:	Constructing of frequency distribution. Problems of frequency distribution.
Lecture 5:	Distinguish between diagram & graph. Discuss about various types of diagram & graph.

Measures of Central Tendency

Lecture 6:	Definition of measures of Central Tendency. Definition of Arithmetic Mean (A.M). Calculation & properties of A.M & its problems.
Lecture 7:	Definition of Median & Mode. Computations of Median & Mode & their problems.
Lecture 8:	Definition of Geometric Mean (G.M) & Harmonic Mean (H.M) & their problems.

Measures of Dispersion :

Lecture 9:	Definition of dispersion, absolute & relative measures of dispersion. Types of dispersion and Computation of various measures of dispersion
Lecture 10:	Uses and properties of various measures of dispersion.
Lecture 11:	Problems of various measures of dispersion.
Lecture 12:	Problems of various measures of dispersion.

Moments , Skewness and Kurtosis

Lecture 13	Definitions, their computations and uses in business and their problems.
Lecture 14	Problems of moments, skewness and kurtosis.

Probability

Lecture 15:	Meaning of probability, Experiment, Types of experiment Events-simple & compound, Sample Space
Lecture 16:	Probability of events, Event Relations, Independent & dependent events, Probability laws: Additional law & multiplication law.
Lecture 17:	Probability of events, Event Relations, Independent & dependent events, Probability laws: Additional law & multiplication law.
Lecture 18:	Problems of Probability laws.
Lecture 19:	Bays theorem and its problems

Random Variables

Lecture 20:	Random Variable, Discrete random Variable, Continuous random variable, Probability distribution of discrete random variable

Mathematical Expectations

Lecture 21:	Mathematical expectations & variance of a discrete random variable.
Lecture 22:	Problems of mathematical expectations & variance of a discrete random variable

Discrete Probability Distribution

Lecture 23:	Binomial Probability Distribution and its problems.
Lecture 24:	Poisson Probability distribution and its problems.

Continuous Probability Distribution:

Lecture 25	Normal Distribution and its problems.

Sampling & Sampling Distribution:

Lecture 26:	Sampling, Statistic & Parameters, types of Sampling
Lecture 27:	Sampling Distributions, Central Limit Theorem, Sampling Distribution of the sample mean & proportion
Lecture 28:	Sampling distribution of the difference between two sample means & proportion.
Lecture 29:	Problems of Sampling Distribution
Lecture 30:	Review class

Text Book:

Business Statistics

---- Mohammed Shakhawat Hossain,
, Md.Mokarram Hossain & Mohammad Shamim

Reference Books:

(1) Statistics for Management
---- Levin, Rubin

(2) Business & Economics
--- Robert D. Mason & Douglas A. Lind.