20BB113 BUSINESS STATISTICS

Hours Per Week :

L	T	P	C
4	-	-	4

Total Hours :

L	T	P
50	-	-

Source :
https://previews.123rf.com

COURSE DESCRIPTION AND OBJECTIVE:

The objective of this course is to provide the basic knowledge of the various statistical techniques useful to managers in their decision-making. Students will learn statistical tools like measures of central tendency, dispersion, probability and probability distributions.

COURSE OUTCOMES:

Upon completion of the course, student will able to achieve the following outcomes:

COs	Course Outcomes	POs
1	Define statistics, become aware of wide range of applications in statistics, types of data, tabulation of data, construct a histogram, frequency polygon, an ogive, pie chart.	2
2	Apply various measures of central tendency –mean, median,mode, GM and H.M percentiles, Deciles for grouped and ungrouped data.	2
3	Apply various measures of variability-range, MD,QD, standard deviation, and to know	1
4	Understand the concepts of probability and its applications in business	1
5	Understand the various discrete and continuous probability distributions	2

SKILLS :

- ✓ *Collect statistical information's from Magazines, Newspapers, Television, Internet etc.,*
- ✓ *Collect interesting statistical facts from various sources and paste it in your note book.*
- ✓ *Collect a primary data about the mode of transport of your school students. Classify the data and tabulate it.*
- ✓ *From the mark sheets of your class, form the frequency tables, less than and more than cumulative frequency tables.*

UNIT - I **L-10**

Introduction to Statistics, Charts and Graphs: Introduction, why statistics is important for managers, why we need data, levels of measurement, basic statistical concepts, population and sample, descriptive and inferential statistics, parameter and statistic. Charts and graphs: frequency distribution, Graphical presentation of data,

UNIT - II **L-10**

Measures of Central Tendency: Introduction, central tendency, measures of central tendency, Mathematical averages: arithmetic mean, geometric mean, harmonic mean. Positional averages: median, mode, quartile, deciles, percentiles.

UNIT - III **L-10**

Measures of Dispersion: Introduction, measures of dispersion, methods of measuring dispersion: Range, inter quartile range, mean deviation, standard deviation, skewness and kurtosis.

UNIT - IV **L-10**

Probability: Introduction to probability, concept of probability, basic rules, counting rules, probability assigning techniques: Classical technique, relative frequency technique, subjective approach, types of probability: marginal probability, union probability, joint probability, conditional probability, Bayes' theorem.

UNIT - V **L-10**

Discrete and Continuous Probability Distributions: Introduction, difference between discrete and continuous random distributions, Discrete probability distributions: Binomial distribution, Poisson distribution: Continuous distribution: Normal distribution.

TEXT BOOKS:

1. Business Statistics, Naval Bajpai, Pearson.

REFERENCE BOOKS:

1. Statistics for management, Richard I. Kevin, Davis S. Rubin, Sanjay Rastogi, Masood Husain Siddiqui, Pearson, 7th edition.
2. J. K. Sharma, Business statistics problems and solutions, Pearson.
3. J. K. Sharma, Business statistics, Vikas, 4th edition.