PGBA S3 01 01

Statistics for Management

Semester III

BUSINESS ADMINISTRATION

Block 1

KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY

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MASTER OF BUSINESS ADMINISTRATION

Statistics for Management

Block 1

DETAILED SYLLABUS

Unit 1: Introduction to Statistics: **Page No. : 7 – 47**

Meaning and Definition of Statistics, Frequency Distribution, Classification of Data, Types of Classification, Tabulation of Data, Advantages or Importance of Tabulation, Different Parts of Table, Types of Tables, Calculation of Class Frequencies and Formation of Frequency Distribution Table, Methods of Presenting Statistical Information

Unit 2: Statistical Survey: **Page No. : 48 – 65**

Definition of Statistical Survey, Stages of Statistical Survey, Planning of a Statistical Survey, Execution of Statistical Survey, Basic terms used in Statistical Survey, Collection of data, Primary Data, Secondary Data, Pilot Survey, Scrutiny and Editing of Secondary data

Unit 3: Measures of Central Tendency: **Page No. : 66 – 86**

Arithmetic Mean (or Mean), Geometric Mean, Harmonic Mean, Median, Mode, Quartile

Unit 4: Measures of Dispersion: **Page No. : 87 – 112**

Concept of Dispersion, Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation

Unit 5: Probability: **Page No. : 113 – 135**

Basic Terminologies, Classical Definition of Probability, Axiomatic Approach to Probability, Some Theorems on Probability

Unit 6: Conditional Probability: **Page No. : 136 – 155**

Conditional probability, Multiplication theorem of probability, Law of probability, Baye's theorem

Unit 7: Random Variables and Probability Distribution: **Page No. : 156 – 169**

Random Variables, Discrete Random Variables, Continuous Random Variables, Probability Distribution of Random Variables, Mean and Variance of Random Variables.

Unit 8: Theoritical Distribution I: **Page No. : 170 – 191**

Bernoulli Trial, Binomial (and Bernoulli) Distribution, Poisson Distribution

COURSE INTRODUCTION:

This course introduces us to the subject of Statistics. The course “Statistics for Management” of M.B.A. 3rd Semester will focus on the different statistical tools and techniques. The course is designed to give the learners the basic knowledge of statistics. The study of statistics is very useful as it helps us in explaining some of the situations of our daily life. In business, it occupies an important place as most of the business decisions are taken on the basis of statishical techniques.

The course is divided into two blocks.First block consists of eight units and second block block consists of seven units.

Block 1 deals with basic concepts of Statistics. Concepts of statistical survey and measures of central tendency and measure of dispersion are introduced in this block. Concept of probability, conditional probability are also covered in this block.Random variables and probability distribution are also discussed.Different theoritical distributions are introduced in this block.

Block 2 deal with theoritical distribution , simple correlation and regression which are discussed in this block. Distribution and ANOVA application are also covered in this block. Sampling and population, testing of hypothesis, chi square test are also discussed in this block. At the end of this block concept of Business forcasting are discussed.

Each unit of these blocks includes some along-side boxes to help you know some of the difficult, unseen terms. Some “EXERCISES” have been included to help you apply your own thoughts. You may find some boxes marked with: “LET US KNOW”. These boxes will provide you with some additional interesting and relevant information. Again, you will get “CHECK YOUR PROGRESS” questions. These have been designed to self-check your progress of study. It will be helpful for you if you solve the problems put in these boxes immediately after you go through the sections of the units and then match your answers with “ANSWERS TO CHECK YOUR PROGRESS” given at the end of each unit. These have been designed to self-check your performance.

BLOCK INTRODUCTION :

This is the first block of the course Statistics for Management. This block consists of eight unit.

The first unit explains the basic concepts of Statistics.

The second unit is about Statistical Survey.

The third unit is on Measure of Central Tendency

The fourt unit explains Measure of DIspersion

The fifth unit enlighten us with the concept of Probability.

The sixth unit is about Conditional Probability

The seventh unit explains about Random variables and Probability Distribution.

The eighth unit explains about Theoritical Distribution, i.e. Binomail distribution and Poissor distribution.