

St. Joseph's College of Commerce (Autonomous)
#163, Brigade Road, Bangalore – 560 025
LESSON PLAN – I BCOM REGULAR

Subject Name: BUSINESS STATISTICS & RESEARCH TECHNIQUES

Lecture hours: 60

Objective: To enhance students to grasp the fundamentals of statistics for interpreting business data. To familiarize students with the concepts and techniques of business research using MS-Excel.

Sl. No	UNIT & OBJECTIVES	No. of Lecture Hours	Methodology/Instructional techniques	Evaluation/ learning confirmation
<i>Module I</i>	<i>Introduction</i>	<i>5</i>		
1.	Meaning, Definition, Importance of statistics, scope ,limitations	1	Lecture and illustration	Discussion and Practical
2.	Definition of research , purpose	1	Lecture and illustration	Discussion and Practical
3.	Scope and types of research , steps in research	1	Lecture and illustration	Discussion and Practical
4.	Classification of data, formation of statistics series, tabulation	1	Lecture and illustration	Discussion and Practical
5.	Different type of data and tabulation	1	Activity	Activity
<i>Module II</i>	<i>Measures of central tendency and dispersion</i>	<i>13</i>		
1.	Mean	1	Lecture and illustration	Discussion and Practical
2.	Median	1	Lecture and illustration	Discussion and Practical
3.	Mode	1	Lecture and illustration	Discussion and Practical
4.	Geometrics mean	1	Lecture and	Discussion and

			illustration	Practical
5.	Quartiles, Range	2	Lecture and illustration	Discussion and Practical
6.	Quartile deviation	1	Lecture and illustration	Discussion and Practical
7.	Mean deviation from mean	1	Lecture and illustration	Discussion and Practical
8.	Median & mode	2	Lecture and illustration	Discussion and Practical
9.	Standard deviation and coefficient of variation	3	Lecture and illustration	Discussion and Practical
Module III	Probability	12		
1.	Classical or mathematical definition of probability	2	Lecture and illustration	Discussion and Practical
2.	Random experiment, equally likely outcomes	2	Lecture and illustration	Discussion and Practical
3.	Sample space- mutually exclusive events	2	Lecture and illustration	Discussion and Practical
4.	Complement of an event , dependent event, independent event,	3	Lecture and illustration	Discussion and Practical
5.	Conditional probability (simple problems), importance of probability in research.	3	Lecture and illustration	Discussion and Practical
Module IV	Hypothesis testing	15		
1.	Formation of null and alternative hypothesis,	3	Lecture and illustration	Discussion and Practical
2.	Level of significance, type I and type II errors,	4	Lecture and illustration	Discussion and Practical
3.	Hypothesis – T-test, Z-test Test for single mean and difference between two means only.	5	Lecture and illustration	Discussion and Practical
4.	Chi-square test (simple problems).	2	Lecture and illustration	Discussion and Practical

5.	Testing of hypothesis with suitable data in excel	1	Activity	Activity
Module V	<i>Statistical tools for research analysis</i>	10		
1.	Time series and its application	1	Lecture and illustration	Discussion and Practical
2.	correlation – scatter diagram, Karl Pearson & Spearman’s coefficient of correlation	4	Lecture and illustration	Discussion and Practical
3.	coefficient of determination and coefficient of non-determination	3	Lecture and illustration	Discussion and Practical
4.	regression analysis	2	Lecture and illustration	Discussion and Practical
Module VI	<i>Diagrammatic & graphical representation of data</i>	5		
1.	Diagrams: utilities , limitations, construction of one dimensional ,two dimensional and three dimensional diagrams	1	Lecture and illustration	Discussion and Practical
2.	Graphs: utilities ,limitations , constitution, frequency distribution , histogram, frequency curve and ogives	3	Lecture and illustration	Discussion and Practical type
3.	Different type of graphs in Excel	1	Activity	Activity

BOOKS FOR REFERENCE

1. C.B.Gupta: Statistics, Himalaya Publications.
2. Chikkodi & B.G.Satya Prasad: Business Statistics, Himalaya Publications.
3. Dr. Asthana: Elements of Statistics , Chaitanya
4. Dr. Sancheti & Kapoor : Statistics Theory , Methods and Application.
5. Ellahance : Statistical Methods
6. S.P.Gupta : Statistical Methods, Sultan Chand ,Delhi.

DATES & NATURE OF CIA:

1. First CIA for 10 marks - Group Presentation/Data Collection & Representation/Writing Article
2. Mid Term Exams 30 marks - January , 2018.(Module 1,2,6)
3. Second CIA for 10 marks - between Feb 15-20th, 2018 - Written Test