

**St. Joseph's College of Commerce (Autonomous)**  
**#163, Brigade Road, Bangalore - 560 025**

**LESSON PLAN - I BCOM (BPM) ("C SEC")**

**Dr. Sridhar L S**

**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.

<b>Sl. No</b>	<b>UNIT &amp; OBJECTIVES</b>	<b>No. of Lecture Hours</b>	<b>Methodology/Inst ructional techniques</b>	<b>Evaluation/ learning confirmation</b>
<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</i>	<i>13</i>		

	<i>tendency and dispersion</i>			
1.	Mean	1	Lecture and illustration	Quiz
2.	Median	1	Lecture and illustration	Test
3.	Mode	1	Lecture and illustration	Quiz
4.	Geometrics mean	1	Lecture and illustration	Test
5.	Quartiles, Range	2	Lecture and illustration	Quiz
6.	Quartile deviation	1	Lecture and illustration	Test
7.	Mean deviation from mean	1	Lecture and illustration	Quiz
8.	Median & mode	2	Lecture and illustration	Test
9.	Standard deviation and coefficient of variation	3	Lecture and illustration	Quiz
<b>Module III</b>	<b><i>Probability</i></b>	<b>12</b>		
1.	Classical or mathematical definition of probability	2	Lecture and illustration	Practical
2.	Random experiment, equally likely outcomes	2	Lecture and illustration	Practical
3.	Sample space- mutually exclusive events	2	Lecture and illustration	Practical
4.	Complement of an event , dependent event,	3	Lecture and illustration	Practical

	independent event,			
5.	Conditional probability (simple problems), importance of probability in research.	3	Lecture and illustration	Practical
<b>Module IV</b>	<b>Hypothesis testing</b>	<b>15</b>		
1.	Formation of null and alternative hypothesis,	3	Lecture and illustration	Practical
2.	Level of significance, type I and type II errors,	4	Lecture and illustration	Practical
3.	Hypothesis - T-test, Z-test Test for single mean and difference between two means only.	5	Lecture and illustration	Practical
4.	Chi-square test (simple problems).	2	Lecture and illustration	Practical
5.	Testing of hypothesis with suitable data in excel	1	Activity	Activity
<b>Module V</b>	<b>Statistical tools for research analysis</b>	<b>10</b>		
1.	Time series and its application	1	Lecture and illustration	Practical
2.	correlation -scatter diagram, karl person & sperman's coefficient of correlation	4	Lecture and illustration	Practical
3.	coefficient of determination and coefficient of non-determination	3	Lecture and illustration	Practical
4.	regression analysis	2	Lecture and	Practical

			illustration	
<b>Module VI</b>	<b><i>Diagrammatic &amp; graphical representation of data</i></b>	<b>5</b>		
1.	Diagrams: utilities , limitations, construction of one dimensional ,two dimensional and three dimensional diagrams	1	Lecture and illustration	Practical
2.	Graphs: utilities ,limitations , constitution, frequency distribution , histogram, frequency curve and ogives	3	Lecture and illustration	Practical
3.	Different type of graphs in Excel	1	Activity	Activity