Lesson Plan

Program: B.Com **Semester:** I **Course Code**: C010102T **Course Name:** Business Statistics

Course Objectives: The purpose of the paper is to inculcate and analytical ability among the students.
(CO1): Gaining Knowledge of basic concept of business statistics.
(CO2): To compute various measures of central tendency, measures of Dispersion and their implication on business performance.
(CO4): To compute various measures of time series analysis, correlation and regression analysis and their implication.
(CO4): To perform practical application for taking managerial decision.

Session Duration: 50 minutes

Participants: B.Com I Semester

Entry level knowledge and skills of students
  i.   Basic Knowledge of Statistics and sources of data.
  ii. Knowledge of Central Tendency like Mean, Median & Mode.

Equipment required in Classroom/ Laboratory/ Workshop
  i.   White Board & Marker

Assessment Schemes

S. No.	Criteria	Marks (100)
1	**CCSU End Term Examination**	75
2	**Internal Evaluation Scheme**	25
2(a)	**Teacher Assessment (Continuous Evaluation)**	20
2(a)(i)	Assignment I	10
2(a)(ii)	**Assignment II**	10
2(a)(iii)	**Attendance (compulsory)**	5

Course Outcomes (starting with action-oriented observable and measurable verb)

(CO1): Gaining Knowledge of basic concept of business statistics.

(CO2): To compute various measures of central tendency, measures of Dispersion and their implication on business performance.

(CO4): To compute various measures of time series analysis, correlation and regression analysis and their implication.

(CO4): To perform practical application for taking managerial decision.

L. No.	Topics	Sub Topics	Date of implementation	Pedagogy	CO-Covered	Faculty Sign	HoD's Remark with Date
			Unit - 1				
1.	**Introduction to Business Statistics**	Meaning, evolution of statistics in India & Discussion of Mahalanobis Model.		Lecture	CO1		
2.	**Introduction to Business Statistics**	Scope, Importance & Limitations of Statistics		Lecture	CO1		
3.	**Statistical Investigation**	Methods of investigation & planning and organization of data		Lecture	CO1		
4.	**Statistical Investigation**	Census & Sampling methods , methods of sampling including probability & Non-probability sampling		Demonstration	CO1		
5.	**Collection of Data**	Sources of data i.e., Primary and secondary data		Demonstration	CO1		
6.	**Classification of Data**	Frequency distribution; types of series		Demonstration	CO1		
7.	**Presentation of Data**	Tabular representation		Group Discussion	CO1		

		of data and practical problems					
8.	**Presentation of Data**	Graphical representation and diagrammatic representation of data		Demonstration	CO1		
Unit - 2							
9.	**Measures of Central Tendency**	Concept of average; Concept of Mean and practical problems of Individual series		Lecture	CO2		
10.	**Measures of Central Tendency**	Discrete series and Continous series with its practical problems		Demonstration	CO2		
11.	**Measures of Central Tendency**	Concept of Median and practical problems of Individual & Discrete series		Demonstration	CO2		
12.	**Measures of Central Tendency**	Practical problems of median in continuous series		Demonstration	CO2		
13.	**Measures of Central Tendency**	Mode and practical problems of mode with tabular method		Demonstration	CO2		
14.	**Measures of Dispersion**	Concept of Range & Coefficient of range; Quartile deviation & its		Demonstration	CO2		

		coefficient					
15.	**Measures of Dispersion**	Concept of mean deviation & its coefficient		Demonstration	CO2		
16.	**Measures of Dispersion**	Concept of standard deviation & its coefficient.		Demonstration	CO2		
17.	**Measure of Skewness**	Concept of skewness & its coefficient including karlpearson&bowley coefficient of skewness		Demonstration	CO2		
18.	**Measure of Skewness**	Practical problems on karlpearson coefficient of skewness		Demonstration			
19.	**Measure of Skewness**	Practical problems on Bowley's coefficient of skewness		Demonstration			
20.	**Measure of Skewness**	Practical problems on Bowley's coefficient of skewness					
21.	**Measure of Skewness**	Practical problems on Bowley's coefficient of skewness		Demonstration			
Unit - 3							
22.	**Correlation Analysis**	Introduction, types & degrees of correlation		Lecture	CO4		
23.	**Correlation Analysis**	Methods of Measurement of correlation; scatter diagram		Lecture	CO4		

24.	**Correlation Analysis**	Introduction of Karl Pearson coefficient of correlation and its measurement		Lecture /Demonstration	CO4		
25.	**Correlation Analysis**	Practical problems of karlpearson coefficient of correlation.		Demonstration	CO4		
26.	**Correlation Analysis**	Introduction of spearman coefficient of correlation		Lecture	CO4		
27.	**Correlation Analysis**	Practical problems on rank correlation method		Demonstration	CO4		
28.	**Correlation Analysis**	Concurrent method of correlation & Probable error		Demonstration	CO4		
29.	**Correlation Analysis**	Practical problems of coefficient of correlation		Demonstration	CO4		
30.	**Correlation Analysis**	Practical problems of coefficient of correlation		Demonstration	CO4		
Unit - 4							
31.	**Index Numbers**	Introduction, meaning and uses of index numbers		Lecture /Demonstration	CO4		
32.	**Index Numbers**	Methods of constructing price index numbers		Lecture /Demonstration	CO4		
33.	**Index Numbers**	Laspeyres method and its practical problems		Lecture /Demonstration	CO4		

34.	Index Numbers	Paasches' & Fishers' Ideal Index method of index numbers		Lecture /Demonstration	CO4		
35.	Index Numbers	Practical problems on methods of index numbers		Lecture /Demonstration	CO4		
36.	Index Numbers	Introduction to Base method of index numbers and practical problems on base method		Lecture /Demonstration	CO4		
37.	Index Numbers	Reversibility Test including Time reversal test and factor reversal test		Lecture /Demonstration	CO4		
38.	Analysis of Time series	Meaning & Importance of time series in statistics		Lecture /Demonstration	CO3		
39.	Analysis of Time series	Decomposition of time series: Practical problems on moving average method		Lecture /Demonstration	CO3		
40.	Analysis of Time series	Practical problems on methods of least squares		Lecture /Demonstration	CO3		
Revision							
41.	Unit 1	Previous year paper solving					
42.	Unit1	Previous year paper solving		Group Discussion			
43.	Unit 2	Previous year paper solving		Group Discussion			
44.	Unit 2	Previous year paper solving		Group Discussion			
45.	Unit 3	Previous year		Group Discussion			

		paper solving					
46.	**Unit 3**	Previous year paper solving		Group Discussion			
47.	**Unit 4**	Previous year paper solving		Group Discussion			
48.	**Unit 4**	Previous year paper solving		Group Discussion			

Text Books

1. **Business Statistics by S.P. Gupta and Archana Agarwal**
2. **Business statistics by S.C. Gupta**

Reference Books:

1. **Business Statistics by J.K. Sharma**
2. **Statistics by Sandeep Garg**

Journals: Not required

Electronic Database:

1. https://nios.ac.in/media/documents/SrSec318NEW/318_Economics_Eng/318_Economics_Eng_Lesson8.pdf
2. https://nios.ac.in/media/documents/SrSec318NEW/318_Economics_Eng/318_Economics_Eng_Lesson9.pdf
3. https://www.nios.ac.in/media/documents/SrSec318NEW/318_Learner_guide_eng/318_LG_E_L10.pdf
4. https://www.igntu.ac.in/eContent/IGNTU-eContent-467281593500-B.Com-4-Prof.ShailendraSinghBhadouriaDean&-BUSINESSSTATISTICS-All.pdf