1 Course Details

Course Name	STATISTICAL METHODS
Course Code	UCS16301
Course Credit	5
Semester	4
Class to which the course is offered	Bsc Computer Science
Faculty offering the course	Dr.A.Venmani
Department which the faculty belongs to	Mathematics and Statistics
Faculty Contact	
Faculty Office	FSH

2 Course Objective

This course aims To apply Statistical analysis for decision making process and Statistical tools for business applications.

3 Lesson Plan

Week No.	Period No.	Portions to be Covered	Teaching Methods (BB, PPT, etc)	Text (or) Reference Bo (Mention T1 or R1, et
		UNIT - I	BB	T1, R1
1	1	Introduction of Statistics	BB	T1, R1
	2	Nature and scope of statisitcal methods.	BB	T1, R1
	3	Limitation and applications of Statistics	BB	T1, R1
	4	Tabulation of statistical data , types and parts of Tabulation	BB	T1, R1
	5	classiifcation of statistical data, Types of classification with examples	BB	T1, R1
2	6	Diagrammatic representations,such as different types of Bar diagrams	BB	T1, R1
	7	Percentage bars and components bars	BB	T1, R1
	8	problems on Pie diagrams	BB	T1, R1
	9	Histogram and Frequency polygon	BB	T1, R1
	10	Histogram, Frequency curves,	BB	T1, R1
3	11	Less than and more than cumulative frequency	BB	T1, R2
	12	Less than and more than cumulative frequency with finding locations	BB	T1, R3
	13	Lorenz curve	BB	T1, R4
	14	Lorenz curve	BB	T1, R5

	15	Revision		
	16	Class test I		
		Unit II		
4	1	Introduction of Central Tendency	BB	T1, R1
	2	Definitions of Mean, Merits and Demertis of Arithmeic mean	BB	T1, R1
	3	Problem on Arthmetic mean Raw data	BB	T1, R1
	4	Problem on Arthmetic mean Discrete data	BB	T1, R1
	5	Problem on Arthmetic mean Discrete continuous data	BB	T1, R1
2	6	Definitions of Mean, Merits and Demertis of Median	BB	T1, R1
	7	Problem on Median Raw data	BB	T1, R1
	8	Problem on Median Discrete data	BB	T1, R1
	9	Problem on Median Discrete continuous data	BB	T1, R1
	10	Definitions of Mean, Merits and Demertis of Mode	BB	T1, R1
3	11	Problem on Mode Raw data	BB	T1, R1
	12	Problem on Mode Discrete data	BB	T1, R1
	13	Problem on Mode Discrete continuous data	BB	T1, R1
	14	Graphical Solution of Median	BB	T1, R1
	15	Graphical solution of Mode	BB	T1, R1
4	16	Revision	BB	T1, R1
	17	Class Test -II		
		Unit III		
	18	Introduction of Measures of Dispersion	BB	T1, R1
	19	Definitions of Mean, Merits and Demertis of Range and quatile deviation	BB	T1, R1
	20	Problem on Range and quatile deviation Raw and discrete data	BB	T1, R1
5	21	Problem on Range and quatile deviation Raw and discrete data	BB	T1, R1
	23	Problem on Range and Quatile deviation continuous data	BB	T1, R1
	24	Problem on Range and Quatile deviation continuous data	BB	T1, R1
	25	Definitions of Mean, Merits and Demertis of Standard deviation	BB	T1, R1
	26	Problem on standard deviation for Raw and discrete data	BB	T1, R1
6	27	Cycle test I	BB	T1, R1
	28	Cycle test I	BB	
	29	Cycle test I		
	30	Problem on standard deviation for Raw and discrete data		
	31	Problem on standard deviation for continuous data		
7	32	Problem on standard deviation for continuous data	BB	T1, R1
	33	Problems on coefficient of variations	BB	T1, R1

	34	Problems on coefficient of variations	BB	T1, R1
	35	Revision	BB	T1, R1
	36	Revision	BB	T1, R1
8	37	Class test II		
		Unit IV		
	38	Introduction of Correlation	BB	T1, R1
	39	Types of crrelation	BB	T1, R1
	40	Scatter diagram	BB	T1, R1
9	41	Karl Pearson's Coefficent of Correlation	BB	T1, R1
	42	Problems on Correlation Coefficient	BB	T1, R1
	43	Problems on Correlation Coefficient	BB	T1, R1
	44	Introduction of Rank Correlation	BB	T1, R1
	45	Sperman's coefficient of Correlation	BB	T1, R1
	46	Problems on Rank Correlation Coefficient	BB	T1, R1
10	47	Introduction of Regression	BB	T1, R1
	48	Properties of Regression coefficients	BB	T1, R1
	49	Regression Equation of Y on X	BB	T1, R1
	50	Regression Equation of X on Y	BB	T1, R1
	51	Revision	BB	T1, R1
11	52	Cycle Test-II		
	53	Cycle Test-II		
	54	Cycle Test-II		
		Unit V		
	55	Introduction on Testing of Hypothesis		
	56	explanation on small sample test	BB	T2, R2
12	57	Definition , application, merits and demerits of t-test	BB	T2, R2
	58	procedures and problem of t-test	BB	T2, R2
	59	Problems of t-test	BB	T2, R2
	60	Problems of t-test (two mean)	BB	T2, R2
	61	Definition , application, merits and demerits of Chi square-test	BB	T2, R2
13	62	procedures and problem of Chi square-test	BB	T2, R2
	63	Problems of Chi square-test	BB	T2, R2
	64	Problems of Chi square-test	BB	T2, R2
	65	Definition , application, merits and demerits of F-test	BB	T2, R2
	66	procedures and problem of F-test	BB	T2, R2
14	67	Problems of F-test	BB	T2, R2
	68	Analysis of Variance		
	69	Revision		
	70	Model Examination		
	71	Model Examination		
15	72	Model Examination		
	73	Model Examination		
	74	Model Examination		
	75	Model Examination		

4 Outcomes

a. An ability to apply knowledge of computing, mathematics, and basic sciences appropriate to the discipline

b. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.

5 Text Books

1. Pillai, R.S.N, Bagavathi, V. (2009),Statistics,Theory and Practice,7Th Edition,S.Chand Ltd,NewDelhi.

2. P.R.Vittal, Mathematical Statistics, Margham publication

6 Reference Books

1. Gupta, S.P. (2011) , Statistical Methods ,4th Edition, Sultan Chand & Sons, New Delhi..

S.P.Gupta, P.K. Gupta, manmohan, Business Statistics and operation Research., Sultan Chand & Sons, New Delhi..