C.U.SHAH UNIVERSITY
VBt's Institute of Commerce,
Wadhwan city
W.e.f.- June 2017

FACULTY OF: - **COMMERCE**
DEPARTMENT OF: - Bachelor of Commerce (B.Com)
SEMESTER: - IV
CODE: - 4CO04STA2
NAME: – Statistics-II

Teaching & Evaluation Scheme:-

Sr. No	Subject Code	Name of the Subject	Teaching Hours / Week				Credits	Evaluation Scheme							
								Theory				Practical			Total Marks
								Sessional Exam		University Exam		Internal		University	
			Th	Tu	Pr	Total		Marks	Hr/s	Marks	Hr/s	Pr / Viva	TW	Pr	
1	4CO04STA2	Statistics - II	3	--	--	3	3	30	$1\frac{1}{2}$	70	3	--	--	--	100

Objectives:

To similar the students with various statistics tool and their application in the decision making in business

Course Outline

Unit	Content	No.of Hours
1	**PROBABILITY DISTRIBUTION-2:** - Meaning of Normal Distribution - Properties and its application (without proof) - Examples	10
2	**TIME SERIES ANALYSIS:** - Meaning and Use of Time Series - Component of Time Series - Methods of Finding Trend by ➢ Moving Average ➢ Least Square (Linear (y = a+bx) , ➢ Second Degree y = a + bx +cx2) - Short Term Variation - Seasonal Variation By Moving Average Method - Computation of Seasonal Index number - Example	12

3	**ASSOCIATION OF ATTRIBUTES:** - Association of Two Attributes - Types of Association of Two Attributes - Order classes, - Consistency of data for two attributes - Methods of studying Association attributes ➢ Comparison of Expected Frequency ➢ Proportion method ➢ Yule's method ➢ Co-efficient of Colignation method - Examples	10
4	**SAMPLING:** - Idea of Population and sample - Advantage of sampling, limitation of sampling - Characteristics of Good sample - With and without replacement sampling - **Sampling method** ➢ Simple random sampling ➢ Stratified simple random sampling ➢ Systematic Sampling ➢ Drawing of all possible random sampling of given size (or Two Three) from a population (with and without replacement) ➢ Calculation of variance of sampling random, sample Mean. Stratified sample Mean(Two or Three strata only) and systematic sampling - Examples	07
5	**Linear Programming:** • Meaning and uses of L.P. • Limitation and assumptions of L.P • Various Terms : (Objective functions, Constraints, solution, feasible solution, optimum solution , basic solution , slake and surplus variables etc.) • Mathematical form of L.P.P • Method solving L.P.P. 1. Graphic method Examples.	06
	Total Hours	**45**

Learning Outcomes :-

Theoretical Outcome :- Students can learn Theoretical aspect of Statistics

Practical Outcome :- Student can solve the problems of Statistics

Teaching and Learning methodology :- The following pedagogical tools will be Used to feach this course:

(A) Lectures
(B) Case discussions
(C) Assignments / Class participation / Quiz etc.

Suggested Readings and Reference Books:

1. Statistics By D.S. sancheti and V.K. Kapoor
2. Fundamentals of mathematical statistics By V.K. Kapoor and S.C. Gupta
3. Basic Statistics By B.L. Agarwal
4. Fundamentals of Statistics By S.C. Srivastva and Sangya Srivastava
5. Operations Research By J.K. Sharma