SARDAR PATEL UNIVERSITY
BCOM SEMISTER: IV
PAPER CODE: UB04CCOM33
TITLE OF PAPER: BUSINESS MATHEMATICS & STATISTICS – IV
(TOTAL CREDIT: 3)   Syllabus with effect with: NOVEMBER-2019

Objectives: (1) To enhance analytical ability in students for processing data

(2) To familiarize students with applications of Statistical techniques in business decision Making.

UNIT	DESCREIPTION IN DETAIL	WEIGHTAGE (%)
1	**Sampling (Theory Only)** (a) Terminology: Population, Sample, Parameter, Statistics (b) Characteristics of ideal sample (c) Population Survey V/s Sample Survey (d) Concept of Sampling errors and Non-Sampling Errors (e) Sampling Methods: Procedure, Merits, Demerits :Simple Random Sampling, Stratified random Sampling, Systematic Sampling , Cluster Sampling	25
2	**Probability** (a) Terminology: Event, Sample space, Mutually exclusive, equally likely, exhaustive, joint, dependent, independent events (b) Definitions: Mathematical, Statistical and Axiomatic (c) Additional and multiplication rules of probability for two and three events respectively (d) Mathematical Expectation: Meaning and properties. Examples on $E(x)$; $V(x)$	25
3	**Probability Distributions** (a) Meaning and importance of probability distributions (b) Binomial, Poisson, Normal distribution: Meaning, Conditions, pdf , properties and uses.	25
4	**Statistical Quality Control (S.Q.C)** (a) Meaning , Importance's and Principles of SQC (b) Charts for variables (Mean and Range chart) (c) Charts for Attributes (p, np & c charts)	25

References:

➢ D. C Sancheti & V K Kapoor: Statistics (Theory, Methods and Applications) Sultan Chand Publication, New Delhi
➢ S C Gupta: Fundamentals of Statistics, Himalaya Publishing House
➢ Prof. H R Vyas and Others, Business Statistics, B S Shah Prakashan
➢ R P Hooda: Statistics for Business and Economics, Mac Millian Publication, New Delhi