

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11))
Programme: B.COM Semester: VI
Syllabus with effect from the Academic Year:

B.COM. SEMESTER-VI		
Paper Code UB06CCOM73	Title of the Paper Business Mathematics & Statistics–VI	Total Credit 3

Course Objectives	(1) To enhance analytical ability in students for processing data (2) To familiarize students with applications of Statistical techniques in business decision Making.
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Course Description		
Unit	Description	Weightage
1.	Moments: Meaning of a random variable, Definition of probability distribution of random variable, Definition of Raw and Central moments. Relation between first four raw and central moments (without proof), Concept of coefficient of Skewness and kurtosis and their interpretations, Simple examples for obtaining the measure by using raw data, grouped data and probability distribution.	25%
2.	Decision theory: Meaning of decision theory and its basic terminologies, Methods of solving decision problem (i) Decision under uncertainty – Maxi-max principle, Maxi-min principle, Hurwitz's principle and Laplace principle. (ii) Decision under uncertainty when events probabilities are known- E.M.V, E.V.P.I. Simple examples and their interpretations.	25%
3.	Testing of Hypothesis: Meaning of statistical hypothesis, Definitions of Null hypothesis, Alternate hypothesis, Simple and Composite hypothesis, Critical region, Type-1 and Type-II errors, Level of significance, Power of tests. SMALL SAMPLE TESTS: Definition, Assumptions, and Properties of t-distribution. Test of Significance of the difference between Sample Mean and Population Mean. Test of Significance of the difference between Means of Two Small Samples. Paired t-test for difference of two Means.	25%
4.	CHI-SQUARE TEST, F TEST AND ANALYSIS OF VARIANCE: Definition and limitations of Chi-Square test, Goodness of fit, Test of Independence of Two Attributes and Yate's Correction. F-test (only introduction), Meaning and Assumptions of Analysis of Variance. Analysis of Variance for One Way Classification and its application.	25%

*Units will have the same Weightage in the evaluation as suggested in the course outline.

Teaching-Learning Methodology	<ul style="list-style-type: none"> • Lecture Method • Online Lectures • Group Discussion • Practical Problem Solving
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Evaluation Pattern		
Sr.No.	Details of the Evaluation	Weightage
1.	Internal/Written Examination	15%
2.	Internal Continuous Assessment in the form of Practical , Viva-Voce, Quizzes, Seminars, Assignments, Attendance	15%
3.	University Examination	70%

* Students will have to score a minimum of 40 (Forty) Percent to pass the course.

Course Outcomes: Having Completed this course, the students will be able to

1. Be able to understand the characteristics of different types of decision-making environments and the appropriate decision making approaches and tools to be used in each type.
2. Can conduct basic statistical analysis of data and interpreting data.
3. Can present the analysis of derived statistics to all audiences.

Suggested References: (include Reference Material from where a student is expected to study the said content in APA Style) Reference Websites can also be included)

Sr. No	References
1.	C.R.Kothari: Quantitative Techniques, Vikas Publishing House.
2.	Sancheti & Kapoor : Business Mathematics. Sultan Chand & sons, New Delhi.
3.	S.C.Gupta & V.K.Kapoor: Fundamental of Mathematical statistics, Sultan Chand & sons, New Delhi.
4.	Sancheti & Kapoor: Business Statistics. Sultan Chand & sons, New Delhi
5.	

On-Line Resources available that can be used as Reference Material

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