

S. No.	Course Code	Course Name	Course Type	Cd	L	T	P	Marks		
								Sessional	Final Exam	Total
6	MBA-106	Business Statistics & Research Methods	Core	4	4	0	0	30	70	100

#### COURSE OUTCOMES:

At the end of the course the student will be able to:	
CO1	Remember the elementary concepts and techniques of statistics.
CO2	Understand the applications of regression and correlation.
CO3	Examine the framework of probability and the various probability concepts that are essential in business decisions.
CO4	Formulate and validate the hypothesis using different statistical methods.
CO5	Demonstrate the importance, types, and research process in decision-making and business.

#### Detailed Syllabus

##### Section A

##### UNIT I

**Measures of Central Tendency:** Arithmetic Mean, Median, and Mode; **Measures of Dispersion:** Standard Deviation; Coefficient of Variation; Skewness and Kurtosis.

(10 hours)

##### UNIT II

**Regression Analysis:** Correlation Karl Pearson Coefficient of Correlation; Spearman's Rank Correlation Method; Simple Linear Regression Model; Regression Coefficients; Regression Equations; Standard Error of Estimate, Coefficient of Determination.

(9 hours)

##### UNIT III

**Probability:** Concept of Probability, Binomial Distribution, and Poisson Distribution; Continuous Probability Distribution, Normal Distribution.

(9 hours)

##### Section B

##### UNIT IV

**Hypothesis Testing:** Format and Types; Procedure of Hypothesis Testing; Errors in Hypothesis; Tests of Significance for Attributes; Tests of Significance for Variables; Tests of Significance for Small Samples; t-distribution and its application. Non-Parametric Tests-Chi-Square Distribution; Chi-Square Distribution Statistic; Goodness of Fit; F-test; Analysis of variance (ANOVA), One Way and Two Way.

(12 hours)

##### Unit V

**Research Methodology:** Concept and meaning of research, types of research-exploratory, descriptive, causal; Process of research, Questionnaire design and Test; Scaling techniques, Research report preparation and presentation; Citation and referencing style.

(8 hours)

**Note:** Hands on Training on SPSS will be provided to students.

#### Textbooks

S. No	Name of the Books	Name of the Author	Publisher Name	Edition (Pub. Yr.)
1.	Statistics for Managers Using Microsoft Excel	Levine Stephan Kathryn A.S Zabat	Pearson	8th (2020)
2.	Business Statistics	G.C Beri	Mc Graw Hill Education (India)	3 <sup>rd</sup> (2017)

#### Reference Books

S. No	Name of the Books	Name of the Author	Publisher Name	Edition (Pub. Yr.)
1.	Elementary Statistics in Social Research	Jack Levin, James Alan Fox	Pearson Education	12 <sup>th</sup> (2021)
2.	Business Statistics	J.K Sharma	Pearson Education	4 <sup>th</sup> (2014)