



L	T	P/ S	SW/F W	TOTAL CREDIT UNITS
2	1	-	-	03

COURSE TITLE: BUSINESS STATISTICS

COURSE CODE: QAM 102

CREDIT UNIT: 03

COURSE LEVEL : UG

Course Objectives:

The objective of this course is to familiarize the students with fundamental statistical tools which can help them in analyzing the business data. This course will provide students with hands-on experience to use statistical tools in order to make scientific decisions even in uncertain business environment

Pre-requisites:

The students should have basic knowledge of Business Mathematics Syllabus covered in semester one of BBA programme.

Student Learning Outcomes: On completion of this course the student will be able to:

1. Identify statistical tools needed to solve various business problems.
2. Compute measures of location and dispersion.
3. Apply discrete and continuous probability distributions to various business problems.
4. Develop the skill of performing the calculations needed for various methods of analysis.

Course Contents/Syllabus:	Weightage (%)
Module I: Introduction to Statistics	10%
<ul style="list-style-type: none"> ▪ Definitions, Functions of Statistics, Limitation of Statistics, Applications of Statistics,2. ▪ Collection of Data: Types and Methods, Classification and Presentation of data: Histogram, Frequency Curve, Frequency Polygon, Ogive 	
Module II: Measure of Central Tendency	20%
<ul style="list-style-type: none"> ▪ Concepts of Central Tendency: Meaning and Characteristics of Average, ▪ Types of Averages: Arithmetic mean; Combined mean; Weighted mean; Median; Mode 	
Module III : Measure of Dispersion	20%
<ul style="list-style-type: none"> ▪ Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation, Combined Standard Deviation, Correct Incorrect Values, ▪ Coefficient of Variation (Absolute & Relative Measure of Dispersion), ▪ Skewness-Karl-Pearson's Coefficient of Skewness, Bowley's Coefficient of Skewness, Moments, Kurtosis. 	

Module IV : Correlation Analysis and Regression Analysis	20%
<p>Correlation:</p> <ul style="list-style-type: none"> ▪ Introduction-Importance of Correlation, Types of Correlation, ▪ Scatter Diagram Method, ▪ Karl Pearson's coefficient of Correlation (Grouped and Ungrouped), ▪ Spearman's Coefficient of Rank Correlation, Rank Correlation for Tied Ranks, <p>Regression Analysis:</p> <ul style="list-style-type: none"> ▪ Concepts of Regression, Difference b/w Correlation and Regression, ▪ Regression Lines. Regression Coefficient in a bi-variate frequency distribution. 	
Module V Time Series Analysis	10%
<ul style="list-style-type: none"> ▪ Introduction; Objectives of Time Series analysis; ▪ Components of a Time Series; ▪ Moving Average Method; method of least squares (fitting of linear trend only) 	
Module V1 Probability Theory and Distributions	20 %
<ul style="list-style-type: none"> ▪ Concept; Addition and multiplication theorems of probability; conditional probability & independent events; ▪ Bayes' theorem; Probability Distribution Function, Binomial distribution; Poisson distribution; Normal distribution and their applications 	

Pedagogy for Course Delivery

The course pedagogy will include lectures, numerical practice and discussion on numerical applications of the topics covered.

Assessment/ Examination Scheme:

Theory L/T (%)	Lab/Practical/Studio (%)	End Term Examination
30%	-	70%

Theory Assessment (L&T):

	Continuous Assessment/Internal Assessment					
Components (Drop down	CT	H	C	V	A	EE
Weightage (%)	10	5	5	5	5	70

References:

1. Sharma J K (2014), Fundamentals of Business Statistics, Vikas Pub. House
2. Gupta S P (2013), Statistical Methods, S. Chand & Co.
3. Kapoor & Sancheti,(2011), Business Statistics, Sultan Chand & Sons
4. Anderson Sweeney Williams(2010), Statistics for Business and Economics, Eighth edition, Thomson
5. Rubin & Levin (2013), Statistics for Management, Seventh edition, Pearson, Prentice Hall of India.