

**DR MPS GROUP OF INSTITUTIONS
COLLEGE OF BUSINESS STUDIES, AGRA**

INSTRUCTIONAL PLAN (MODIFICATION PROPOSED – SUBJECT TO STUDENTS PARTICIPATION AND INTERACTION)

ALLOCATED LECTURES ARE BASED ON STUDENT INTERACTION AND PARTICIPATION. SESSIONS REQUIRED MAY VARY, DEPENDING ON CLASS ATTENDANCE AND STUDENT INVOLVEMENT.

SESSION TOOK 50 LECTURE TO COMPLETE THE SYLLABUS.

Faculty Name: Hima Singh Jayas

Course No. KMB104 Course Title: Business Statistics & Analytics

Textbook: (Book Bank – Given to Student)

1. S.C. Gupta- Fundamentals of Statistics, Himalaya Publishing

Other specific books: (Reference)

1. G.C. Beri- Business Statistics, 3rd edition, TATA Mc Graw HILL
2. J.K. Sharma- Business Statistics, Pearson Publication

Objectives of the subject:

1. Understand the different basic concept / fundamentals of business statistics.
2. Understand the practical application of various concepts.
3. Understand the importance of measures of Descriptive statistics which includes measures of central tendency, Measures of Dispersion, Time Series Analysis, Index Number, Correlation and Regression analysis and their implication on Business performance.
4. Understand the concept of Probability and its usage in various business applications.
5. Understanding Decision making environment and applying the Concept of Business Analytics.

Detailed Plan for Lectures.

Lecture No. Each Lecture of min. 45 minutes duration	Topic	Assignment/ Task to be assigned to students
1	Introduction to the subject and need to study it	
2	<u>UNIT 1: Descriptive Statistics</u> Meaning, scope, functions and limitations of statistics	
8	Measures of central tendency- Mean, median, mode, quartiles	
4	Measures of dispersion- Range, inter quartile range, mean deviation, standard deviation , variance, coefficient of variance	

1	Skewness and kurtosis	
1	<u>UNIT 2: Time series and index number</u> Time series analysis- Concept, additive and multiplicative models, component of time series	
4	Least square method- linear and non-linear equations, applications in business decision making	
1	Index numbers- meaning, types uses	
3	construction of price, quantity and volume indices- fixed base and chain base methods	
4	<u>UNIT 3: CORRELATION AND REGRESSION</u> Correlation analysis- Rank method and Karl Pearson method of correlation and properties of correlation	As 2
2	Regression Analysis- Fitting a regression line and interpretation of results	
2	Properties of regression coefficients and relationship between regression and coefficient	
5	<u>UNIT 4: PROBABILITY THEORY AND DISTRIBUTION</u> Probability: Theory of probability, addition and multiplication Law, Baye's theorem	
5	Probability theoretical distributions: concept and application of binomial, poisson and normal distributions	
8	<u>UNIT 5:</u> Decision making environment Decision making under certainty, uncertainty and risk situations, decision tree approach and its applications	AS 1
	Concept of business analytics Meaning, types and application of business analytics	

Details of Assignments Planned:

Assignment No.	Details	Nature of Assignment	Expected outcome
1	Worksheet on numerical	calculative	To help the students to understand the analytical work
2	Data collection and application of statistical tools	Research based	To get an idea about how statistics is used in research