

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR (Established by Govt. of A.P., ACT No.30 of 2008) ANANTHAPURAMU – 515 002 (A.P) INDIA

MASTER OF BUSINESS ADMINISTRATION MBA; MBA (General Management); MBA (Business Management) COMMON COURSE STRUCTURE

Course Code	STATISTICS FOR MANAGERS	L	T	P	C
21E00135	STATISTICS FOR MANAGERS	4	0	0	4
	Semester	I			

Course Objectives:

- To explain descriptive statistics and inferential statistics
- To introduce various measurements—used to describe the data and inter the results of the data analysis.
- To describe the concept of probability, theorems, and types of probability distributions of data.
- To impart the computational, analytical and interpretation skills using the data

Course Outcomes (CO): Student will be able to

- Understand statistical techniques popularly used to describe the data in managerial decision making.
- Know the procedure involved in inferential statistics and appropriate tests for given data.
- Learn the computational skill, interpretation of results of the data analysis.
- Analyse and differentiate various types of data distribution and its probability distribution.

UNIT - I Lecture Hrs: 12

Introduction of statistics – Nature & Significance of Statistics to Business, Measures of Central Tendency: Mean – Median – Mode; Measures of Dispersion: range, quartile deviation, mean deviation, standard deviation, coefficient of variation.

UNIT - II Lecture Hrs: 12

Correlation & Regression: Introduction, Significance and types of correlation — Measures of correlation — Co-efficient of correlation. Regression analysis — Meaning and utility of regression analysis — Comparison between correlation and regression — Properties of regression coefficients-Rank Correlation.

UNIT - III Lecture Hrs:12

Probability – Meaning and definition of probability – Significance of probability in business application – Theory of probability: Addition and multiplication – Examinal distribution – Poisson distribution – Normal distribution.

UNIT - IV Lecture Hrs:12

Testing of Hypothesis- Hypothesis testing: One sample and Two sample tests for means and proportions of large samples (z-test), One sample and Two sample tests for means of small samples (t-test), ANOVA Test: One-way and two way ANOVA.

UNIT - V Lecture Hrs: 08

Non-Parametric Methods: Importance of Non-Parametric method – difference between parametric and non-parametric methods; Chi-square test: Test of Goodness of fit - test for Irucpendence of Attributes; Sign test: One sample and paired samples data.

Textbooks:

- 1. Statistical Methods, Gupta S.P., S.Chand.Publications
- 2. Business Statistics, J.K.Sharma, Vikas house publications house Pvt Ltd

Reference Books:

- 1. Statistics for Management, Richard I Levin, David S.Rubin, Pearson,
- 2. Complete Business Statistics, Amir D. Aezel, Jayavel, TMH,
- 3. Statistics for Management, P.N.Arora, S.Arora, S.Chand
- 4. Statistics for Management ,Lerin, Pearson Company, New Delhi.
- 5. Business Statistics for Contemporary decision making, Black Ken, New age publishers.
- 6. Business Statistics, Gupta S.C & Indra Gupta, Himalaya Publishing House, Mumbai

Online Learning Resources:

https://onlinecourses.swayam2.ac.in/cec20_mg13/preview https://onlinecourses.nptel.ac.in/noc20_mg23/preview https://iimbx.iimb.ac.in/statistics-for-business-i/