JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

MBA I Semester	L	T	P	C
	4	0	0	4

(17E00105) STATISTICS FOR MANAGERS

The objective of this course is to familiarize the students with the statistical techniques popularly used in managerial decision making. It also aims at developing the computational skill of the students relevant for statistical analysis.

1.Introduction of statistics – Nature & Significance of Statistics to Business, , Measures of Central Tendency- Arithmetic – Weighted mean – Median, Mode – Geometric mean and Harmonic mean – Measures of Dispersion, range, quartile deviation, mean deviation, standard deviation, coefficient of variation – Application of measures of central tendency and dispersion for business decision making.

2. Correlation: 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.

3. Probability – Meaning and definition of probability – Significance of probability in business application – Theory of probability –Addition and multiplication – Conditional laws of probability – Binominal – Poisson – Uniform – Normal and exponential distributions.

4. 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), F-test for two sample standard deviations. ANOVA one and two way .

5. Non-Parametric Methods: Chi-square test for single sample standard deviation. Chi-square tests for independence of attributes - Sign test for paired data.

Textbooks:
- Statistical Methods, Gupta S.P., S.Chand. Publications

References:
- Statistics for Management, Richard I Levin, David S.Rubin, Pearson,
- Business Statistics, J.K.Sharma, Vikas house publications house Pvt Ltd
- Complete Business Statistics, Amir D. Aezel, Jayavel, TMH,
- Statistics for Management, P.N.Arora, S.Arora, S.Chand
- Statistics for Management , Lerin, Pearson Company, New Delhi.
- Business Statistics for Contemporary decision making, Black Ken, New age publishers.
- Business Statistics, Gupta S.C & Indra Gupta, Himalaya Publishing House, Mumbai