

QUANTITATIVE TECHNIQUES FOR MANAGEMENT

Course Code		Year	III	Semester	II
Course Category	Inter disciplinary elective	Branch	CIVIL	Course Type	Theory
Credits	0	L-T-P	3-0-0	Prerequisites	Nil
Continuous Internal Evaluation:	30	Semester End Evaluation:	70	Total Marks:	100

Course Outcomes	
Upon successful completion of the course, the student will be able to -	
CO1	Understand the basic concepts for solutions to business problems (L2)
CO2	Apply the analytical techniques in business transactions that would help in making effective business decisions (L3)
CO3	Analyze problems in business transactions that would help in making effective business (L4)
CO4	Apply the least square technique to find the equation of the curve. (L3)
CO5	Determine the equation of the curve from the given data. (L4)
CO6	Apply the various methods to find the deviations and submit a report (L3)

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3-High, 2: Medium, 1:Low)														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1													2	
CO2	3												2	
CO3		3											2	
CO4	3												2	
CO5		3							2	2			2	

SYLLABUS		
Unit No.	Contents	Mapped CO
I	Introduction to Statistics: Meaning, Definition, Functions, Importance, Limitations of Statistics, Collection of Primary and Secondary Data.	CO1,CO2,CO3
II	Measures of Central Tendency: Definition, Objectives, Characteristics and Techniques: Mean Median, Mode, Geometric Mean and Harmonic Mean.	
III	Measures of dispersion: Definition, Objectives, Characteristics and Techniques: Range, Quartile Deviation, Mean Deviation, Standard Deviation and Coefficient of Variation.	
IV	Measures of Skewness & Kurtosis: Definition, types of skewness, types of kurtosis, Karl-Pearson's Co-efficient, Bowley's Co-efficient, Kelly Co-efficient, Calculation of Raw Moments and Central Moments	
V	Curve Fitting: Method of least squares, straight line, parabola, exponential curve, power curve	CO1,CO4,CO5

Learning Resources
Text Books:
<ol style="list-style-type: none">1. S.C. Gupta and V.K. Kapoor, Fundamentals of Mathematical Statistics, 11/e, Sultan Chand & Sons Publications, 2012.2. Dr.T.K.V. Iyengar, Dr.B.Krishna Gandhi, S. Ranganatham, Dr. M.V.S.S.N. Prasad, "Probability & Statistics", Publications: S.Chand, 4th Revised Edition, 2012.
Reference Books:
<ol style="list-style-type: none">1. S. Ross, a First Course in Probability, Pearson Education India, 2002.2. Miller and Freunds, Probability and Statistics for Engineers,7/e, Pearson, 2008.
e- Resources & other digital material:
<ol style="list-style-type: none">1. www.nptelvideos.com/mathematics/(Math Lectures from Mit,Stanford,IIT'S2. nptel.ac.in/courses/111/106/111106150/3. nptel.ac.in/courses/111105035