QUANTITATIVE TECHNIQUES FOR MANAGEMENT

Course Code	19HS2501C	**Year**	III	**Semester**	I
Course Category	Inter Disciplinary Elective-I	**Branch**	Common to All	**Course Type**	Theory
Credits	3	**L – T – P**	3 – 0 – 0	**Prerequisites**	Nil
Continuous Internal Evaluation	30	**Semester End Evaluation**	70	**Total Marks**	100

Course Outcomes		**Levels**
After 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

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													1	
CO2	3												1	
CO3		2											1	
CO4	3												1	
CO5									2	2			1	

Syllabus

Unit No.	**Contents**	**Mapped COs**
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 Recourse(s)
Text Books
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:
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:
1. www.nptelvideos.com/mathematics/ (Math Lectures from Mit,Stanford,IIT'S) 2. nptel.ac.in/courses/111/106/111106150/ 3. nptel.ac.in/courses/111105035