



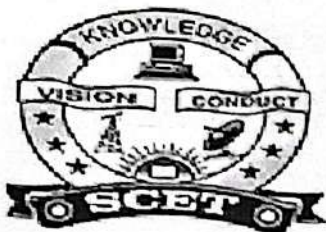
# SWARNANDHRA

## COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act 1956, Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

### DEPARTMENT OF S & H TEACHING PLAN

Course Code	Course Title	Semester	Branches	Contact Periods /Week	Academic Year	Date of commencement of Semester	
24MB1T04	Quantitative Analysis For Business Decisions	I	MBA	5	2024-25	04-09-24	
<b>COURSE OUTCOMES:</b> Students are able to							
CO1	Basic importance and applications of quantitative techniques.(K2)						
CO2	Study the various measures and applicability of probability related to the statistics.(K3)						
CO3	Justify the several decisions in decision theory.(K3)						
CO4	Use and understand the different sampling distribution techniques.(K3)						
CO5	Test the hypothesis for choosing best conclusion and inference.(K3)						
UNIT	Out Comes / Bloom's Level	Topic No.	Topics/Activity	Text Book/ Reference	Contact Hour	Delivery Method	
<b>I</b>	CO1 Students are able to Basic importance and applications of quantitative techniques (K <sub>2</sub> ).	<b>Quantitative Techniques</b>					Chalk & Talk, Active Learning, PPT & Tutorial
		1.1	Introduction To Quantitative Techniques	T <sub>1</sub> &T <sub>2</sub>	1		
		1.2	Meaning and Definition	T <sub>1</sub> &T <sub>2</sub>	1		
		1.3	Classification of Quantitative Techniques	T <sub>1</sub> &T <sub>2</sub>	1		
				T <sub>1</sub> &T <sub>2</sub>	1		
		1.4	Quantitative Techniques and other disciplines	T <sub>1</sub> &T <sub>2</sub>	1		
				T <sub>1</sub> &T <sub>2</sub>	1		
		1.5	Application of Quantitative Techniques in business	T <sub>1</sub> &T <sub>2</sub>	1		
T <sub>1</sub> &T <sub>2</sub>	1						
1.6	Limitations of Quantitative Techniques	T <sub>1</sub> &T <sub>2</sub>	1				
		T <sub>1</sub> &T <sub>2</sub>	1				
<b>Total</b>					<b>10</b>		



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		Measure of Central Tendency and Dispersions				
<b>II</b>	CO2 Students are able to Study the various measures and applicability of probability related to the statistics.(K3).	2.1	Arithmetic Mean and Geometric Mean	T <sub>1</sub> & T <sub>2</sub>	1	Chalk & Talk, Active Learning, PPT & Tutorial
		2.2	Harmonic Mean, Median and Mode	T <sub>1</sub> &T <sub>2</sub>	1	
				T <sub>1</sub> &T <sub>2</sub>	1	
		2.3	Standard Deviation and Simple correlation	T <sub>1</sub> &T <sub>2</sub>	1	
				T <sub>1</sub> &T <sub>2</sub>	1	
		2.4	Karl Pearson's Coefficient of correlation and Rank correlation	T <sub>1</sub> &T <sub>2</sub>	1	
				T <sub>1</sub> &T <sub>2</sub>	1	
		2.5	Simple Regression Analysis and Concept of Probability	T <sub>1</sub> &T <sub>2</sub>	1	
				T <sub>1</sub> &T <sub>2</sub>	1	
		2.6	Probability Rules, Joint and Marginal probability, Baye's Theorem	T <sub>1</sub> &T <sub>2</sub>	1	
T <sub>1</sub> &T <sub>2</sub>	1					
2.7	Binominal and Poisson distributions	T <sub>1</sub> &T <sub>2</sub>	1			
		T <sub>1</sub> &T <sub>2</sub>	1			
2.8	Normal & Exponential Probability Distributions	T <sub>1</sub> &T <sub>2</sub>	1			
		T <sub>1</sub> &T <sub>2</sub>	1			
<b>Total</b>					<b>15</b>	
		Decision Theory				
<b>III</b>	CO3 Students are able to Justify the several decisions in decision theory. (K3)	3.1	Introduction of Decision Theory: Steps involved in decision making	T <sub>1</sub> &T <sub>2</sub>	1	Chalk & Talk, Active Learning, PPT & Tutorial
		3.2	Different environments in which decisions are made	T <sub>1</sub> &T <sub>2</sub>	1	
				T <sub>1</sub> &T <sub>2</sub>	1	
		3.3	Criteria for decision making	T <sub>1</sub> &T <sub>2</sub>	1	
				T <sub>1</sub> &T <sub>2</sub>	1	
		3.4	Decision making under uncertainty	T <sub>1</sub> &T <sub>2</sub>	1	
				T <sub>1</sub> &T <sub>2</sub>	1	
3.5	Decision making under conditions of Risk and Utility as a decision criterion	T <sub>1</sub> &T <sub>2</sub>	1			
		T <sub>1</sub> &T <sub>2</sub>	1			



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		3.6	Decision trees, Graphic displays of the decision-making process	T <sub>1</sub> &T <sub>2</sub>	1		
				T <sub>1</sub> &T <sub>2</sub>	1		
		37	Decision making with an active opponent	T <sub>1</sub> &T <sub>2</sub>	1		
				T <sub>1</sub> &T <sub>2</sub>	1		
			<b>Total</b>		<b>13</b>		
		<b>Concept of Estimation and Sampling</b>					
<b>IV</b>	CO4 Students are able to Use and understand the different sampling distribution techniques (K3)	4.1	Inferential Analysis, Point Estimates and Interval Estimates of Averages	T <sub>1</sub> &T <sub>2</sub>	1	Chalk & Talk, Active Learning, PPT & Tutorial	
				T <sub>1</sub> &T <sub>2</sub>	1		
		4.2	Proportions of small and large samples	T <sub>1</sub> &T <sub>2</sub>	1		
		4.3	Proportions of small and large samples	T <sub>1</sub> &T <sub>2</sub>	1		
		4.4	Sampling Meaning, Steps in Sampling Process and Sample Size	T <sub>1</sub> &T <sub>2</sub>	1		
				T <sub>1</sub> &T <sub>2</sub>	1		
		4.5	Probability and non-probability sampling techniques	T <sub>1</sub> &T <sub>2</sub>	1		
		4.6	Errors in sampling, Tests of significance, Types of Hypothesis	T <sub>1</sub> &T <sub>2</sub>	1		
		4.7	Hypothesis testing and Confidence Intervals	T <sub>1</sub> &T <sub>2</sub>	1		
		4.8	Parametric Tests for means	T <sub>1</sub> &T <sub>2</sub>	1		
4.9	Proportions, Variance and Paired Observations	T <sub>1</sub> &T <sub>2</sub>	1				
		T <sub>1</sub> &T <sub>2</sub>	1				
		T <sub>1</sub> &T <sub>2</sub>	1				
			<b>Total</b>		<b>13</b>		
		<b>Analysis of Variance (ANOVA)</b>					
<b>V</b>	CO5 Students are able to Test the hypothesis for choosing best conclusion and inference.(K3).	5.1	One-way ANOVA	T <sub>1</sub> &T <sub>2</sub>	1	Chalk & Talk, Active Learning, PPT & Tutorial	
				T <sub>1</sub> &T <sub>2</sub>	1		
		5.2	Two Way ANOVA	T <sub>1</sub> &T <sub>2</sub>	1		
				T <sub>1</sub> &T <sub>2</sub>	1		
		5.3	Non Parametric tests	T <sub>1</sub> &T <sub>2</sub>	1		
		5.4	Chi-Square-Test of Independence	T <sub>1</sub> &T <sub>2</sub>	1		
T <sub>1</sub> &T <sub>2</sub>	1						



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		5.5	Chi-Square- Test of Goodness of Fit	T <sub>1</sub> &T <sub>2</sub>	1	
				T <sub>1</sub> &T <sub>2</sub>	1	
				<b>Total</b>	<b>9</b>	
<b>Cumulative Proposed Periods</b>					<b>60</b>	

**Text Books:**

S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION
T1	Anand Sharma "Quantitative Techniques for Business decision Making Himalaya Publishers, New Delhi, 2012.
T2	N.D. Vohra "Quantitative Techniques in Management", Tata- McGraw Hill Private Limited, New Delhi, 2011.

**Reference Books:**

S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION
R1	Gupta S.P "Statistical Methods", S. Chand and Sons, New Delhi
R2	Anderson "Quantitative Methods for Business", Cengage Learning, New Delhi, 2013.

	Name	Signature with Date
i. Faculty	Mr. P.V.Narayana	<i>P.V. Narayana</i>
ii. Course Coordinator	Mr. P.V.Narayana	<i>P.V. Narayana</i>
iii. Module Coordinator	Mr. M.Ravindra Babu	<i>M. Ravindra Babu</i>
iv. Programme Coordinator	Dr. V. Swaminadham	<i>V. Swaminadham</i>

*Amr.*  
Principal