O.P.Code: 20MB9004

**R20** 

H.T.No.

## SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS)

MBA I Year I Semester Regular & Supplementary Examinations January/ February-2025

BUSINESS STATISTICS FOR MANAGERS

Max. Marks: 60

Time: 3 Hours

SECTION - A

(Answer all Five Units  $5 \times 10 = 50$  Marks)

UNIT-I

a Explain the types of Statistical methods.
b Discuss in detail the Limitations of Statistics with illustrations

CO1 L2 5M CO1 L2 5M

OR

a Write a note on Functions of Statistics.
b Explain role of Statistics in Business Management.

CO1 L2 5M CO1 L2 5M

UNIT-II

a Explain Measures of Central tendency.

CO2 L2 5M

b Two brands of Tyres are tested for their life and the following results were obtained:

CO2 L2 5M

Life (in months)	20-25 25-30		30-35	35-40	40-45	
No.of Tyers 'X'	1	22	64	10	3	
No.of Tyers 'Y'	3	21	74	1	1	

If consistency is the criterion which brand of tyre would you prefer?

OR

4 Discuss the application of dispersion measures for business decision making with suitable examples.

CO2 L2 10M

UNIT-III

a Explain Classification and tabulation of data.

CO3 L2 5M

b Draw a pie chart to represent the following data of the proposed expenditure by the Government for 2024-25.

CO3 L5 5M

Items	Agricult ure	Industry	Irrigatio n	Educatio n	Miscella neous
Expendi ture (Rs. In Lakhs)	600	400	450	300	250

OR

6 a Explain the procedure for Drafting Questionnaire.

CO3 L2 5M CO3 L6 5M

b Express the following data using Pie-Chart:

Items	Expenditure as % Total
Food	40
Clothing	15
Housing	10
Fuel	15
Education	10
Enterrtainment	5
Miscellaneous	5

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7	a	What is	Correlation	n? Proper	ties of Corr	elation (	Coefficie	nt.	<b>CO4</b>	L1	5M
	b	Calculat	e the coeff	icient of c	orrelation f	rom the	following	g data	CO4	L4	5M
		X	6	7	7	8	9	10			
		Y	18	17	16						
						0	R				
8	a	Distingu	ish betwee	n Correlat	ion and Re	gression			CO4	L2	<b>5M</b>
	b			ression eq	uation of X	on Y an	d Y on Y	I for the	CO4	L5	5M
		followin			-						
		X	12	14	16		20	32			
		Y	34	36	38		40	48			
						UNI	r-V				
9	a	Define	Hypothesi	s. Explain	the importa	ance of h	ypothes	s testing.	CO <sub>5</sub>	L2	<b>5M</b>
	b							ives a sample	CO <sub>5</sub>	<b>L6</b>	5M
					dard deviat		) of 6. To	est the			
		hypothe	esis that the	e population	on mean is						
						OI					
10	a	_	_		ved in solvi	_	-		CO5	L4	5M
	b							in commoditie		L4	5M
								the analysis o			
						differen	ce betwe	en the prices o	Ī		
		the con	modity in	three plac	Nacional Control				1		
		-	<b>A</b> 6		<b>B</b> 9			<b>C</b> 5			
			7		10			6			
		-	5		11	-		4			
		-	18		30			15			
			10			SECTIO	N - B	13	E		

## (Compulsory Question)

 $1 \times 10 = 10 \text{ Marks}$ 

## 11 Use the following data

	Sales Man						
		P	Q	R	S		
District	A	30	70	30	30		
District	В	80	50	40	70		
	C	100	60	80	80		

Use 0.05 to carry out the analysis of variance and interpret the results

\*\*\* END \*\*\*