P P SAVANI UNIVERSITY

First Semester of MBA Examination

December 2022

SLMB7220 STATISTICAL ANALYSIS

22.12.2022, Thursday   Time: 09:00 a.m. To 11:30 a.m.   Maximum Marks: 60

Instructions:
1. The question paper comprises of two sections.
2. Section I and II must be attempted in same answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION – I

			CO	BLT
Q – 1	**Define following. (Any Five)**	**[05]**	**1**	**1**
(i)	Sample			
(ii)	Primary Data			
(iii)	Median			
(iv)	Ordinal Data			
(v)	Population			
(vi)	Pie chart			
(vii)	Ogive			
Q - 2 (a)	Explain measurement of scale in detail.	[05]	1	2
Q - 2 (b)	Explain Skewness and Kurtosis in detail.	[05]	1	2

OR

Q - 2 (a) Calculate the coefficient of corelation (r) of following data.   [10]   2   5

X	4	6	7	11	14	17	21
Y	18	12	13	8	7	7	4

Q – 3 (a)	Explain hypothesis testing in detail.	[05]	1	2
Q – 3 (b)	Explain Type - I and Type – II error in detail.	[05]	1	2

OR

Q – 3 Construct the equation for regression line.   [10]   2   6

X	140	119	103	91	65	29	24
Y	25	29	46	70	88	112	128

Q – 4	**Attempt anyone.**			
(i)	Explain different types of charts and graphs.	[05]	1	2
(ii)	Explain measurement of central tendency.	[05]	1	2

SECTION – II

Q – 1	**Define following. (Any Five)**	**[05]**	**1**	**1**
(i)	Hypothesis			
(ii)	Mean			
(iii)	Interval data			

(iv)	Type – II error
(v)	Mode
(vi)	Line diagram
(vii)	Scatter diagram

| Q - 2 (a) | Differentiate between correlation and regression analysis. | [05] | 1 | 4 |
| Q - 2 (b) | What is the meaning of regression analysis? Explain it in detail. | [05] | 1 | 2 |

OR

Q - 2   Four experiments were conducted to determine the moisture content in [10]   3   4
sample of four types of wheats grown in five different blocks. Using test of
significant whether the average moisture of all the four varieties differ
significantly from the following observations.

Blocks	Varieties				
	A	B	C	D	
1	16	14	19	20	
2	20	23	11	27	
3	26	24	23	16	
4	12	29	17	21	
5	21	25	20	13	

Q - 3   Find the value of mean median and mode of following data.   [10]   2   5

C.I	0 - 10	10 – 20	20 – 30	30 – 40	40 – 50	50 - 60
Fre	4	16	20	30	17	13

OR

Q - 3   Find the value of mean and medium of following data.   [10]   2   5

Class	Frequency
0-2	1
3-5	4
6-8	7

Q - 4   **Attempt anyone**

(i)   Find the value of mean, medium and mode of following data.   [05]   2   5

5	15	20	20	15	19	23	55	45	100

(ii)   Explain coefficient of determinants.   [05]   1   2

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CO   : Course Outcome Number   BTL   : Blooms Taxonomy Level

Level of Bloom's Revised Taxonomy in Assessment

1: Remember	2: Understand	3: Apply
4: Analyze	5: Evaluate	6: Create