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22SOU309N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BA DEGREE EXAMINATION MAY 2025
(Third Semester)
Branch– **SOCIOLOGY**

SOCIAL STATISTICS- I WITH COMPUTER APPLICATIONS

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Population census is conducted through _____. (a) sample survey (b) accounting (c) investigation (d) complete enumeration	K1	CO1
	2	The specific statistical methods that can be used to summarize or describe a collection of data are called _____. (a) Descriptive statistics (b) Inferential statistics (c) Analytical statistics (d) mathematical statistics	K2	CO1
2	3	The headings of the rows of a table are called _____. (a) box head (b) stub (c) body (d) title	K1	CO2
	4	The diagrammatic representation of the cumulative frequency distribution is called _____. (a) Frequency polygon (b) Histogram (c) Frequency curve (d) Ogive curve	K2	CO2
3	5	Given the N values in a series, the geometric mean is_____. (a)the third root of the product of N values (b) the square root of the product of N values (c)the fourth root of the product of N values (d) the Nth root of the productof N values	K1	CO3
	6	The positional average of central tendency is _____. (a) Mean (b) geometric mean (c) harmonic mean (d) median	K2	CO3
4	7	_____ is the statistical tool that studies the degree of all the relationships between variables. (a) mean (b) range (c) correlation (d) mean deviation	K1	CO4
	8	In the regression equation $Y = 21 - 3X$, the slope is (a) 21 (b) -21 (c) 3 (d) -3	K2	CO4
5	9	What type of chart is useful for showing trends? (a) pie chart (b) line chart (c) Dot chart (d) column chart	K1	C05
	10	The following Excel function is used to find the mean of a number of items ____. (a) Find Average() (b) Mean () (c) Average () (d) Sum ()	K2	CO5

SECTION - B (35 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Explain the sources of secondary data.	K2/K4	CO1
		(OR)		
	11.b.	Discuss in detail the preparation of the questionnaire for the survey.		

Cont...

2	12.a.	Prepare the frequency table for the data given below: 31 13 46 31 30 45 38 42 30 9 30 30 46 36 2 41 44 18 29 63 44 30 19 5 44 15 7 25 12 30 6 22 24 37 15 6 39 32 21 20 42 31 19 14 23 26 17 53 22 21	K6	CO2
		(OR)		
	12.b.	Draw a multiple-bar diagram from the following data: Year | Sales ('000 Rs.) | Gross Profit ('000 Rs.) | Net Profit ('000 Rs.) 2005 | 120 | 40 | 20 2006 | 135 | 45 | 30 2007 | 140 | 55 | 35 2008 | 150 | 60 | 40		
3	13.a.	From the following data compute the Harmonic mean. Marks | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 Frequency | 4 | 6 | 10 | 7 | 3	K3	CO3
		(OR)		
	13.b.	Compute the coefficient of quartile deviation for the following data: C-I | 30-32 | 32-34 | 34-36 | 36-38 | 38-40 | 40-42 | 42-44 f | 12 | 18 | 16 | 14 | 12 | 8 | 6		
4	14.a.	Point out the difference between correlation and regression.	K4/K3	CO4
		(OR)		
	14.b.	From the following data obtain the two regression equations: X | 6 | 2 | 10 | 4 | 8 Y | 9 | 11 | 5 | 8 | 7		
5	15.a.	Explain in detail how to create diagrams using Excel.	K5	CO5
		(OR)		
	15.b.	Explain how to perform quartile deviation and standard deviation in Excel.		

SECTION -C (30 Marks)

Answer **ANY THREE** questions

ALL questions carry **EQUAL** Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Discuss the nature, scope and limitations of statistics.	K6	CO1
2	17	Explain the graphical representation of statistical data.	K5	CO2
3	18	Calculate the coefficient of variation and find out which is more stable. X 35 54 52 53 56 58 52 50 51 49 Y 108 107 105 105 106 107 104 103 104 101	K4	CO3
4	19	Calculate Karl Pearson's coefficient of skewness: Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 Frequency | 5 | 6 | 11 | 21 | 35 | 30 | 22 | 11	K4	CO4
5	20	How to perform correlation analysis using Excel with suitable example.	K6	CO5

Z-Z-Z END