PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BA DEGREE EXAMINATION DECEMBER 2024
(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	The data already collected by someone is called _____ data. (a) secondary data (b) primary data (c) array (d) quantitative	K1	CO1
	2	The statistics are concerned with _____. (a) an aggregate of numerical facts (b) an aggregate of disorganized facts (c) an aggregate of qualitative facts (d) an aggregate of heterogeneous facts	K2	CO1
2	3	The data can be classified according to place is called _____. (a) geographical classification (b) qualitative classification (c) chronological classification (d) quantitative classification	K1	CO2
	4	Histogram can be only drawn for_____. (a) discrete frequency distribution (b) continuous frequency distribution (c) cumulative frequency distribution (d) relative frequency distribution	K2	CO2
3	5	If mean is 10 and standard deviation is 2, then coefficient of variation is (a) 22 (b) 20 (c) 19 (d)) 0.2	K1	CO3
	6	In a distribution of 10, 20,30,40,50, the $\bar{x}$ is 30, the sum of deviations from $\bar{x}$ is ____. (a) 60 (b)30 (c) 0 (d) 15	K2	CO3
4	7	The correlation coefficient describes _____. (a) Only magnitude (b) Both magnitude and direction (c) Only direction (d) neither magnitude nor direction	K1	CO4
	8	A process by which we estimate the value of the dependent variable based on one or more independent variables is called _____. (a) Correlation (b) Residual (c) Regression (d) Slope	K2	CO4
5	9	What is the default file name of a Microsoft Excel file? (a) Workbook.xlsx (b) Worksheet1.xlsx (c) Worksheet.xlsx (d) Workbook1.xlsx	K1	CO5
	10	What chart is useful for comparing parts of a whole? (a) Dot chart (b) line chart (c) Column chart (d) Pie chart	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.	Discuss the nature and scope of statistics.	K6	CO1
		(OR)		

Cont...

	11.b.	Write short notes on limitations of statistics.		
2	12.a.	Describe the various parts of the Table.	K4/K6	CO2
		(OR)		
	12.b.	Draw a histogram and frequency polygon for the following data: Size: 40 – 50 | 50 – 60 | 60 - 70 | 70 – 80 | 80 – 90 frequency: 4 | 6 | 14 | 8 | 5		
3	13.a.	From the following data compute the Geometric mean: Marks: 4-8 | 8-12 | 12-16 | 16-20 | 20-24 | 24-28 | 28-32 | 32-36 | 36-40 Frequency: 6 | 10 | 18 | 30 | 15 | 12 | 10 | 6 | 2	K4	CO3
		(OR)		
	13.b.	Calculate mean deviation about median from the following data: Class: 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 Frequency: 5 | 8 | 12 | 15 | 20 | 14 | 12 | 6		
4	14.a.	Discuss the various types of correlation.	K6/K4	CO4
		(OR)		
	14.b.	The marks obtained by the students in physics and mathematics are as follows: Find which student is more consistent is Scoring marks. Marks in Physics: 35 | 23 | 47 | 17 | 10 | 43 | 9 | 6 | 28 Marks in Maths: 30 | 33 | 45 | 23 | 8 | 49 | 12 | 4 | 31		
5	15.a.	Explain how to perform descriptive statistics using Excel.	K5	CO5
		(OR)		
	15.b.	Discuss in detail how to create charts using chart elements 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	Elaborate on methods of collecting primary data.	K6	CO1
2	17	Draw less than and more than ogives curve from the data given below: Class: 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 Frequency: 6 | 8 | 12 | 18 | 25 | 16 | 8 | 5 | 2	K4	CO2
3	18	Calculate mean, median and mode from the following frequency distribution: Variable: 10-13 | 13-16 | 16-19 | 19-22 | 22-25 | 25-28 | 28-31 | 31-34 | 34-37 | 37-40 Frequency: 8 | 15 | 27 | 51 | 75 | 54 | 36 | 18 | 9 | 7	K3	CO3
4	19	Calculate Bowley's coefficient of skewness for the data given below: C.I: 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 f: 12 | 16 | 26 | 38 | 22 | 15 | 7 | 4	K5	CO4
5	20	Explain how to perform linear regression analysis using Excel with a suitable example.	K6	CO5

Z-Z-Z END