22PSU207N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Second Semester)

Branch - **PSYCHOLOGY**

PSYCHOLOGICAL STATISTICS – I

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 × 1 = 10)

Question No.	Question	K Level	CO
1	Which of the following is an example of a nominal scale of measurement? a) Height in centimeters b) Temperature in Celsius c) Types of therapy used d) Intelligence quotient (IQ)	K1	CO2
2	Which type of graph is best used to display cumulative frequency data? a) Histogram b) Frequency Polygon c) Pie Chart d) Ogive	K2	CO2
3	The main purpose of calculating an average is to: a) Show the maximum value b) Show the minimum value c) Represent the data by a single value d) Compare two variables	K1	CO2
4	When a distribution has extreme values, the best measure of average to use is: a) Mean b) Median c) Mode d) Combined Mean	K2	CO3
5	The purpose of measuring dispersion is to find: a) The central value of data b) The relationship between variables c) The degree of variation or spread in data d) The average of data	K1	CO2
6	Standard deviation is denoted by: a) M b) Q c) σ (sigma) d) D	K2	CO2
7	The total probability of all possible outcomes of an experiment is: a) 0 b) 1 c) Between 0 and 1 d) Infinite	K1	CO2
8	The shape of a normal curve is: a) Skewed to the right b) Skewed to the left c) Symmetrical and bell-shaped d) Uniform and rectangular	K2	CO2
9	SPSS stands for: a) Statistical Package for Social Studies b) Statistical Package for the Social Sciences c) Standard Program for Statistical Software d) Statistical Process for Simple Systems	K1	CO1
10	Which chart is best suited to show percentage distribution? a) Histogram b) Bar Chart c) Pie Chart d) Line Graph	K2	CO2

Cont...

SECTION - B (35 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 × 7 = 35)

Question No.	Question	K Level	CO
11.a.	Define statistics and explain its need and importance in psychology.	K2	CO3
	(OR)		
11.b.	Explain the limitations of statistics in psychological research?		
12.a.	Illustrate the concept average in statistics and explain the requisites of a good average.	K3	CO3
	(OR)		
12.b.	Demonstrate the merits and demerits of arithmetic mean..		
13.a.	Analyse the concept dispersion and explain its importance.	K4	CO3
	(OR)		
13.b.	Distinguish between Mean Deviation and Standard Deviation.		
14.a.	Demonstrate probability with and example and state its axioms.	K3	CO3
	(OR)		
14.b.	Explain the concept Z-score with an example? How is it calculated?		
15.a.	Demonstrate how do you install and start SPSS?	K3	CO3
	(OR)		
15.b.	Illustrate the steps to create and save a data file in SPSS?		

SECTION -C (30 Marks)

Answer **ANY THREE** questions

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

Question No.	Question	K Level	CO
16	Analyse the concept of organizing data. Describe the methods used—Statistical tables, Rank Order, and Frequency Distribution.	K4	CO2
17	Differentiate the concepts Mean, Median, and Mode with merits and demerits.	K4	CO3
18	Analyse the different measures of dispersion with merits and demerits.	K4	CO3
19	Justify the properties and assumptions of a normal distribution.	K5	CO3
20	Validate Shapiro–Wilk test for normality with appropriate example.	K6	CO3

Z-Z-Z END