

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BVoc DEGREE EXAMINATION MAY 2025
(First Semester)**

**Branch – BANKING, STOCK & INSURANCE
BUSINESS STATISTICS**

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	Which of the following is a key step in preparing a questionnaire? a) Collecting secondary data b) determining the objective of the questionnaire c) Designing pie charts d) drawing frequency curves	K1	CO1
	2	How would you classify a histogram in terms of the type of data it represents? a) A histogram represents continuous data grouped into intervals. b) A histogram shows data in the form of cumulative frequencies. c) A histogram is used to represent categorical data. d) A histogram is used to represent qualitative data.	K2	CO1
2	3	Which of the following is a measure of central tendency? a) Range b) Mean c) Standard deviation d) Quartile deviation	K1	CO2
	4	Infer the best measure of dispersion for data with extremes. a) Range b) Quartile deviation c) Standard deviation d) Median deviation	K2	CO2
3	5	What does correlation measure? a) The difference between two variables b) The relationship between two variables c) The average of two variables d) The sum of two variables	K1	CO3
	6	When to use Pearson's correlation over Spearman's rank correlation. a) For nominal data b) For ranked data c) For linear relationships with interval data d) For non-linear relationships with ordinal data	K2	CO3
4	7	Which method is commonly used to construct price index numbers? a) Chain base method b) Simple arithmetic average c) Laspeyres and Paasche methods d) Frequency distribution method	K1	CO4
	8	Choose the correct method to smooth out fluctuations in time series data: a) Moving averages b) Histogram c) Pie chart d) Frequency table	K2	CO4
5	9	How to access the Descriptive Statistics tool in Excel? a) Insert tab b) Data tab c) Formulas tab d) Developer tab	K1	CO5
	10	Classify STDEV and STDEVP based on their use. a) Both for population b) Both for sample c) STDEV for sample, STDEVP for population d) STDEV for population, STDEVP for sample	K2	CO5

Cont...

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 application of statistics in business decision-making.	K2	CO1
	(OR)			
	11.b.	Compare and contrast primary and secondary data in terms of their collection methods, costs, and use in business research.		
2	12.a.	Identify and solve a problem involving measures of dispersion	K3	CO2
	(OR)			
	12.b.	Construct a problem requiring measures of central tendency and dispersion.		
3	13.a.	Identify the properties of Spearman's rank correlation and apply it to solve a ranking problem.	K3	CO3
	(OR)			
	13.b.	Develop a simple model using regression to predict one variable based on another.		
4	14.a.	Distinguish moving averages and least squares methods in trend analysis.	K4	CO4
	(OR)			
	14.b.	Construct a cost of living index using the weighted aggregate method.		
5	15.a.	Identify the difference between STDEV and STDEVP in Excel.	K4	CO5
	(OR)			
	15.b.	Explain how to use the SLOPE and INTERCEPT functions in Excel to build a regression equation.		

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	Examine the process of classifying and tabulating data.	K4	CO1
2	17	Distinguish between Quartile Deviation and Standard Deviation.	K4	CO2
3	18	Simplify the process of calculating Pearson's correlation coefficient and Spearman's rank correlation.	K4	CO3
4	19	List the main assumptions when using the least squares method.	K4	CO4
5	20	Compare the functions VAR and VARP in Excel.	K4	CO5

Z-Z-Z

END