

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION DECEMBER 2024
(First Semester)

Branch – BANKING STOCK AND 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 types of data is collected through surveys and experiments? a) Secondary data b) Tertiary data c) Primary data d) Metadata	K1	CO1
	2	Which graph infers distribution of continuous data? a) Bar diagram b) Pie chart c) Histogram d) Ogive	K2	CO1
2	3	What is a relative measure of dispersion? a) Mean b) Range c) Coefficient of variation d) Median	K1	CO2
	4	Which measure of dispersion shows the extent to which data points deviate from the mean? a) Range b) Quartile deviation c) Standard deviation d) Mode	K2	CO2
3	5	Who developed the concept of correlation? a) Karl Pearson b) Ronald Fisher c) Spearman d) John Tukey	K1	CO3
	6	Infer what a Pearson's correlation coefficient of +1 indicates. a) No correlation b) Perfect negative correlation c) Perfect positive correlation d) Strong negative correlation	K2	CO3
4	7	which characteristic belongs to index numbers: a) Measures absolute change b) Shows relative change c) Shows exact values d) Involves one observation	K1	CO4
	8	Infer what a positive slope in the least squares method indicates. a) Declining trend b) Increasing trend c) Random trend d) Cyclical trend	K2	CO4
5	9	What does the Excel function 'VARP' calculate? a) Sample variance b) Population variance c) Population standard deviation d) Sample standard deviation	K1	CO5
	10	What is the estimate of the TREND function which is used to extend a time series? a) Future values of a linear trend b) Moving averages c) Correlation between variables d) Slope of the regression line	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 process of constructing a bar diagram and a pie diagram to represent business data.	K2	CO1
		(OR)		
	11.b.	Classify the differences between primary and secondary data in terms of data collection methods.		
2	12.a.	List out the merits and demerits of measures of central tendency.	K4	CO2
		(OR)		
	12.b.	List out the merits and demerits of measures of dispersion.		
3	13.a.	Apply Karl Pearson's coefficient to measure the strength of correlation between two variables.	K3	CO3
		(OR)		
	13.b.	Plan how to construct a scatter diagram for two variables. Use the diagram to identify the type of correlation.		
4	14.a.	Identify and illustrate the key characteristics of index numbers with an example.	K3	CO4
		(OR)		
	14.b.	Construct a time series model using the least squares method to analyze trends.		
5	15.a.	Construct a plan to calculate variance using Excel's VAR and VARP functions.	K4	CO4
		(OR)		
	15.b.	List out the steps to calculate SLOPE and INTERCEPT 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	List the different types of graphs used to represent business data.	K4	CO1
2	17	List the steps to calculate Standard Deviation. Analyse how outliers affect its value and data interpretation.	K4	CO2
3	18	Analyze the differences between Karl Pearson's coefficient of correlation and Spearman's rank correlation.	K4	CO3
4	19	Distinguish between the Laspeyre's and Paasche's index methods.	K4	CO4
5	20	List the steps to calculate AVERAGE, MEDIAN, and MODE in Excel.	K4	CO5

Z-Z-Z

END