PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BVoc DEGREE EXAMINATION DECEMBER 2023

(First Semester)

Branch - BANKING, STOCK & INSURANCE

BUSINESS STATISTICS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EOUAL** marks $(10 \times 1 = 10)$

Module No.	Question No.	ALL questions carry EQUAL marks (10 × 1 = Question	K Level	со
1	1	Choice of a particular chart depends on: a) The purpose of study b) The nature of data c) The type of audience d) All the above	K1	COI
	2	Which of the following is one-dimensional diagram? a) Bar diagram b) pie chart c) cylimder d) a graph	K2	COI
2	3	The algebraic sum of deviations of a set of n values from their arithmetic mean is a) n b) 0 c) 1 d) None of these	K1	CO2
	4	10 is the mean of a set of 7 observations and 5 is the mean of a set of 3 observations. The mean of a combined set is given by a) 15 b) 10 c) 8.5 d) 7.5	K2	CO
3	5	The coefficient of correlation will have positive sign when: a) X is increasing and Y is decreasing b) bothX and Y are increasing c) X is decreasing and Y is increasing d) there is no change in X and Y	K1	CO
	6	The coefficient of correlation: a) can take any value between -1 and +1 b) is always less than -1 c) is always more than +1 d) cannot be zero	K2	СО
4	7	Graphical method is normally used to measure a) Seasonal variation b) Trend c) Cyclic variation d) None of these	K1	СО
	8	The formula (∑ wjpij/∑ w jpoj)×100 is for calculating a) Quantity index number b) price index number c) Industrial production index number d) None of these	K2	СО
5	9	To move to the previous worksheet press a) Ctrl+PgUp b) Ctrl+PgDn c) Shift+Tab d) Ctrl+Tab	K1	СО
	10	Which types of charts can excel produce? a) Line graphs and pie charts only b) Only line graphs c) Bar charts, line graphs and pie charts d) Bar charts and line graphs only	K2	СО

Cont...

22BSB105N/ 22BSB105 Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks $(5 \times 7 = 35)$

3.7 - 3 1 -	ADD questions carry EQUAD Marks (3 × 7 33)							
Module No.	Question No.	Question	K Level	CO				
1	Draw a Pie diagram for the following data.		-]				
	11.a.	Item: Food Clothing Rent Other Expenses:						
		Value: 240 160 80 200	K2	CO1				
	11.b.	(OR) Explain the different types of graphs.						
		Apply median & mode for the following data.		CO2				
2	12.a.	Marks: 0-19 20-39 40-59 60-79 80-99						
	12.0.	No. of students: 5 20 35 20 12						
		(OR)	K3					
	12.b.	Apply quartile deviation for the following data. Class: 0-10 10-20 20-30 30-40 40-50 50-60 60-70						
	12.0.	Frequency: 5 12 21 37 23 18 1						
	13.a.	Discuss about scatter diagram.						
		K3	CO3					
3								
	13.b.	Apply the rank correlation co.efficient for the following data X: 21 36 42 37 25						
		Y: 47 40 37 42 43						
	14.a.	Explain the uses of Time series.						
4]						
		Determine the 4 yearly moving averages trend from the	K3	CO4				
	14.b.	following data.						
		Year: 1995 96 97 98 99 2000 01 02 03 04 05						
		Value: 41 61 55 48 53 67 62 60 67 73 78						
5	15.a.	Explain the procedure of doing descriptive statistics in Excel?						
	(OR)			CO5				
	15.b.	Explain the various statistical methods used in Excel?		1				

SECTION -C (30 Marks) Answer ANY THREE questions

ALL questions carry **EOUAL** Marks $(3 \times 10 = 30)$

		ALL questions carry EQUAL Marks (3 × 10 - 30)	7	
Module No.	Question No.	Question	K Level	СО
1	16	Construct the different types of classification of data with an example.	CO1	К3
2	17	Apply Mean, Median and Mode from the following data: Class: 11-20 21-30 31-40 41-50 51-60 61-70 71-80 Frequency: 42 38 120 84 48 36 31	CO2	K3
3	18	Analyze the co.efficient of correlation between X and Y from the following data. X: 10 12 18 8 13 20 22 15 5 17 Y: 88 90 94 86 87 92 96 94 88 85	CO3	K4
4	19	The following figures relate to the prices and quantities of certain commodities. Construct Fisher's Ideal Index of Price. Also show that it satisfies Time reversal test and Factor reversal test. 2012 2013 Commodities Price Quantity Price Quantity A 16 40 30 40 B 20 60 25 50 C 8 120 15 120 D 4 100 5 100 E 12 50 10 60	CO4	K4
5	20	Explain the steps involved in computing correlation of Regression using Data Analysis todpak in MS Excel.	CO5	K2

Z-Z-Z END