



Even Semester End Term Examination, May / June 2026

Date: 19/05/2026

Time: 09.30 AM - 12.30 PM

Course Code: CBS1017

Course Name: Business Statistics

Semester: Second Semester

Max. Marks: 100

Weightage: 50%

CO - Levels	CO1	CO2	CO3	CO4
Marks	130	178	122	110

Part A: Answer Following Questions. 20 M

Qn.No	Questions	M	CO	BT
1	Define Statistics.	2	CO1	BT1
2	List any two methods of collecting primary data.	2	CO1	BT1
3	Describe a histogram.	2	CO1	BT2
4	Define Arithmetic Mean.	2	CO2	BT1
5	Define the Range in measures of dispersion.	2	CO2	BT1
6	Name any two methods of correlation.	2	CO3	BT1
7	Outline the meaning of regression.	2	CO3	BT1
8	outline the formula for Spearman's Rank Correlation.	2	CO3	BT1
9	List any two uses of index numbers.	2	CO4	BT1
10	Name any two methods of constructing index numbers.	2	CO4	BT1

Part B: Answer Any 1 Following Questions. 16 M

Qn.No	Questions	M	CO	BT										
11.a	Explain the methods of collecting primary data.	6	CO1	BT2										
11.b	<table border="1"> <tr> <td>Product</td><td>A</td><td>B</td><td>C</td><td>D</td></tr> <tr> <td>Sales (Units)</td><td>50</td><td>70</td><td>40</td><td>90</td></tr> </table> Construct a Bar Diagram for the above mentioned data and Provide the interpretation for the same.	Product	A	B	C	D	Sales (Units)	50	70	40	90	10	CO1	BT3
Product	A	B	C	D										
Sales (Units)	50	70	40	90										

12.a	Explain the types of graphical presentation of data using diagrams and graphs.					6	CO1	BT2										
12.b	<table><tr><td>Category</td><td>Food</td><td>Rent</td><td>Education</td><td>Others</td></tr><tr><td>Expenditure</td><td>400</td><td>300</td><td>200</td><td>100</td></tr></table>					Category	Food	Rent	Education	Others	Expenditure	400	300	200	100	10	CO1	BT3
	Category	Food	Rent	Education	Others													
	Expenditure	400	300	200	100													
Construct a Pie Diagram from the following data with interpretation.																		

Part C: Answer Any 1 Following Questions. 16 M									
Qn.No	Questions					M	CO	BT	
13.a	X	10	20	30	40	6	CO2	BT3	
	F	2	3	5	4				
	Calculate Arithmetic Mean with Interpretation.								
13.b	X	5	10	20	25	50	10	CO2	BT3
	F	2	3	4	3	2			
	Calculate Harmonic Mean and give interpretation.								
14.a	X	10	20	30	40	6	CO2	BT2	
	F	2	3	3	2				
	Calculate Mean Deviation with Interpretation.								
14.b	Class Intervals	0 - 10	10 - 20	20 - 30	30 - 40	10	CO2	BT3	
	Frequency	4	6	8	2				
	Calcualte the Mean and provide interpretation								

Part D: Answer Any 1 Following Questions. 16 M								
Qn.No	Questions					M	CO	BT
15.a	Calculate the Coefficient of Variation for the data: 10, 20, 30, 40, 50					6	CO2	BT3
15.b	Class Intervals	0 - 10	10 - 20	20 - 30	30 - 40	10	CO2	BT3
	Frequency	4	7	12	6			
	Calculate Mode with Interpretation.							
16.a	Calculate Karl Pearson's coefficient of skewness for the data and give interpretation. 5, 8, 10, 12, 15					6	CO2	BT3
16.b	Class Intervals	0 - 10	10 - 20	20 - 30	30 - 40	10	CO2	BT3
	Frequency	5	9	15	11			

Calculate the median for the above data and provide interpretation.

Part E: Answer Any 1 Following Questions. 16 M

Qn.No	Questions						M	CO	BT
17.a	X	1	2	3	4	5	6	CO3	BT3
	Y	2	4	5	4	5			
	Calculate Karl Pearson's Coefficient of Correlation								
17.b	X	12	15	18	20	22	10	CO3	BT3
	Y	30	25	20	18	15			
	Calculate Spearman's Rank Correlation Coefficient								
18.a	X	1	2	3	4	5	6	CO3	BT3
	Y	2	3	5	7	8			
	Calculate Regression Equation of Y on X								
18.b	From the following data, find the regression equation of Y on X and estimate Y when X = 6 :						10	CO3	BT3
	X	1	2	3	4	5			
	Y	2	4	5	4	6			

Part F: Answer Any 1 Following Questions. 16 M

Qn.No	Questions				M	CO	BT	
19.a	Commodity		Price - 2025	Price - 2026	6	CO4	BT3	
	A		10	12				
	B		20	25				
	C		30	35				
	Calculate Simple Aggregate Price Index.							
19.b	Commodity		Price - 2025	Price - 2026	Quantity - 2025	10	CO4	BT3
	A		10	12	5			
	B		20	25	4			
	C		30	36	3			
	Calculate Laspeyres Price Index.							
20.a	Calculate Consumer Price Index.				6	CO4	BT3	
	Commodity		Price - 2025	Price - 2026				Weight
	Food		10	15				5
	3Clothing		20	25				3
	Rent		40	50				2

20.b	Commodity	Price - 2025	Price - 2026	Quantity - 2026	10	CO4	BT3
	A	10	12	6			
	B	20	25	5			
	C	30	36	4			
	Calculate Paasche Price Index.						