

QP CODE: D2BIB2502	(Pages: 2)	Reg. No :												
		Name :												
SECOND SEMESTER FYUGP EXAMINATION, APRIL 2026														
(Regular/Improvement/Supplementary)														
Discipline Specific Core (DSC) Courses - Major														
BIB2CJ102 : BUSINESS STATISTICS														
(Credits: 4)														
Time: 2 Hours	Maximum Marks: 70													
Section A. Answer the following questions. Each carries 3 marks (Ceiling: 24 marks)														
1. Define skewness of a distribution.	BL1	CO1												
2. Define standard deviation. State any two uses of standard deviation.	BL1	CO1												
3. Find quartile deviation for the following data. 20, 15, 22, 34, 15, 16, 4, 10, 12, 49, 28, and 25.	BL2	CO1												
4. The second, third and fourth central moments of a distribution are 2.5, 0.7 and 18.75. Find the measures of kurtosis.	BL2	CO1												
5. Define mode. State any two uses of mode.	BL1	CO1												
6. What do you mean by cyclical fluctuations in time series?	BL1	CO2												
7. What are the uses of an index number?	BL1	CO2												
8. Give any three properties of regression coefficients.	BL1	CO3												
9. State multiplication theorem of probability.	BL1	CO4												
10. Define the following with example (i) Empty set (ii) Finite set (iii) Infinite set (iv) Singleton set	BL1	CO4												
Section B. Answer the following questions. Each carries 6 marks (Ceiling: 36 Marks)														
11. Calculate the mean of the following data.	BL2	CO1												
<table border="1" style="margin-left: 20px; border-collapse: collapse; text-align: center;"> <tr> <td>Class</td> <td>0 - 4</td> <td>4 - 8</td> <td>8 - 12</td> <td>12 - 16</td> </tr> <tr> <td>Frequency</td> <td>1</td> <td>4</td> <td>3</td> <td>2</td> </tr> </table>	Class	0 - 4	4 - 8	8 - 12	12 - 16	Frequency	1	4	3	2				
Class	0 - 4	4 - 8	8 - 12	12 - 16										
Frequency	1	4	3	2										
12. Calculate median for the following data:	BL2	CO1												
<table border="1" style="margin-left: 20px; border-collapse: collapse; text-align: center;"> <tr> <td>Class</td> <td>0 - 5</td> <td>5 - 10</td> <td>10 - 15</td> <td>15 - 20</td> <td>20 - 25</td> </tr> <tr> <td>f</td> <td>5</td> <td>10</td> <td>15</td> <td>12</td> <td>8</td> </tr> </table>	Class	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	f	5	10	15	12	8		
Class	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25									
f	5	10	15	12	8									
(PTO)														

13.	Calculate Bowley's coefficient of skewness from the following data.							BL2	CO1	
	Size	4	6	10	12	18	20	25		
	f	3	7	10	15	8	6	4		
14.	Calculate mean deviation about median for the following data.							BL2	CO1	
	Classes	0 - 6	6 - 12	12 - 18	18 - 24	24 - 30				
	f	5	12	30	10	3				
15.	What is meant by trend? How would you fit a logarithmic trend by the method of least squares?							BL1	CO2	
16.	Calculate Laspeyre's and Paasche's index number of prices for the following data :							BL2	CO2	
	Commodity	2013		2014						
		Price (Rs)	Quantity (Kg)	Price (Rs)	Quantity (Kg)					
	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					
17.	Eight students has obtained the following marks in economics and accountancy. Calculate Rank correlation coefficient.							BL2	CO3	
	Economics	50	40	60	40	30	20	40	70	
	Accountancy	25	39	38	22	50	70	30	90	
18.	Three urns are given each containing red and white balls as indicated. Urn I : 6 red , 4 white Urn II : 2 red , 6 white Urn III : 1 red , 8 white An urn is chosen at random and a ball is drawn from the urn. The ball is red. Find the probability that the urn chosen was Urn II.							BL3	CO4	
Section C. Answer any one question. Each carries 10 marks (1 x 10 = 10 Marks)										
19.	The runs scored by two batsmen in 7 innings are given below. Find who is more consistent batsman?							BL3	CO1	
	A	55	50	45	35	70	60	40		
	B	60	70	10	20	65	35	28		
20.	Calculate the correlation coefficient for the following data. Also interpret the data.							BL2	CO3	
	X :	10	20	30	40	50	60	70		
	Y :	30	50	60	80	10	11	13		
CO : Course Outcome BL : Bloom's Taxonomy Levels (1 – Remember, 2 – Understand, 3 – Apply, 4 – Analyse, 5 – Evaluate, 6 – Create)										