Enrollment No./Seat No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
Bachelor of Vocation - SEMESTER - II EXAMINATION - WINTER 2025

Subject Code: BV02000021   **Date: 29-11-2025**

Subject Name: Business Statistics

Time: 02:30 PM to 04:30 PM   **Total Marks: 50**

Instructions
1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

		Marks
Q.1 (a)	Following are the daily wages in Rupees of a sample of 9 workers: 58, 62, 48, 53, 70, 52, 60, 84, and 75. Compute the mean wage.	**05**
(b)	The weight of 50 students in pounds are given below : 82, 95, 120, 174, 179, 176, 159, 91, 85, 175 88, 160, 97, 133, 159, 176, 151, 115, 105, 172 170, 128, 112, 101, 123, 117, 93, 117, 99, 90 113, 119, 129, 134, 178, 105, 147, 107, 155, 157 98, 117, 95, 135, 175, 97, 160, 168, 144, 175 If the data are arranged in the form of a frequency distribution with class intervals as 81-100, 101-120, 121-140, 141-160 and 161-180, then what will be the frequencies for these 5 class intervals?	**05**
Q.2 (a)	A review of the first 30 pages of a statistics book reveals the following printing mistakes: 0, 1, 3, 3, 2, 5, 6, 0, 1, 0, 4, 1, 1, 0, 2, 3, 2, 5, 0, 4, 2, 3, 2, 2, 3, 3, 4, 6, 1, 4 . Make a frequency distribution of printing mistakes.	**05**
(b)	Write a short note on Primary Data.	**05**

OR

(b)	Write a short note on Secondary Data.	**05**
Q.3 (a)	Following are the wages of the labourers: Rs. 82, Rs. 56, Rs. 90, Rs. 50, Rs. 120, Rs. 75, Rs. 75, Rs. 80, Rs. 130, Rs. 65. Find Q1 and D6.	**05**
(b)	What is the mean deviation about mean for the following numbers? 5, 8, 10, 10, 12, 9.	**05**

(a) Find the standard deviation and the coefficient of variation for the following numbers:
5, 8, 9, 2, 6   **05**

(b) Find the SD of the following distribution: **05**

Weight (kgs.)   : 50-52 52-54 54-56 56-58 58-60
No. of Students :   17   35   28   15   5

Q.4 (a) Marks of 8 students in Mathematics and statistics are given as: **05**

Mathematics: 80 75 76 69 70 85 72 68
Statistics: 85 65 72 68 67 88 80 70

Find the regression lines.
When marks of a student in Mathematics are 90, what are his most likely marks in statistics?

(b) The following data relate to the mean and SD of the prices of two shares in a stock Exchange: **05**

Share	Mean (in Rs.)	SD (in Rs.)
Company A	44	5.60
Company B	58	6.30

Coefficient of correlation between the share prices = 0.48

Find the most likely price of share A corresponding to a price of Rs. 60 of share B and also the most likely price of share B for a price of Rs. 50 of share A.

OR

(a) Explain types of correlation.   **05**

(b) Write a Short Note on Regression Analysis.   **05**

Q.5 (a) Explain types of Index Numbers.   **05**

(b) Explain issues involved in Index Numbers.   **05**

OR

(a) Explain Time Reversal Test.   **05**

(b) Explain Factor Reversal Test   **05**

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