

GUJARAT TECHNOLOGICAL UNIVERSITY**MBA Integrated - SEMESTER– II EXAMINATION – WINTER 2021****Subject Code: 2527102****Date: 07/01/2022****Subject Name: Business Statistics****Time: 02:30 PM to 05:30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Explain different types of Graphs and Charts. **07**
(b) Explain level of Data Measurement. **07**

- Q.2 (a)** Find : Mean , Standard Deviation, Variance , Coefficient of variation **07**

Class	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50
Frequency	6	22	35	29	16	8	4	2

- (b)** Find : Mean , Median , Mode , Standard Deviation, Variance , Coefficient of variation **07**
 10 , 15 , 12 , 15 , 17 , 20 , 22 , 25

OR

- (b)** Calculate missing frequencies if Mean is 28 **07**

C.I.	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 - 60
Fre	12	18	27	-	17	6

- Q.3 (a)** Explain Kurtosis and Skewness in detail **07**
(b) Range, Coefficient of Range, Q2 , Inter Quartile Range , Coefficient of QD. **07**
 5 , 9 , 8 , 12 , 17 , 14 , 19 , 15 , 20 , 23

OR

- Q.3 (a)** Explain Important and limitation of Statistics. **07**
(b) Calculate Karl Pearson's co-efficient of correlation. **07**

X	4	6	7	11	14	17	21
Y	18	12	13	8	7	7	4

- Q.4 (a)** Write a short note on Spearman Rank Correlation. **07**
(b) Calculate Regression Equation. **07**

X	5	7	5	12	8	3
Y	8	9	10	15	10	6

OR

- Q.4 (a)** Explain Baye's theorem. **07**
(b) Calculate Spearman's Rank Correlation **07**

x	77.91	82.00	89.20	74.37	66.42	80.10	69.78	72.09	92.14	96.31
y	65.46	64.18	65.66	59.23	65.68	69.55	67.81	67.39	82.06	84.40

- Q.5 (a)** Write a short note on Regression Analysis. **07**
(b) A certain firm has Plants A ,B and C producing 30% , 20% and 50% respectively of total output. The Probability of Non-Defective product from plants are 0.80 , 0.85 and 0.90 respectively. The products from these plants are mixed together and dispatched to customers. A defective product was found ,what is the Probability that it comes from Plant A , Plant B and Plant C ? **07**

OR

- Q.5 (a)** Explain Structure of Probability. **07**
(b) Explain permutation and combination with suitable example. **07**
