

GUJARAT TECHNOLOGICAL UNIVERSITY**B.VOC- SEMESTER-II EXAMINATION – SUMMER 2022****Subject Code:1122201****Date:26-07-2022****Subject Name:Business Statistics****Time:10:30 AM TO 12:30 PM****Total Marks:50****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) Explain different types of Graphs and Charts. **05**
 (b) Discuss the importance and limitations of Statistics. **05**

- Q.2** (a) Draw Histogram and frequency polygon on the same graph paper for the following frequency distribution. **05**

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Fi	6	11	18	23	14	9	4

- (b) Find Mean, Median and Mode for the following data. **05**
 9, 12, 5, 10, 11, 20, 18, 14, 12

OR

- (b) Find Q3, D8, and P72 for the data given below. **05**
 11, 18, 15, 9, 20, 14, 21, 6, 16, 12

- Q.3** (a) Discuss the uses and characteristics of a good average. **05**
 (b) Calculate Mean, Median and Mode for the given frequency distribution. **05**

Class	0-5	5-10	10-15	15-20	20-25	25-30	30-35
Frequency	5	9	14	21	16	12	8

OR

- Q.3** (a) Find s.d., variance and CV for the following data. **05**
 8, 5, 12, 21, 18, 9, 10, 14, 6, 20
 (b) Write a note on Types of correlation. **05**

- Q.4** (a) Find rank correlation coefficient. **05**

X	10	5	12	20	21	9	7
Y	21	11	12	20	6	10	15

- (b) Find equation of regression line. **05**

X	12	4	11	14	10	9	6
Y	9	10	8	16	8	5	9

OR

- Q.4** (a) Write a note on Scatter Diagram Method. **05**
 (b) Calculate Karl Pearson's correlation coefficient. **05**

X	9	15	8	6	12	10	8
Y	11	10	9	10	9	11	12

- Q.5** (a) Discuss: Components of Time Series. **05**
 (b) Find Trend values by Three yearly moving averages. **05**

Year	2011	2012	2013	2014	2015	2016	2017	2018
Y	45	48	54	47	51	58	49	44

OR

- Q.5** (a) Discuss: Advantages and Limitations of Sampling. **05**
 (b) Write a note on Simple Random Sampling. **05**
