# ST. JOSEPH'S UNIVERSITY, BENGALURU -27 <br> B.Sc. (STATISTICS) - I SEMESTER <br> SEMESTER EXAMINATION: OCTOBER 2022 

(Examination conducted in December 2022)
ST 121- Descriptive Statistics
Time: 2 Hours
Max Marks: 50
This paper contains ONE printed page and ONE part.
Answer any five from the following

1. A) Explain the difference between qualitative and quantitative data with example.
B) Explain the difference types of scales of measurements with appropriate examples. (6)
2. A) Explain the construction of frequency table.
B) What are stem and leaf plots? explain the steps involved in constructing the same with suitable example.
3. A) Define correlation. Derive Karl Pearson's correlation coefficient. List out all the properties of correlation coefficient and prove any one property.
B) Distinguish between Regression and Correlation.
4. A) Describe mode for a grouped distribution and state one merit and demerit of the same.
B) What is Spearman's rank correlation? What should be done when two or more observations have equal values? explain in detail.
5. A) State all the properties of arithmetic mean and prove any 2 properties.
B) Define median. How do you find median graphically? Explain.
6. A) Describe Geometric and harmonic means. And list out one merit and demerit of the same.
B) What are the requisites for an ideal measure of Central tendency.
7. A) Explain the concept of mean vector and dispersion matrix.
B) What is association between attributes? Explain 3 of its types.
