Date: 13-12-2022 ( 1pm )

Registration number:



**ST. JOSEPH’S UNIVERSITY, BENGALURU-27**

**M.Sc. BOTANY - I SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2022**

**(Examination conducted in December-2022)**

 **BO 7421 – BIOINFORMATICS AND BIOSTATISTICS**

**Time- 2 hrs Max Marks-50**

**This question paper contains ONE printed page and three parts**

**Part A**

**Part-A: Answer any FIVE questions in one or two sentences 2X 05=10**

1. Descriptive statistics

2. Differentiate between histogram and bar diagram

3. What is the difference between sample and population?

4. Stem & Leaf Chart

5. Any two programming languages

6. Proteomics

7. Array express

**Part-B: Write short notes on any 5 questions 6X 5=30**

 08. Methods of Random sampling

 09. Skewness and Kurtosis

 10. Sampling errors

 11. Homology modelling

 12. Sequence databases (any two)

 13. Phylogenetic tree

 14. Computer networking and its types

**Part-C: Explain any 2 questions in detail 10X1=10**

20. Computer Aided Drug Designing

 21. Calculate mean, median and mode for the data given below in the table and represent with a bar diagram showing skewness.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Below 10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | Above 90  |
| 23 | 45 | 55 | 67 | 89 | 76 | 55 | 44 | 32 | 21 |