K24N 0167

Reg. No. : ....

Name : ....

Second Semester M.Sc. Degree (CBSS – Regular/Supplementary/ Improvement) Examination, April 2024
(2022 Admission Onwards)
STATISTICS WITH DATA ANALYTICS
MST2C08 : Statistics Using Python Programming

Time : 3 Hours

Max. Marks : 80

PART – A

Answer **all** questions. **Each** carries **2** marks.

1. What is the utility of "sep" argument in print() function ?

2. Give a simple example which illustrates the use of float() function.

3. Distinguish between in-built function and user-defined function.

4. Give an example of function without arguments.

5. What is the use of append function used in the list ?

6. How can we add rows to a dataframe ?

7. Name the libraries used for data visualisation in python.

8. What are the uses of plot() function ?
(8×2=16)

PART – B

Answer **any four** questions. **Each** carries **4** marks.

9. Explain the utility of nested "if" statement with the help of an example.

10. What are the different types of errors in Python ? Explain.

11. What are Python modules ? What are the some commonly used built-in modules in Python ?

12. Illustrate the utility of relational operators in filtering data from a dataframe.

13. Explain various methods to import data from files of different types of softwares using Pandas Library.

14. Explain the method of creating different bar charts on one image.
(4×4=16)

P.T.O.

PART – C

Answer **any four** questions. **Each** carries **12 marks.**

15. Explain various arithmetic and relational operators in python with examples.

16. a) Create a user defined function to calculate compound interest.

    b) Design a user defined function in Python to print 100 Fibonacci numbers.

17. Explain the benefits of object-oriented programming.

18. Explain the following data structures and their manipulations : (a) Tuples (b) Dictionaries.

19. Explain the methods in python to handle missing observations in a data. Illustrate with an example.

20. Write syntax to create the following considering a data of your choice :
    a) scatter plot
    b) histogram.

                                                                    (4×12=48)