UG PROGRAM (4 YEARS HONOURS) WITH SINGLE MAJOR AT THE END OF SECOND SEMESTER DATA SCIENCE-INTRODUCTION TO DATA SCIENCE AND R PROGRAMMIN (B.Sc HONOURS-MAJOR) (w.e.f. Admitted Batch 2023-24)

Time: 3Hours

129

SECTION - A

129 129 129 129

Answer any FIVE Questions.

x 4 = 20

- 129. Explain about R Nuts and Bolts. 129
- 2. How do you get the Data in and out of R? Explain.
- 3. What is Machine Learning? Why data Scientists use Machine Learning.
- Write about the Problems faced when handling large data.
- Explain about Scoping rules in R Programming.
- Explain about Interfaces in R Programming.
- How do you handle large Data on a Single Computer?
- How do you manage Data Frames with dplyr.

SECTION - B

Answer All the Questions.

 $5 \times 10 = 50$

9. a) Define Big Data. Write the Benefits and Uses of Big Data.

(Or)

- b) Explain in detail about history and overview of R.
- 10. a) Explain in brief about Data Science Process.

- b) What is use of reader package in R? Explain.
- 11. a) Write the Applications of Machine Learning in Data Science.

(Or)

- b) Explain about Types of Machine Learning.
- 12. a) What are the General Techniques for handling large volumes of data? Explain.

(Or)

- b) Write the Programming tips for dealing with Large data sets.
- 13. a) Explain about Control Structures in R Programming.

b) Write about Debugging and Simulation.