2019

MSc

2nd Semester Examination

OBJECT ORIENTED PROGRAMMING WITH JAVA

PAPER - COS-203(M2)

Full Marks: 25

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their Own words as far as practicable.

Illustrate the answers wherever necessary.

Group-A

1. Answer any TWO questions:

2x2=4

- a) Why R is useful for data science?
- b) How missing values and impossible values are represented?
- c) What is object-oriented programming in R?
- d) What is the difference between a data frame and a matrix?

Group-B

2. Answer any TWO questions:

4x2 = 8

- a) Explain different types of data structures in detail.
- b) Discuss about different types of functions used for debugging.
- c) Define a plot and explain at least two functions used for plotting.
- d) Briefly explain profiling in R with the functions used for it.

Group-C

3. Answer any **ONE** question:

8x1

a) i) Write down different types of loops used in R.

4+4

ii) Discuss how break and next statements are used inside a loop.

- b) i) What is an environment? What are the scoping rules in R? 2+2+4
 - ii) Explain any four functions in the dplyr package used for data manipulations.

[Internal Assessment:5]