



QP CODE: 22001005



22001005

Reg No :

Name :

M Sc DEGREE (CSS) EXAMINATION, APRIL 2022

Third Semester

Faculty of Science

M Sc COMPUTER SCIENCE (DATA ANALYTICS)

CORE - CA030301 - STATISTICAL MODELING USING R

2019 ADMISSION ONWARDS

D5D4C972

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Advantages of statistics ?
2. What can be called as a Good quality data?
3. How does R differ from other programming languages?
4. What are the uses of lists?
5. Where is SWITCH used? Why not IF..ELSEIF...ELSE?
6. How does parameter passing in R works?
7. What is Normal Distribution?
8. What is alpha?
9. Define different distributions in R .
10. What do you mean by a Alternate hypothesis?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Define 3 sampling methods.
12. What is attach() ?





13. How do you handle Exception in R?
14. What is environment() used for?
15. Explain two proportion and two mean sample test.
16. What is the significance of regression in Model representation?
17. What is Multi Linear Regression in R? Give syntax.
18. Explain the Diagnostic required in Model Selection.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Write a program to read and write in Excel sheet using R.
20. Create a progress bar with width=8 and character "^". Is this possible in Window. If no how window progress bar is defined?
21. An auto company decided to introduce a new six cylinder car whose mean petrol consumption is claimed to be lower than that of the existing auto engine. It was found that the mean petrol consumption for the 50 cars was 10 km per litre with a standard deviation of 3.5 km per litre. Test at 5% level of significance, whether the claim of the new car petrol consumption is 9.5 km per litre on the average is acceptable.
22. Explain Linear Model Selection in detail.

(2×5=10 weightage)

