

Assignment: Linear Model
Course: Basics of Mathematical Modelling and Simulation
Course Number: HT504
Semester 1, 2022-23

Each question contains 10 marks (4x10=40).

There are two attachments along with this assignment:

- White wine data set.
- Data description.

You will use the above data set to fit:

1. Simple Linear Regression(s),
2. Multiple Linear Regression(s)
3. Exploring the diagnostic plots
4. Interpreting the data and the results

Read the data description carefully to understand the data. You need to write a professional report of the above process just like a complete project. So the report should include everything in detail.

Reference: Chapter 3: Linear Regression of the book: An Introduction to Statistical Learning: with Applications in R, by Daniela Witten, Trevor Hastie, Robert Tibshirani. Springer

You may use any programming language for this assignment. You need to submit both the report and the code.