## MA588: R Programming Lab

Lab # 01 (1 Questions, 100 Points)

Timings: 08:00 to 11:00 Hours Pages: 1

IIT Guwahati 11 Mar 2020 (Wed)

## Question 1: (100 points)

You are given a file named xy.csv. Each line of this file contains:

- x An independent variable
- y A dependent variable

## Problem Statement Your task is to:

Fit (75) A simple least squares model  $y = \beta_0 + \beta_1 \times x$  from first principles and obtain  $\beta_0$  and  $\beta_1$ .

Coefficients (10) Find  $\beta_0$  and  $\beta_1$  using the linear model package 1m.

**Predicting** (15) Generate 100 values of x between [3.00, 50.00] and find the value of y.

## **Instructions** Adhere to the following

**File naming** Prepend R program file name with your roll number. Save the output into a file with your roll number.output.

Evaluation Submit your R program to s.shivagunde by Friday, 13-Mar-2020 23:59 hours.

**Independent efforts** You should make an honest and independent effort in obtaining the solution to the above problem.