

Visva Bharati

CC-12 B (PRACTICAL) , 2021

Campus: Santiniketan

STATISTICS

Stat Computing with C/C++ Programming

B.Sc 5th semester

Semester Question Paper (PRACTICAL)

Full Marks 20

(Time allowed: 2 hours)

NOTE: Answer all questions. Each question contains 10 marks, total marks 20.

Save your program files and output files in the following format:

Roll No._Prob no.cpp/dat/txt

Example:BSC-Sem-5-Stat-01_Prob 1.cpp

Example:BSC-Sem-5-Stat-01_Prob 1.dat

Example:BSC-Sem-5-Stat-01_Prob 1.txt

- Suppose we want to fit a simple linear regression model for weight gain based upon calories consumed only based on the below given data. You may assume “calories consumed” as the independent variable X and “weight gain ” as dependent variable Y . Write a program in C for fitting lines of regression. Hence, using that C program obtain the weight gain predicted by that simple linear regression model after consumption of 2500 calories.

Calories	Weight gain
500	1
1000	2
1500	2.5
1750	3.2
2100	3.9

- Write a program in C for Matrix addition, and matrix multiplication. Hence, using that C program obtain both the output of the addition and multiplication of the following two matrices A and B :

```
matrix A:
1 0 1
2 1 2
3 2 3
matrix B:
2 1 2
3 2 3
4 3 4
```
