



# KALIACHAK COLLEGE

**Internal Assessment 2021**

**Semester –IV**

**Core-10 (A-4.2)**

**Introductory Econometrics**

**Full marks: 14**

Group A

1. Answer any one of the following. 2x1 = 2

- a) What do you mean by BLUE property of the Least Square Estimates
- b) What are the assumptions of Least Square Method
- c) Define autocorrelation
- d) What do you mean by heteroscedasticity?
- e) What is the use of dummy variable in econometrics
- f) Indicate the importance of the stochastic error term

Group: B

2. Answer any one of the following: 4x1 = 4

- a) Briefly outline the scope of Econometrics in the field of Economics
- b) Establish the least square estimates for a bi-variate data set.
- c) Prove that least square Estimates are unbiased
- d) What happens to the least square estimates if the error term is auto correlated?
- e) Explain the method of solving the problem of heteroscedastic error terms.

Group:C

3. Answer any one of the following: 8x1 = 8

- a) Suppose in a hypothetical example the income and consumption is given by the following data set. Estimate the parameters of the consumption function.

Income	Consumption
5000	3500
5500	3560
4000	3000
10000	6000
7000	5050
6500	4600
8700	5800
5700	4000
2000	2000

- b) From the above results form the test statistic and test the reliability of the estimates.