

2008**M.A./M.Sc.****2nd Semester Examination****ECONOMICS****PAPER—VIII (EC-1204)***Full Marks : 40**Time : 2 Hours*

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer all questions.

1. Answer any *five* questions : 2×5
- (a) How would you rationalise the inclusion of an error term in an econometric model ?
 - (b) Discuss the plausibility of the assumption of homoscedasticity.
 - (c) Distinguish between perfect and near—perfect multicollinearity.
 - (d) What do you mean by structural form equation in a simultaneous equation system ?
 - (e) What do you mean by pre-determined variables ?
 - (f) Distinguish between point out interval estimation.
 - (g) Distinguish between Type I and Type II errors.
 - (h) Distinguish between SRSWR and SRSWOR.

(Turn Over)

- (i) When is one-tail-test used ?
 (j) Distinguish within group variation from between group variation.

2. Answer any *two* questions : 5×2

- (a) Explain the concept of Dummy Variable Trap.
 (b) Explain the problem of heteroscedasticity presenting at least two real life examples.
 (c) Explain the factors that lead to autocorrelation in an econometric model.
 (d) Explain the concept of sufficiency of a statistic in estimating a parameters. Give a suitable example.

3. Answer any *two* questions : 10×2

- (a) Illustrate the identification problem in a simultaneous equation framework.
 (b) Describe the consequences of multicollinearity on the estimates of the individual regression coefficients in a multivariate relationship suggest some remedial measures to this problem.
 (c) Estimate the consumption using the matrix method used in 'k' variable linear regression model.

C : Consumption	:	65	75	80	95	114	145	149
I : Income	:	100	125	130	155	175	225	230

Present an economic interpretation of the estimated consumption function

- (d) Define frequency χ^2 . Explain in detail how this frequency χ^2 is used to test the independence of two attributes.