

M.Sc. (Part—II) Semester—III (CBCS) Examination
E-I/II(4) : STATISTICS
(Econometrics—I)
Paper—XII

Time : Three Hours]

[Maximum Marks : 80

Note :— Solve either (A) or (B) from each question.

1. (A) (i) Explain indifference curve approach in detail.
(ii) Describe various elasticities of demand and supply. Establish relationship between them. 8+8

OR

- (B) Derive Slutsky equation. 16
2. (A) (i) Explain the concept of multicollinearity with an example. State its consequences.
(ii) What is meant by heteroscedasticity ? Give one example. Explain Park-Test of detecting it. 8+8

OR

- (B) (i) Discuss the problems of single equation regression models in econometrics.
(ii) Explain the nature of heteroscedasticity with an example. State the different tools for handling it. 8+8
3. (A) Describe dummy variables with an example. How they are used in various regression models ? Explain its use in seasonal adjustment. 16

OR

- (B) Explain the nature of autocorrelation, its consequences, detection and remedial measures. 16
4. (A) (i) Explain OLS method in detail.
(ii) Describe the concept of instrumental variable method with an example. 8+8

OR

- (B) (i) Explain the concept of autoregressive and distributed lag models with an example.
(ii) Discuss the concept of General Linear Model (GLM) with an example. 8+8
5. (A) What is meant by recursive model ? Explain Indirect Least Square (ILS) method and Two Stage Least Square Method (2SLS) with an example. 16

OR

- (B) Explain the concept of simultaneous linear equation models. What is meant by identification problem ? Describe rank and order conditions of identification problem. 16

