C 82336 (Pages : 3)

Name..................................

Reg. No..............................

FOURTH SEMESTER M.A. DEGREE EXAMINATION, JUNE 2015

(CUCSS)

Economics

Optional Paper 2 – ADVANCED ECONOMETRICS

Time : Three Hours

Maximum : 36 Weightage

Part A

Answer **all** *questions.*

Each bunch of **four** *questions carries weightage of* 1.

A. Multiple Choices :

1. A complete system of equations are known as :

   (a) Reduced form model.
   (b) Structural model.
   (c) Structural equation.
   (d) None of the above.

2. Moving average model is :

   (a) $y_1 = \mu + \beta_0 u_1 + \beta_1 u_{t-1}$.
   (b) $(yt - \delta) = \alpha_1 (y_{t-1} - \delta) + u_t$.
   (c) $y_1 = \theta + \alpha_1 y_{t-1} + \beta_0 u_1 + \beta_1 u_{t-1}$.
   (d) $y_{t-1} = \alpha + \beta_0 x_{t-1} + \beta_0 \lambda x_{t-2}$.

3. In $(K - M) \geq (G - 1)$; M – denotes :

   (a) Total number of equations.
   (b) Total number of endogeneous variables.
   (c) Total number of exogeneous variables.
   (d) None of the above.

4. Order condition is based on :

   (a) Determinant rule.
   (b) Counting rule.
   (c) Polynomial rule.
   (d) None of the above.

B. Multiple Choices :

5. Box and Jenkins methodology is associated with :

   (a) AR process.
   (b) MA process.
   (c) ARIMA process.
   (d) None of the above.

6. Binary variables are also known as :

   (a) Quantitative variables.
   (b) Qualitative variables.
   (c) Predetermined variables.
   (d) None of the above.

Turn over

7. If the equation is over identified the appropriate method to be used :

   (a) MLM. (b) 2SLS.

   (c) 3SLS. (d) ILS.

8. Reduced form method is also known as :

   (a) Two SLS. (b) Three SLS.

   (c) ILS. (d) None of the above.

C. Fill in the blanks :

9. ADF stands for ________.

10. Almon's schemes include only ________ variables.

11. ILS is an important technique for ________ models.

12. The extension of ILS and IV method is ________.

D. State whether the following statements are True *or* False :

13. Method of IV is appropriate for under identified models.

14. Logit model is also known as logistic regression.

15. Rank condition for identification is based on zero determinants.

16. Almon's model uses exogenous lagged variables.

(16 × ¼ = 4 weightage)

Part B (Short Answer Questions)

Answer any **ten** *questions.*

Each question carries a weightage of 2.

17. What is simultaneous equations bias ?

18. What are rules of identification ?

19. Explain errors in variable.

20. What is 'K' class estimator ?

21. What are endogenous and exogenous variables ?

22. Explain Nerlov model.

23. Write short note on dummy variables.

24. What is Logit model ?

25. Explain AR process.

26. What is economic forecasting ?

27. Explain ACF test of stationarity.

28. Write short note on unit-root test.

29. Explain the econometric applications in Monetary Economic studies.
30. Explain the use of econometric applications in Indian industry studies.

(10 × 2 = 20 weightage)

Part C

Answer any **three** *questions.*

Each question carries a weightage of 4.

31. Write the reduced form of the following structural equation.

$$C_t = a_0 + a_1 Y_t + u_1$$
$$I_t = b_0 + b_1 Y_t + b_2 Y_{t-1} + u_2$$
$$Y_t = C_t + I_t + G_t$$

Equations : (a) Consumption function ; (b) Investment function ; (c) Definitional equation.

32. Explain the estimation of Koyck's transformation model.
33. Explain Box-Jenkins methodology.
34. Explain the methods for testing integration.
35. Explain the role of econometrics in macroeconomic modelling.

(3 × 4 = 12 weightage)