C 3381 (Pages : 3) Name..................................

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

FOURTH SEMESTER M.A. DEGREE EXAMINATION, JUNE 2016

(CUCSS)

Economics

Optional Paper 2—ADVANCED ECONOMETRICS

(2010 Admissions)

Time : Three Hours Maximum : 36 Weightage

Part A

Answer **all** *questions.*
Each bunch of **four** *questions carries a weightage of* 1.

A. Multiple Choice.

1 Order condition is based on :

(a) Determinant rule. (b) Counting rule.

(c) Polynomial rule. (d) None of the above.

2 A complete system of equations are known as :

(a) Reduced form model. (b) Structural model.

(c) Structural equation. (d) None of the above.

3 Moving average model is :

(a) $y_t = \mu + \beta_0 u_t + \beta_1 u_{t-1}$.

(b) $(yt - \delta) = \alpha_1 (y_{t-1} - \delta) + u_t$.

(c) $y_t = \theta + \alpha_1 y_{t-1} + \beta_0 u_t + \beta_1 u_{t-1}$.

(d) $y_{t-1} = \alpha + \beta_0 x_{t-1} + \beta_0 \lambda x_{t-2}$.

4 ADF test is for :

(a) Unit root. (b) Co-integration.

(c) Error correction. (d) None of the above.

B. Multiple Choices.

5 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.

Turn over

6 Two SLS is an appropriate technique for :

(a) Extently identified models (b) Under identified models.

(c) Over identified models. (d) None of the above.

7 Dummy variables are also known as :

(a) Quantitative variables. (b) Qualitative variables.

(c) Predetermined variables. (d) None of the above.

8 Box and Jenkins methodology is associated with :

(a) AR process (b) MA process

(c) ARIMA process (d) None of the above

C. Fill in the blanks :

9 ————————— parameters are used for forecasting.

10 Koyck transformation model assumes ————————— weightage

11 The extension of ILS and IV method is —————————.

12 ILS is an important technique for ————————— models.

D. State whether the following statements are true *or* false :

13 Probit model is a quantitative response model.

14 Almon's model uses endogenous lagged variables.

15 Rank condition for identification is based on zero determinant.

16 Method of IV is appropriate for under identified models.

(4 × 1 = 4 weightage)

Part B

Answer any **ten** *questions.*
Each question carries a weightage of 2.

17 What is simultaneous equation system ?

18 Write the rules of identification.

19 What is FIML estimation ?

20 Explain the method of Instrument Variables.

21 Explain the recursive system.

22 Write short notes on Nerlov model.

23 What are the properties of binary variable ?

24 Explain probit model.

25 What is ARIMA model ?

26 Explain MA process of forecasting.

27 Explain ACF test of stationarity.

28 What is co-integration ?

29 Explain the econometric applications in Indian industry studies.

30 Explain the econometric applications in international economic 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 : (i) Consumption function, (ii) Investment function, (iii) Definitional equation.

32 Explain Koyck's transformation model.

33 Explain forecasting with multivariate regression model.

34 Explain ADF test of unit root.

35 Explain the econometric application in Monetary Economics.

(3 × 4 = 12 weightage)