MA ECONOMICS
FOURTH SEMESTER
ADVANCED ECONOMETRICS
MEC – 405B
[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Objective

Time: 30 mins.

Marks: 20

Choose the correct answer from the following: *1×20=20*

1. The reason for lag is
   a. Institutional
   b. Psychological
   c. Technological
   d. All of the above

2. The problems with direct least square estimator of distributed lag model is
   a. The parameters are unable to estimate
   b. High multicollinearity
   c. Standard errors will be large
   d. All of the above

3. Koyek transformation model underlines
   a. Adaptive expectation model
   b. Stock adjustment model
   c. Rational expectation hypothesis model
   d. Both a and b

4. In an LPM
   a. The errors are homoscedastic
   b. The errors are heteroscedastic
   c. The errors are normally distributed
   d. The errors are all equal to zero

5. The probability for underlying Logit model is
   a. Normal distribution
   b. Logistic distribution
   c. Chi-square distribution
   d. F distribution

6. In Linear Probability Model, the
   a. Regressand is dichotomous
   b. Regressand is ordinal variable
   c. Regressor is dichotomous
   d. Regressors is ordinal variable

7. Models that use censored data is
   a. LPM Model
   b. Logit Model
   c. Probit Model
   d. Tobit Model

8. Hausman test statistics follows
   a. Normal distribution
   b. t distribution
   c. Chi-square distribution
   d. F distribution

9. Panel data is a
   a. Time series data
   b. Summation of cross section and time series data
   c. Cross section data
   d. None of the above

10. A approach to forecasting using time series data is
    a. Single equation regression model
    b. Single equation regression model
    c. Vector Autoregression
    d. All of the above

11. Example of a model usually not derived from an economic theory
    a. Single equation regression model
    b. Single equation regression model
    c. ARIMA
    d. All of the above

12. One of the feature of the Koyek transformation is
    a. The disturbance term U
    b. Auto regressive model
    c. Multicollinearity
    d. None of the above

13. In the inverted V lag scheme the weights are given
    a. Equal
    b. Declining
    c. Initially increasing and subsequently
    d. Increasing
       declining

14. A collection of random variables ordered in time is called
    a. Non stationary process
    b. Stationary process
    c. Integrated variables
    d. Stochastic process

15. The best example of random walk model is
    a. Stock prices
    b. Gold prices
    c. Food grain prices
    d. None of the above

16. A trend stationary time series has a
    a. Non Deterministic trend
    b. Deterministic trend
    c. Non difference stationary
    d. None of the above

17. The error correction mechanism was developed by
    a. Ganger
    b. Engle
    c. Engle and Ganger
    d. Dickey-Fuller

18. One of the most widely use methodologies for the analysis of time series data is
    a. ARIMA
    b. ARMA
    c. MA
    d. AR

19. In logit model the odds ratio decreases from 1 to 0, the logit becomes
    a. Negative
    b. Equal to 0
    c. Fraction
    d. Positive

20. Tobit model is also called
    a. LPM
    b. Censored model
    c. Logistic model
    d. Binary model

-- --- --

(Descriptive)

Time : 2 Hr. 30 Mins.   Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Estimate Koyek Model.   10

2. Estimate Darwin-Watson d statistic and its limitation.   8+2=10

3. In the presence of Autocorrelation estimate of OLS are statistically   10
    unbiased. Justify

4. Explain Linear Probability Model (LPM) with suitable example.   10

5. Define Logit model and its features.   8+2=10

6. Explain Random walk model with drift and without drift.   5+5=10

7. Estimate Unit root test.   10

8. Define Panel data. Explain Box Jenkins Methodology.   2+8=10

== == *** == ==