

Roll No.....

Total No. of page(s): 1

**OMDE/M-20: 19587**  
**MABE-202: Fundamentals of Econometrics**  
**(upto 2015-16 syllabus)**

Time: 3 hrs]

[Max. Marks: 80

Note: Attempt five questions in all. Question No. 1 is compulsory. Select one question from each unit. All questions carry equal marks.

Compulsory question

- I. Write short notes on followings: 16
- (a) Null Hypothesis
  - (b) Non stationary time series
  - (c) Level of significance
  - (d) Sufficient estimator
  - (e) Serial correlation
  - (f) Distributed lag model
  - (g) Dummy variable
  - (h) Hypothetical process of repeated sampling

Unit I

- II. What do you understand by Regression? Discuss Ordinary Least Squares (OLS) method for the derivation of estimates for Simple Linear Regression Model. 16
- III. Discuss the various functional forms of regression models used in Econometrics. 16

Unit II

- IV. What is Autocorrelation? Discuss Durbin-Watson test for detecting Autocorrelation. What are the possible remedies for Autocorrelation? 16
- V. What is Multicollinearity? Discuss the consequences and solutions of multicollinearity. 16

Unit III

- VI. Discuss the following uses of dummy variable 16
- (a) Comparing two regression model
  - (b) Interaction effect
  - (c) Seasonal analysis
- VII. Discuss the Granger test for causality. What are its limitations? 16

Unit IV

- VIII. Write short notes on following: 16
- (a) Stationarity
  - (b) Unit root
  - (c) Co-integration
- IX. What is time series forecasting? Discuss the Box-Jenkins Methodology of time series forecasting. 16