Reg. No.:

Name :



M 27281

II Semester M.A./M.Sc./M.Com. Degree (Reg./Sup./Imp.)
Examination, March 2015
ECONOMICS

(2013 and Earlier Admn.)

Paper - VI : Basic Econometrics

Time: 3 Hours

Max. Marks: 80

Instructions : Part A : Answer all questions. Each question carries one mark.

Part B: Answer any eight questions. Each question carries

3 marks.

Part C: Answer any four questions. Each question carries 5 marks.

Part **D**: Answer **any two** questions. **Each** question carries **13** marks.

PART-A

- 1. The error term in regression model makes the relation as
 - a) Stochastic

b) Deterministic

c) Realistic

- d) Theoretical
- 2. Pooled data represents
 - a) Time series

- b) Cross section
- c) Combination of both
- d) All of the above
- 3. In OLS method, the sum of squares of error should be
 - a) Zero

b) Minimum

c) Maximum

- d) Infinity
- 4. Auto correlation refers to
 - a) Correlation among the random error terms
 - b) Correlation among the X variables
 - c) Correlation between X and Y variables
 - d) Correlation between X and error terms

P.T.O.

- 5. When population is heterogeneous, it is advisable to use
 - a) Simple random sampling
 - b) Systematic sampling
 - c) Stratified random sampling
 - d) Quòta sampling
- 6. The goodness of fit of regression model is tested with
 - a) t test

b) F test

c) Chi square test

- d) Freedman test
- 7. The impacts of omitted variables in a regression model is represented in
 - a) Error term

b) Constant term

c) Slope

- d) Dependent variable
- 8. The violation of the assumption of no correlation between independent variables in a model leads to the situation of
 - a) Multicollinearity

- b) Auto correlation
- c) Heteroscedasticity
- d) All of these
- 9. The correlation coefficient between two variables lies between
 - a) 0 and 1

b) -1 and 0

c) -1 and +1

- d) Less than two and more than one
- 10. The power of a test is given by
 - a) Probability of type I error
- b) Probability of type II error

c) Both

d) None of these

 $(1 \times 10 = 10)$

PART-B

- 11. What is null hypothesis?
- 12. Define degrees of freedom.
- Distinguish between statistic and parameter.
- 14. Define sample regression function.
- 15. What is best estimate?

- 16. What is a proxy variable?
- 17. Distinguish between a mathematical model and econometric model.
- 18. What is interval scale?
- 19. Define time series data.
- 20. What is a dummy variable?
- Explain dummy variable trap.

 $(3 \times 8 = 24)$

PART-C

- 22. Explain the assumptions relating to the behavior of random error term.
- 23. What are different sources secondary data relating to economics studies?
- 24. Explain two situations where F test is used.
- 25. Explain causes of multicollinearity.
- 26. Briefly explain Almon's contributions to lagged model estimation.
- 27. Explain the use of dummy variable in gender studies.

(5×4=20)

PART-D

- 28. State and prove Gauss Markov theorem.
- 29. Explain various sampling methods used in econometric studies.
- 30. Explain the causes of auto correlation and suggest remedial measures.
- 31. For the following data, compute consumption function and interpret the value of marginal propensity to consume :

			547						
Υ	700	700	800	600	900	800	700	700	600

Where C represents consumption, Y income, both measured in rupees. (13×2=26)