K16P 0444

Reg. No. : .....

Name : .....

Second Semester M.A. Degree (Regular/Supplementary/Improvement) Examination, March 2016
(2013 and Earlier Admn.)
ECONOMICS
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 method of obtaining the value of estimates is known as
   a) Parameter b) Estimation c) Statistic d) None of these

2. Regression shows
   a) Exact relation b) Average relation
   c) Both d) None of these

3. A testable proposition is called as
   a) Tentative theory b) Tested theory
   c) Hypothesis d) Inference

4. The absence of heteroscedasticity shows the
   a) Unequal variance b) Zero variance
   c) Equal variance d) Maximum variance

P.T.O.

5. In a classical linear model, we do not make an assumption
   a) Error term follows a normal distribution
   b) X are independent variables
   c) Errors are independent
   d) X and Y are independent

6. The ratio between explained sum of squares and total sum of squares in a regression model is a measure of
   a) Total variation
   b) Error variance
   c) Coefficient of determination
   d) Auto correlation

7. Accepting a wrong hypothesis leads to
   a) Type I error
   b) Type II error
   c) Standard error
   d) Specification error

8. Park test is used for testing
   a) Auto correlation
   b) Multi collinearity
   c) Heteroscedasticity
   d) Correlation

9. The coefficient of multiple regression represents
   a) Simple coefficients
   b) Partial regression coefficients
   c) Correlation
   d) None of these

10. The overall fitness of an estimated multiple regression is tested by testing the significance of
    a) Estimated parameter
    b) Intercept
    c) Estimated correlation coefficient of any two variables
    d) Estimated coefficient of determination **(1×10=10)**

PART – B

11. What is working hypothesis ?
12. Define statistical estimation.
13. Distinguish between statistic and parameter.
14. Define population regression function.

15. What is unbiased estimate ?
16. What is an instrumental variable ?
17. Distinguish between a statistical model and econometric model.
18. What is ratio scale ?
19. Define cross section data.
20. What is a binary variable ?
21. Explain dummy variable trap. **(3×8=24)**

PART – C

22. Explain the rationale for incorporating the random term in an econometric model.
23. What are different sources for collecting primary data ?
24. Explain two situations where t test and F test are used.
25. Explain the relationship between Type I error, Level of significance and critical region.
26. Briefly explain Koyck's transformation model.
27. Explain the use of dummy variable in impact studies. **(5×4=20)**

PART – D

28. State and prove BLUE properties of the OLS estimation.
29. Explain various sampling methods used in econometric studies.
30. Explain the causes of heteroscedasticity and suggest remedial measures.
31. For the following data, compute consumption function and interpret the value of marginal propensity to consume :

C	84	72	67	52	87	91	45	21	87
Y	124	107	98	87	120	126	68	54	120

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