

31628

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Name.....

Reg. No.....

THIRD SEMESTER P.G. DEGREE EXAMINATION, DECEMBER 2017

(CCSS)

Economics

ECO 3C 10—ECONOMETRICS

(2013 Admissions)

Time : Three Hours

Maximum : 80 Marks

Section A

Answer all questions.

Each question carries 1 mark.

1. For solving over identified equation we use ——— method.
(a) Indirect Least Square. (b) Ordinary Least Square.
(c) Two Stage Least Square. (d) Any of the above.
2. The problem of ——— results in Dummy Variable Trap.
(a) Heteroscedasticity. (b) Autocorrelation.
(c) Multicollinearity. (d) Instrumental Variables.
3. The regression model $\log Y = a + bX + u$ is a case of :
(a) Lin-log model. (b) Log-log model.
(c) Log-lin model. (d) Reciprocal log model.
4. Models involving lagged values of the dependent variable as explanatory variables are called :
(a) Distributed lag models. (b) Autoregressive models.
(c) Reciprocal models. (d) MA model.
5. Farrar Glaubertest is used to detect :
(a) Heteroscedasticity. (b) Errors in Variables.
(c) Multicollinearity. (d) Autocorrelation.
6. Correlation between the explanatory variables and random term in regression model results in :
(a) Heteroscedasticity. (b) Multicollinearity.
(c) Autocorrelation. (d) Simultaneous Equation Bias.

Turn over

7. Dummy variable is also known as :
- (a) Qualitative Variable.
 - (b) Quantitative variable.
 - (c) Pre determined variable.
 - (d) None of the above.
8. A system where dependent variables are functions of independent variables alone in the model is called :
- (a) Reduced Form system.
 - (b) Structural system.
 - (c) Deterministic system.
 - (d) None of the above.
9. Statistical criteria is also known as :
- (a) First order test.
 - (b) Second order test.
 - (c) Third order test.
 - (d) None of the above.
10. When the correlation between explanatory variables is zero, the situation is termed as ———.
- (a) Orthogonality.
 - (b) Multicollinearity.
 - (c) Homoscedasticity.
 - (d) Heteroscedasticity.

(10 × 1 = 10 marks)

Section B

Answer any eight questions.

Each question carries 5 marks.

11. Interpret the regression result of demand for tea (D) on price of tea (P) (both co-efficients are statistically significant and $R^2 = 0.95$)
- $$D = 20 + 0.75 P + u$$
12. Explain the method of Ordinary Least Squares.
13. Explain Simultaneous Equation Bias and prove it using an example.
14. Discuss how Durbin Watson d statistic is used to understand the problem of Autocorrelation.
15. Elaborate the concept of Dynamic Econometric Models and state the difference between Autoregressive and Distributed Lag Models.
16. What do you mean by Identification and explain the formal rules of identification.
17. Discuss the solutions for Heteroscedasticity.
18. What is multicollinearity and explain the tests for Multicollinearity.
19. Discuss Two Stage Least Square method as a solution to Simultaneous Equation Bias.
20. State and explain the steps involved in the methodology of econometric research.

21. Differentiate lin log and log lin regression models.
22. Discuss the scope of econometrics.

(8 × 5 = 40 marks)

Section C

Answer any two questions.

Each question carries 15 marks.

23. State and prove the Gauss Markov theorem.
24. Differentiate Nerlove's lag model and compare it with Almon's scheme of polynomial lag.
25. Explain Indirect Least Squares as a solution to simultaneous equation bias.
26. Estimate Saving function from the following data :

Saving :	5	8	10	11	22	12	20
Income :	23	25	34	35	60	34	36

(2 × 15 = 30 marks)