20P327 (Pages: 3) Name……..

Reg. No…….……

THIRD SEMESTER M.A. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS-PG)

(Regular/Supplementary/Improvement)

CC19P ECO3 C11 - BASIC ECONOMETRICS

(Economics)

(2019 Admission onwards)

Time: Three Hours Maximum: 30 Weightage

Part A

Answer ***all*** questions. Each question carries 1/5 weightage.

1. The reliability and precision of a sample is given by:

   (a) Mean (b) Standard error

   (c) Variance (d) Correlation coefficient

2. Type I error shows the situation of

   (a) Accepting a null hypothesis when it is wrong

   (b) Accepting a null hypothesis when it is right

   (c) Rejecting a null hypothesis when it is wrong.

   (d) None of the above

3. Durbin –Watson d-test is used to detect the problem of:

   (a) Multicollinearity (b) Autocorrelation

   (c) Heteroscedasticity (d) None of the above.

4. R^2 is equal to

   (a) TSS/ESS (b) ESS/TSS (c) 1-(TSS/ESS) (d) 1-(ESS/TSS)

5. The weighted Least Square method is used to rectify the problem of:

   (a) Autocorrelation (b) Heteroscedasticity

   (c) Multicollinearity (d) None of these.

6. The influence of the past values of the regressor on the current value of the endogenous variable is analysed by using:

   (a) A linear model (b) A lagged model

   (c) A nonlinear model (d) A simultaneous equations model.

7. The appropriate method of estimation for over identified equation is:

   (a) ILS (b) 2SLS

   (c) Weighted least squares (d) Maximum likelihood

8. The term multicollinearity is due to:

(a) Arrow (b) A.K. Sen (c) Baumol (d) Ragner Frisch

9. An efficient estimator is one which has:

(a) Minimum variance (b) Minimum variance and unbiasedness

(c) Zero variance (d) Unitary variance and unbiasedness

10. The presence in errors of measurement of the variables in a regression model makes the estimates:

(a) Biased (b) Biased and inefficient

(c) Biased and inconsistent (d) Inconsistent

11. In Econometric models, the nature of relationship is:

(a) Stochastic (b) Deterministic (c) Non stochastic (d) None of these

12. Dummy variable technique is used to study the influence of:

(a) Any variable

(b) Any attribute

(c) Any variable or attribute

(d) A variable which is not exactly measurable.

13. Simultaneous equation bias measures:

(a) Specification error

(b) Errors in variables

(c) Standard error

(d) Bias in the estimation when the simultaneous relationship is ignored in the estimation.

14. In the case of hetroscedasticity, the variance of *u* is:

(a) Constant (b) Not constant (c) Zero (d) None of these

15. Which of the following is used to detect specification errors?

(a) The Park test (b) Ramsey's RESET test

(c) Chow test (d) The Runs test

(15 × 1/5 = 3 Weightage)

Part B (Very Short Answer Questions)

Answer any ***five*** questions. Each question carries 1 weightage.

16. Define Econometrics.

17. Difference between R^2 and Adjusted R^2.

18. Durbin Watson statistic.

19. Variance Inflating Factor.

20. ANOVA

21. Degrees of freedom.

22. LPM

23. SRF

(5 × 1 = 5 Weightage)

Part C (Short Answer Type Questions.)

Answer any ***seven*** questions. Each question carries 2 weightage.

24. Explain the method for testing the equality of two regression coefficients.

25. Explain the dummy variable trap.

26. Explain regression through origin.

27. Explain the nature and implications of heteroscedasticity.

28. Explain coefficient of determination of simple linear regression model.

29. Bring out the assumption of OLS method of estimation.

30. Explain various steps involved in an econometric study.

31. What do you mean by 'dummy variable'? Illustrate its application in econometric research.

32. What are the different types of model specification errors?

33. Define multicollinearity and bring out its causes and consequences.

(7 × 2 = 14 Weightage)

Part D (Essay Questions)

Answer any ***two*** questions. Each question carries 4 weightage.

34. Explain the causes, consequences and remedial measures of autocorrelation in an econometric model.

35. Discuss the methods of overcoming simultaneous equation bias.

36. State and explain the Gauss-Markov Theorem.

37. Explain the different functional forms of regression analysis.

(2 × 4 = 8 Weightage)

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