

22P327

(Pages: 3)

Name:

Reg. No:

THIRD SEMESTER M.A. DEGREE EXAMINATION, NOVEMBER 2023

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19P ECO3 C11 – BASIC ECONOMETRICS

(Economics)

(2019 Admission onwards)

Time: 3 Hours

Maximum: 30 Weightage

Part A

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

1. An economist mainly uses econometrics for
 - (a) Studying relationship between goods and prices
 - (b) Studying relationship between production and price
 - (c) Studying relationship between demand and supply
 - (d) Studying relationship between economic variables
2. Regression analysis is concerned with estimating
 - (a) The mean value of the dependent variable
 - (b) The mean value of the explanatory variable
 - (c) The mean value of the correlation coefficient
 - (d) The mean value of the fixed variable
3. Standard error of an estimator is a measure of
 - (a) Population estimator
 - (b) Power of the estimator
 - (c) Confidence interval of the estimator
 - (d) Precision of the estimator
4. An estimator is unbiased if
 - (a) Its expected value is the true value of the parameter
 - (b) Its expected value is not the true value of the parameter
 - (c) Its unexpected value is the true value of the parameter
 - (d) None of the above
5. When $R^2 = 1$; \bar{R}^2 would be equal to
 - (a) 0
 - (b) 1
 - (c) -1
 - (d) less than 1
6. In testing the restrictions imposed on a model we calculate F-statistics and compare this value to the table $F(m,n-k)$. In this formulae, 'm' is the
 - (a) Number of regressors in the two models taken together
 - (b) Sample size of the restricted model
 - (c) Number of X variables dropped in the restricted model
 - (d) Number of parameters estimated in the restricted mode

7. Multicollinearity is essentially a
 (a) Sample phenomenon (b) Population phenomenon\
 (c) Both a and b (d) Either a or b
8. One of the easiest ways of detecting autocorrelation is the graphical method where we plot
 (a) the error terms against their standardized values
 (b) the error terms against each X variable
 (c) the error terms against the Y variable
 (d) the error terms against time
9. For a regression through the origin, the intercept is equal to
 (a) 0 (b) 2 (c) 1 (d) -1
10. In lin-log regression model, the slope coefficient gives
 (a) The relative change in Y for an absolute change in X
 (b) The percentage change in Y for a given percentage change in X
 (c) The absolute change in Y for a percent change in X
 (d) The percentage change in X for a given percentage change in Y
11. If a quantitative variable has 'm' categories, we can introduce
 (a) Only 'm-1' dummy variables (b) Only 'm+1' dummy variables
 (c) Only 'm' dummy variables (d) Only 'm×1' dummy variables
12. The process of removing the seasonal component from a time series sample data is known as
 (a) Seasonalization (b) Seasonality
 (c) Deseasonalization (d) Seasonal trend testing
13. Which of the following is used to detect specification errors?
 (a) The Park test (b) Chow test
 (c) Ramsey's RESET test (d) The Runs test.
14. If there are errors of measurement in the explanatory variable X, then the OLS estimators of the regression model would be
 (a) Unbiased and consistent (b) Biased but consistent
 (c) Biased and inconsistent (d) Unbiased but inconsistent
15. In LPM, the error term follows
 (a) normal distribution (b) Chi-square distribution
 (c) Bernoulli probability distribution (d) Logistic distribution
- (15 × 1/5 = 3 Weightage)**

Part B (Very Short Answer Questions)Answer any *five* questions. Each question carries 1 weightage.

16. Bring out the relation between economic theory and mathematical economics
17. Define dependent variable.
18. Bring out the properties of OLS estimators.
19. Distinguish between a population and a sample.
20. Write a note on Chow test
21. Define homoscedasticity.
22. Define the concept of ANCOVA
23. Bring out the features of logit model.

(5 × 1 = 5 Weightage)**Part C** (Short Answer Questions)Answer any *seven* questions. Each question carries 2 weightage.

24. Bring out the nature and limitations of Econometric analysis.
25. Explain the the normality assumption of u_i
26. Explain the maximum likelihood method of estimation.
27. Explain the three variable or multiple regression model.
28. Bring out the relation between R^2 and adjusted R^2 .
29. Explain the approaches used for testing of hypothesis
30. Explain the nature and causes of Multicollinearity.
31. Explain regression through origin
32. Explain the functional form used to measure the growth rate.
33. Explain the general test of specification errors proposed by Ramsey.

(7 × 2 = 14 Weightage)**Part D** (Essay questions)Answer any *two* questions. Each question carries 4 weightage.

34. Explain the method of OLS estimation of regression coefficients
35. Explain the nature, consequences, detection and remedial measures of autocorrelation.
36. Define dummy variables. Bring out the major uses or the applications of dummy variables.
37. Explain the different types of model specification errors. Bring out the consequences and methods of detection of these errors.

(2 × 4 = 8 Weightage)
