Reg. No. : ....

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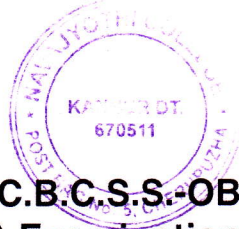
Sixth Semester B.A. Degree (C.B.C.S.S.–OBE – Regular/Supplementary/ Improvement) Examination, April 2024
(2019 to 2021 Admissions)
CORE COURSE IN ECONOMICS/DEVELOPMENT ECONOMICS
6B15 ECO/DEV ECO : Basic Econometric Analysis

Time : 3 Hours   Max. Marks : 40

PART – A

Answer **all** questions. **Each** question carries **1** mark.

1. What distinguishes econometrics from purely mathematical economics ?

2. Define econometrics.

3. Explain the meaning of Population Regression Function (PRF).

4. What do you mean by stochastic error term ?

5. Define multicollinearity.

6. Define autocorrelation.   (6×1=6)

PART – B

Answer **any six** questions. **Each** question carries **2** marks.

7. Elucidate the scope of econometrics with suitable example.

8. Distinguish between stochastic and non-stochastic relationship.

9. What is meant by level of significance ?

10. Define multiple linear regression.

11. State any two assumptions of ordinary least squares.

12. What are the problems with perfect multicollinearity ?

13. How should we correct for a heteroscedastic error term if the true nature of the heteroscedasticity was known ?

14. What do you mean by non-linear regression models ?   (6×2=12)

P.T.O.

PART – C

Answer **any four** questions. **Each** question carries **3** marks.

15. Discuss the nature and type of data collected.

16. Explain the division of econometrics.

17. A researcher estimated the following model.

    $$SALARY = \beta_0 + \beta_1 \, EDUCATION + \beta_2 \, EDUCATION^2 + u_i.$$

    What type of regression is this ? Is it a linear model ? Does it violate the CLRM assumption of no perfect multicollinearity ?

18. Explain the coefficient of determination.

19. Explain the following tests to detect the existence of heteroscedastic disturbances (a) Glejser test; (b) Goldfeld-Quandt test.

20. What are the consequences of autocorrelation ?   (4×3=12)

PART – D

Answer **any two** questions. **Each** question carries **5** marks.

21. Describe the main steps involved in econometric research by giving suitable examples from economic theory.

22. Prove that OLS estimators are BLUE given the assumptions of Classical Linear Regression Model.

23. What are the theoretical and practical consequences of imperfect multicollinearity ? Explain different methods for detecting the presence of high multicollinearity.

24. Explain the procedure of estimating linear demand function.   (2×5=10)

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VI Semester B.A. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, April 2023
(2019 & 2020 Admissions)
CORE COURSE IN ECONOMICS/DEVELOPMENT ECONOMICS
6B15 ECO/DEV ECO.: Basic Econometric Analysis

Time : 3 Hours

Max. Marks : 40

PART – A

Answer **all** questions. **Each** question carries **one** mark.

1. Define Econometrics.

2. What do you mean by Error Term ?

3. Give a note on Hypothesis.

4. What is Regression ?

5. Explain Degrees of Freedom.

6. Define level of significance.

(1×6=6)

PART – B

Answer **any 6** questions. **Each** question carries **two** marks.

7. Explain the uses of Econometrics.

8. What do you mean by Auto Correlation ?

9. Briefly explain the concept of PRF.

10. Distinguish between Time Series and Cross Section Data.

11. Explain the term "Liner in parameters".

P.T.O.

12. Explain the graphical method for the detection of Heteroscedasticity.

13. Point out its main limitation of Durbin Watson test. **(2×6=12)**

14. What do you mean by Non-linear regression models ?

PART – C

Answer **any 4** questions. **Each** question carries **three** marks.

15. Explain the reasons of Multicollinearity.

16. Briefly explain Goldfeld Quandt test associated with Heteroscedasticity.

17. Explain the significance of coefficient of determination.

18. How we can solve the problem of autocorrelation ?

19. Explain the division of Econometrics. **(3×4=12)**

20. Define Data. Point out the different types of data.

PART – D

Answer **any 2** questions. **Each** question carries **five** marks.

21. Write an essay on the methodology of Econometrics.

22. Explain Cobb-Douglas Production function.

23. Give an account on the main assumptions underlying the method of OLS.

(5×2=10)

24. Explain BLUE property.

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VI Semester B.A. Degree (CBCSS – OBE – Regular) Examination, April 2022
(2019 Admission)
CORE COURSE IN ECONOMICS/DEVELOPMENT ECONOMICS
6B15ECO/DEVECO : Basic Econometrics Analysis

Time : 3 Hours

Max. Marks : 40

PART – A

Answer **all** questions. **Each** question carries **1** mark :

1. Distinguish between mathematical and econometric model.

2. Distinguish between theoretical and applied econometrics.

3. What is Sample Regression Function ?

4. What is Heteroscedasticity ?

5. What is coefficient of determination ?

6. How do you interpret regression coefficient ?

PART – B

Answer **any six** questions. **Each** question carries **2** marks :

7. What is the meaning of 'linear in parameters' ?

8. Distinguish between estimator and estimate.

9. Distinguish between type I error and type II error.

10. How Multicollinearity be detected ?

11. What is meant by non-linear regression model ?

12. What do you mean by stochastic function ?

13. Explain the assumptions of Ordinary Least Square.

14. What do you mean by null hypothesis ?

PART – C

Answer **any four** questions. **Each** question carries **3** marks :

15. Discuss the applications of regression in economic analysis.

16. Explain the relationship between R^2 and F.

17. Explain the cause and consequences of multi-collinearity.

18. Explain the following : a) Cross section data b) Time series data c) Pooled data.

19. Explain Cobb Douglas Production function.

20. How to test the overall significance of the regression model ?

PART – D

Answer **any two** questions. **Each** question carries **5** marks :

21. Briefly explain the meaning, causes, consequences and detection of autocorrelation.

22. Discuss the scope and methodology of Econometrics.

23. Explain the assumptions of classical linear regression models.

24. State and prove the Gauss-Markov Theorem.

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