B.A. DEGREE EXAMINATION, APRIL 2020 III Year VI Semester Introduction to Econometrics

Time : 3 Hours

Max.marks:75

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

- 1. Define the term Econometrics.
- 2. State the goals of Econometrics.
- 3. What do you know about simple linear regression?
- 4. State assumptions of OLS estimators.
- 5. Define the term confidence interval.
- 6. Define Coefficient of Determination.
- 7. Define multiple regression.
- 8. State the assumptions of multiple regression model.
- 9. Define Autocorrelation.
- 10. What are the causes for Autocorrelation?
- 11. Explain multi-collinearity.
- 12. Define the term Heteroscedasticity.

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

- 13. State the limitations of Econometrics.
- 14. State the properties of BLUE.
- 15. To estimate the mean amount spent per customer at a national steakhouse chain, data was collected for 75 customers (multi-person meals had the total divided by number of persons). We assume the population standard deviation is Rs.4

i) At 95% confidence, what is the margin of error? ii) If the sample mean is Rs.20, what is the 95% confidence interval for the population mean (all customers)?

- 16. Explain standard error in multiple regression.
- 17. Explain multiple regression model with two explanatory variable.

17UECCE6A02 UEC/CE/6A02

- 18. Discuss the Consequences of Autocorrelation.
- 19. Explain the test for detecting Multicollinearity.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

- 20. Explain in detail methodology of econometrics.
- 21. Analyse the Goodness of fit.
- 22. Find multiple regression equation to the following:

Y	X1	X2
- 3.7	3	8
3.5	4	5
2.5	5	7
11.5	6	3
5.7	2	1

23. Explain Durbin-Watson test.

24. Explain the methods of removing multi-collinearity.

B.A. DEGREE EXAMINATION, APRIL 2020 III Year VI Semester Introduction to Econometrics

Time : 3 Hours

Max.marks:75

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

- 1. Define the term Econometrics.
- 2. State the goals of Econometrics.
- 3. What do you know about simple linear regression?
- 4. State assumptions of OLS estimators.
- 5. Define the term confidence interval.
- 6. Define Coefficient of Determination.
- 7. Define multiple regression.
- 8. State the assumptions of multiple regression model.
- 9. Define Autocorrelation.
- 10. What are the causes for Autocorrelation?
- 11. Explain multi-collinearity.
- 12. Define the term Heteroscedasticity.

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

- 13. State the limitations of Econometrics.
- 14. State the properties of BLUE.
- 15. To estimate the mean amount spent per customer at a national steakhouse chain, data was collected for 75 customers (multi-person meals had the total divided by number of persons). We assume the population standard deviation is Rs.4

i) At 95% confidence, what is the margin of error? ii) If the sample mean is Rs.20, what is the 95% confidence interval for the population mean (all customers)?

- 16. Explain standard error in multiple regression.
- 17. Explain multiple regression model with two explanatory variable.

17UECCE6A02 UEC/CE/6A02

- 18. Discuss the Consequences of Autocorrelation.
- 19. Explain the test for detecting Multicollinearity.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

- 20. Explain in detail methodology of econometrics.
- 21. Analyse the Goodness of fit.
- 22. Find multiple regression equation to the following:

Y	X1	X2
- 3.7	3	8
3.5	4	5
2.5	5	7
11.5	6	3
5.7	2	1

23. Explain Durbin-Watson test.

24. Explain the methods of removing multi-collinearity.