

Answer any 4 questions.

20. Explain the stochastic assumptions of OLS.

21. Explain the goals of econometrics.

22. Discuss the properties of a least square estimate.

23. Discuss the sources and consequences of multicollinearity.

24. Explain the solutions for the violation of the assumption of homoscedasticity.

25. Explain the uses of lagged variables in consumption function with example.

Answer any two questions. Each answer should not exceed six pages.

26. Explain the step-by-step procedure of methodology of econometric research.

27. The following table includes corn and fertilizer of 10 periods in agriculture.

Year	1	2	3	4	5	6	7	8	9	10
Fertilizer	8	10	12	14	16	18	20	24	28	32
Corn	40	44	48	52	56	60	64	68	72	76

i) Estimate the slope of regression line

ii) Estimate the intercept

iii) Estimate the regression equation

28. Explain the importance of lagged variables in the econometric analysis.

29. Discuss the uses of dummy variables in the econometric research.



Reg. No. : .....

Name : .....

**II Semester M.A./M.Sc./M.Com. Degree (Reg./Sup./Imp.)**  
**Examination, March 2015**  
**Economics / App. Econ./Dev. Econ.**  
**(2014 Admn. Onwards)**  
**ECO 2C09 : BASIC ECONOMETRICS**

Time : 3 Hours

Max. Marks : 60

**PART - A**

Answer **all** questions.

**(8x1/2=4)**

1. Two stage least square is developed by

- a) Theil
- b) Basman
- c) Theil and Basman
- d) Von Neumann

2. If  $0 < d^* < 2$  there is some degree of

- a) Positive Autocorrelation
- b) Perfect Positive Autocorrelation
- c) Negative Autocorrelation
- d) Perfect Negative Autocorrelation

3. The Farrar - Glauber test is used for

- a) Multicollinearity
- b) Autocorrelation
- c) Heteroscedasticity
- d) None of these

4. The repeated surveys of a single sample in different time periods

- a) Panel data
- b) Time series data
- c) Cross section data
- d) Engineering data

5. Econometric criteria comes under \_\_\_\_\_ stage of methodology of econometrics.

- a) Specification
- b) Estimation
- c) Evaluation
- d) Forecasting



6. The relationship between any two variables when all other variables connected with those two are kept constant

- a) Correlation                      b) Autocorrelation  
c) Positive correlation            d) Partial correlation

7. The goodness of fit is indicated by

- a)  $r$                                       b)  $R^2$   
c)  $\bar{R}^2$                                   d)  $e^2$

8. Degrees of freedom is expressed as

- a)  $N - K$                                 b)  $K - N$   
c)  $N < K$                                 d)  $N > K$

PART - B

Answer **any 8** questions.

(8×2= 16)

9. What is econometrics ?
10. What are the theoretical distributions ?
11. Mention the goals of econometrics ?
12. What are the parameters used to determine a normal distribution ?
13. What is  $R^2$  ?
14.  $y_i - \hat{y}_i = ?$
15. What do you mean by serial correlation ?
16. What is binary variable ?
17. What is MSE ?
18. What is multicollinearity ?
19. What do you mean by orthogonal ?



PART - C

Answer **any 4** questions.

(4×5= 20)

20. Explain the stochastic assumptions of OLS.
21. Explain the goals of econometrics.
22. Discuss the properties of a least square estimate.
23. Discuss the sources and consequences of multicollinearity.
24. Explain the solutions for the violation of the assumption of homoscedasticity.
25. Explain the uses of lagged variables in consumption function with example.

PART - D

Answer **any two** questions. **Each** answer should **not** exceed **six** pages. (2×10= 20)

26. Explain the step-by-step procedure of methodology of econometric research.
27. The following table includes corn and fertilizer of 10 periods in agriculture.
 

<b>Corn :</b>	40	44	46	48	52	58	60	68	74	80
<b>Fertilizer :</b>	6	10	12	14	16	18	22	24	26	32

  - i) Estimate the slope of regression line
  - ii) Estimate the intercept
  - iii) Estimate the regression equation.
28. Explain the importance of lagged variable in the econometric analysis.
29. Discuss the uses of dummy variables in the economic research.