



K16P 0361

Reg. No. : .....

Name : .....

**Second Semester M.A. Degree (Regular/Supplementary/Improvement)**  
**Examination, March 2016**  
**ECONOMICS/APP. ECONOMICS/DEV. ECONOMICS**  
**(2014 Admn. Onwards)**  
**ECO 2C09 : Basic Econometrics**

Time : 3 Hours

Max. Marks : 60

PART - A

Answer all questions.

(8x½ = 4)

1. Deviation of the observations from the line may not be attributed by
 

a) Omission of the variable	b) Error of aggregation
c) Error of measurement	d) Zero correlation
2. Rank correlation is used for
 

a) Quantitative variable	b) Qualitative variable
c) Both	d) None of these
3. The probabilities of the 't' distribution have been tabulated by
 

a) Gosset	b) Durbin	c) Yamane	d) Goldfelt
-----------	-----------	-----------	-------------
4. Which one is not the properties of the estimator ?
 

a) High variance	b) BLUE	c) MSE	d) Unbiasedness
------------------	---------	--------	-----------------
5. Cramer's rule is a
 

a) Method of determinants	b) First order test
c) Second order test	d) Test of significance
6. 'F' static is developed by
 

a) Durbin-Watson	b) Francis Galten	c) Ragnar Frisch	d) Fisher
------------------	-------------------	------------------	-----------



7. Dummy variables are not used as proxies to
- Qualitative factor
  - Numerical factors
  - Dependent variable
  - Lagged variables
8. Order condition for identification
- $K - M \geq G - I$
  - $K - M \leq G - I$
  - $G - I \geq K - M$
  - $G - I \leq K - M$

## PART - B

Answer any 8 questions.

(8×2=16)

- What is homoscedasticity?
- What do you mean by dummy variable?
- What is distributed lag model?
- What is applied econometric research?
- What is the system of simultaneous equation?
- State the structural equation.
- What do you mean by reduced form?
- Expand ARIMA.
- What do you mean by spurious correlation?
- Expand SURE.
- What is cointegration?

## PART - C

Answer any 4 questions.

(4×5=20)

- Give the procedure of estimation of OLS to the two variable model.
- How is dummy variable used for measuring the change of parameters?
- Explain the difference  $R^2$  and  $R^{-2}$ . How do you test the significance of a regression coefficient?



- Discuss the sources and consequences of autocorrelation.
- What are the solutions for heteroscedasticity disturbances?
- What are the limitations of lagged variables in OLS?

## PART - D

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

- Explain the methodology of econometric research.
- Explain the factors to determine the deviation of the observations from the regression line.
- Explain the test of significance of the parameter estimates.
- Find the autocorrelation in the following manufacturing sector for 20 years.

Level inventories (Y) : 242 265 283 312 312 340 335 323 338 369 391 405 391

Sales (X) : 144 154 168 163 172 191 194 195 206 225 237 243 240

Level inventories (Y) : 383 384 405 431 437 456 467

Sales (X) : 250 261 279 300 310 327 338