

MA ECONOMICS  
SECOND SEMESTER [REPEAT]  
BASIC ECONOMETRICS  
MEC – 204

**SET  
A**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 1.30 hrs.

Full Marks: 35

Time: 15 mins.

Marks: 10

**(Objective)**

**1 × 10 = 10**

*Choose the correct answer from the following:*

- In classical linear regression model  $X_i$  and  $u_i$  are:
  - Positively correlated
  - Negatively correlated
  - Highly correlated
  - Not correlated
- Homoscedasticity refers to the error terms having:
  - Zero mean
  - Positive variance
  - Constant variance
  - None of the above
- The least square estimators are:
  - Period estimators
  - Point estimators
  - Population estimators
  - Popular estimators
- If there exist high multicollinearity, then the regression coefficients are:
  - Determinate
  - Indeterminate
  - Infinite values
  - Small negative values
- Heteroscedasticity is more likely a problem of:
  - Cross section data
  - Time series data
  - Pooled data
  - All of the above
- When error term across time series data are intercorrelated, it is known as:
  - Cross correlation
  - Cross autocorrelation
  - Spatial autocorrelation
  - Serial autocorrelation
- Applying OLS to simultaneous equations results in the parameters being:
  - Inefficient
  - Inconsistent
  - Biased
  - Biased and Inconsistent
- In Time series analysis data are collected:
  - At a point of time
  - Both point and period of time
  - Over a period of time
  - None of the above
- A collection of random variables ordered in time is known as:
  - Stationary series
  - Stochastic series
  - Spurious variable
  - Non Stationary series

10. A purely random process is a stationary series with:
- a. Zero variance
  - b. Zero mean
  - c. Positive mean
  - d. Zero mean and Zero variance

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**(Descriptive)**

Time : 1 Hr. 15 Mins.

Marks : 25

[ Answer question no.1 & any two (2) from the rest ]

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|---|----|
| 1. Explain the assumptions of CLRM or Ordinary Least squares.                       | 5  |
| 2. Estimate the parameters of two variable linear regression models.                | 10 |
| 3. Illustrate the causes and remedies of Multicollinearity.                         | 10 |
| 4. Define Autocorrelation. Explain Durbin Watson d statistic with suitable example. | 10 |
| 5. Explain Simultaneous bias with suitable example.                                 | 10 |

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