

MA ECONOMICS
SECOND SEMESTER
BASIC ECONOMETRICS
MEC – 204

**SET
A**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 1.30 hrs.

Full Marks: 35

Time: 15 mins.

(Objective)

Marks: 10

Choose the correct answer from the following:

1 × 10 = 10

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

(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 Darwin Watson d statistic with suitable example. | 10 |
| 5. Explain Simultaneous bias with suitable example. | 10 |

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