

MODEL - QUESTIONS

Class - U.G (B. A) Hons.

Semester - 6

Subject - Economics

Paper - Econometrics (ECCDSE3601C)

Time - 3 hours

Full marks - 70

SECTION (A)

(Compulsory)

multiple choice Questions

1. (i) The Regression Analysis is Concerned with estimating 2 x 10 = 20
- The mean value of dependent Variable
 - The mean value of independent Variable
 - The mean value of Correlation Coefficient
 - The mean value of fixed Variables
- (ii) The r^2 measures the percentage of that total variation
- X explained by Y
 - Y explained by regression Constants
 - Y explained by random term
 - Y explained by regression model.
- (iii) The mean value of random term (u_i) is always
- positive values
 - negative values
 - equal to zero
 - Any of the above.
- (iv) If $E(u_i^2) = 84$ it means
- Auto Correlation
 - multicollinearity
 - Homoscedasticity
 - Heteroscedasticity

- (v) one of the properties of OLS estimator is
 (a) Linear (b) Unbiased
 (c) minimum variance (d) All of the above.
- (vi) The value of Correlation Coefficient lies between
 (a) -1 to +1 (b) 0 to 1
 (c) -1 to 0 (d) none of the above.
- (vii) If $E(u_i u_j) \neq 0$, it refers to
 (a) Heteroscedasticity (b) Multicollinearity
 (c) Auto Correlation (d) none of the above.
- (viii) Spearman's Rank Correlation is used to test
 (a) Auto Correlation (b) Heteroscedasticity
 (c) multicollinearity (d) none of the above.
- (ix) one of the Consequences of perfect multicollinearity is that the Standard Error of estimates are
 (a) Small (b) Minimum
 (c) Zero (d) Infinitely large.
- (x) t-test is applicable in case of
 (a) Small samples (b) large samples
 (c) both a and b (d) none of the above.

Answer key of Multiple choice Questions

- | | |
|-------------|--------------|
| (i) — (a) | (ii) — (d) |
| (iii) — (c) | (iv) — (c) |
| (v) — (d) | (vi) — (a) |
| (vii) — (c) | (viii) — (b) |
| (ix) — (d) | (x) — (a) |

SECTION (B)

Short Answer Type Questions
Answer any four questions

5 × 4 = 20


2. Define Random Sampling
3. Define level of Significance.
4. Differentiate between Population and Sample.
5. Distinguish between α Error and β Error.
6. What do you mean by Homoscedasticity?
7. What is multicollinearity.
8. Distinguish between Correlation and AutoCorrelation
9. What are assumptions of Linear Regression model $y_i = \alpha + \beta x_i + u_i$.

SECTION (C)

Long Answer Type Questions
Answer any two questions

15 × 2 = 30

10. For the Linear Regression model $y_i = \alpha + \beta x_i + u_i$ prove that β is BLUE.
11. Discuss the Causes and Consequences of autoCorrelation.
12. Explain the Consequences of the Problem of ~~heteroscedasticity~~ heteroscedasticity.
13. What is hypothesis testing? What are the procedures of hypothesis testing?



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