

Mid-West University
Examinations Management Office
Birendranagar, Surkhet
End Semester - Examination, 2080

Subject: DE 526- Econometrics I

FM: 60

Level/program: Master (M.A)

Semester: II

Time: 3 Hours

PM: 30

Candidates are required to answer the questions in their own words as far as practicable.

Attempt ALL of the following Very Short Answer Questions.

10x1=10

1. Why is Gauss-Markov Theorem called BLUE?
2. What do you mean by unbiasedness in estimation?
3. Define parameter.
4. What is dummy variable trap?
5. Define the autoregressive model.
6. Define Slutsky's theorem.
7. What is asymptotic normality?
8. State Engle's Law.
9. Define dynamic analysis.
10. What is shadow price?

Attempt any THREE of the Following Short Questions.

3x8=24

11. Define hypothesis testing. Differentiate between R^2 and \bar{R}^2 .
12. Explain Koyck Lag distribution model.
13. Estimate the parameter of following regression equation by OLS method:

$$Y = \beta_0 + \beta_1 X + u$$

14. Explain Cobb-Douglas production function with properties.

Attempt any TWO of the Following Long Questions.

2x13=26

15. Define heteroscedasticity. Explain Almon Distributed Lag model.
16. Obtained regression model is $Y = -0.28 + 0.91 X + U$. Check the autocorrelation by

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|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| X | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Y | 2 | 2 | 2 | 1 | 3 | 5 | 6 | 6 | 10 | 10 | 10 | 12 | 15 | 10 | 11 |

17. Explain the methodology of econometrics.
