

Mid-West University
Examinations Management Office
Birendranagar, Surkhet
Chance Examination, 2082

Subject: DE 532: Econometrics II

FM: 60

Level/program: Master (M.A) Semester: III

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 Question

1x10=10

1. Define simultaneous equation bias.
2. Define Box-Jenkins methodology.
3. Explain independent variable.
4. Define Latent Regression Model.
5. Define ILS method.
6. List the properties of 3SLS.
7. Explain co-integration.
8. What is FIML estimation method?
9. Define discrete choice model.
10. Define stationary stochastic process.

Attempt any THREE of the Following Short Questions.

3x8=24

11. Explain the simultaneous equation model by using Cobb-Douglas production function.
12. Explain ARMA process.
13. Explain Logit model for multiple choice.
14. Explain Random Walk Model with-out drift.

Attempt any TWO of the Following Long Questions.

2x13=26

15. Identify the equation

$$Y_1 = 5Y_2 - 3X_1 + X_2 + U_1$$

$$Y_2 = Y_3 + X_3 + U_2$$

$$Y_3 = Y_1 - Y_2 - 2X_3 + U_3$$

Where, Y's are endogenous and X's are exogenous variable.

16. Prove ILS and 2SLS are identical from the following equations:

$$C = \beta_1 + \beta_2 Y + U; \quad (0 < \beta_2 < 1)$$

$$Y = C + I$$

17. Examine the use of IV in following equation.

$$Y = b_0 + b_1 X_1 + b_2 X_2 + U$$
