Mid-West University

**Examinations Management Office** 

Birendranagar, Surkhet Chance - Examination, 2080

Subject: DE532-Econometrics II

Semester: III

Time: 3 Hours

FM:60 PM:30

Level/program: Master (M.A) 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. What is simultaneous equation bias?
- 2. List the conditions of identify the problem.
- Define dependent and independent variable.
- 4. Define latent regression model.
- Define identification of problem.
- 6. What do you mean by multivariate probit models?
- 7. Explain vector auto-regression (VAR).
- 8. Define discrete choice model.
- 9. What do you mean by panel data?
- 10. Define dynamic analysis.

## Attempt any THREE of the Following Short Questions.

3x8 = 24

11. Estimate the parameters of following two explanatory variables case by IV method.

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + u$$

- 12. Explain FIML with steps.
- 13. Define 2SLS model with steps and assumptions.
- 14. Explain Logit model for multiple choice in econometrics.

## Attempt any TWO of the Following Long Questions.

2x13 = 26

15. Examine the exact/over/under identification of the following equations.

$$y_1 = 2y_2 - 2x_1 + x_2 + u_1$$
  

$$y_2 = y_3 + x_3 + u_2$$
  

$$y_3 = y_1 - y_2 - 2x_3 + u_3$$

- 16. Explain the random walk model. Explain random walk model with drift and without drift.
- 17. Using the OLS methods in simultaneous equation, how can you control the bias and inconsistency?