(i) **Printed Pages : 7** **Roll No. ....**

(ii) **Questions : 9** **Sub. Code : 1 9 9 8**

Exam. Code : 0 3 1 0

Master of Arts (Economics) 4th Semester

1046

Opt. (v) : ADVANCED ECONOMETRICS (In all Mediums)

Paper–MAECO-403 & 404

Time Allowed : Three Hours] **[Maximum Marks : 80**

Note : Attempt **five** questions in all by selecting **one** from each Unit. Question No. **I** is compulsory. Use of Non-programmable non-scientific simple calculator is allowed.

I. Attempt any **ten** of the following :

(a) What do you mean by nesting models ?

(b) What are the consequences of specifying a linear model at the place of a quadratic model ?

(c) What do you mean by dichotomous variable ?

(d) How a dichotomous variable is different from a polychotomous variable ?

(e) What is *Pseudo-R^2* ?

(f) Give any one reason of not applying method of OLS to estimate parameters of a dummy dependent variable model.

(g) What is the use of marginal effects at mean in Probit model estimations ?

(h) How is Tobit model different from Probit model ?

(i) What do you mean by reduced form model ?

(j) Why identification of model's equations is must ?

(k) What do you mean by spurious regression ?

(l) Whether the cointegration is a problem or a desired property of a time series regression model ?

(m) What is the use of MA terms in specification of a time series regression model ?

(n) How a modeler can analyze the macro economic issues using a micro level data ?

(o) Discuss the use of Haussman Specification test in making a selection between fixed effect and random effect models.

$10 \times 2 = 20$

UNIT–I

II. Discuss the consequences of dropping an important variable out of the model in detail. 15

III. What do you mean by dummy variable ? Explain with suitable example how the coefficient of a dummy variable can be interpreted. Also discuss the various uses of dummy variables in estimating regression models. 15

UNIT–II

IV. What do you mean by LPM ? Discuss the major criticisms and methods to solve the criticisms of an LPM. 15

V. What do you mean by Tobin's Probit model ? Discuss the procedure to estimate the coefficients of Tobin's Probit model. 15

UNIT–III

VI. Define SEM using a well defined model. Also discuss the issue of simultaneous equations bias with suitable prove. 15

VII. What do you mean by the method of 2SLS ? How is 2SLS different from 3SLS method of estimating a SEM ? Explain using suitable example. 15

UNIT–IV

VIII. Discuss the concept of VAR and write a VAR model in matrix form. Use the same VAR model to explain the concept of Granger Causality. 15

IX. What do you mean by random coefficient model ? How a random coefficient model is different from random effect model ? Explain using a suitable example. 15

(हिन्दी माध्यम)

Note : Attempt **five** questions in all by selecting **one** from each Unit. Question No. **I** is compulsory. Use of Non-programmable non-scientific simple calculator is allowed.

I. कोई दस प्रश्न करो :

(a) आपका नेस्टिंग मॉडलों से क्या अभिप्राय है ?

(b) द्विघाती मॉडल के स्थान पर रैखिक मॉडल का उल्लेख करने के क्या परिणाम निकलते हैं ?

(c) द्विभाजी चर से आपका क्या तात्पर्य है ?

(d) द्विभाजी चर बहुभाजी चर से भिन्न कैसे है ?

(e) 'आभासी-R^2' क्या है ?