QP CODE: 25022641

MA DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025

Third Semester

MAECONOMETRICS

CORE - EM010305 - ECONOMETRICS OF LIMITED DEPENDENT VARIABLE MODELS AND NON LINEAR REGRESSION

2020 ADMISSION ONWARDS

C037D4A8

Time: 3 Hours

Part A (Short Answer Questions)

Answer any **eight** questions.

Weight 1 each.

- 1. Give an example of Dichotomous variable.
- 2. Define Dichotomous & Polychotomous variables.
- 3. What is Multinomial Probit Model?
- 4. What are Informative Priors?
- 5. Why is the OLS method inappropriate for a model where the dependent variable is censored or truncated?
- 6. Breifly describe a Stochastic frontier Model?
- 7. What do you mean by hazard rate model?
- 8. What is incidental truncation?
- 9. The formulae for likelihood ratio test. How LR test is performed?
- 10. What do you mean by partially linear regression?

(8×1=8 weightage)

Part B (Short Essay/Problems)

Answer any **six** questions. Weight **2** each.

- 11. Discuss logit model for ungrouped data.
- 12. Between logit and probit model which model is more preferable? Discuss logit & probit model briefly.
- 13. Briefly explain Mcfadden's Conditional Logit.
- 14. What is a truncated distribution? Explain its various types.

Turn Over

Weightage: 30



Reg No :



- 15. Discuss how Semi-parametric Models of Duration different from Parametric Models.
- 16. How do you evaluate treatment effect? What is a significant treatment effect?
- 17. "Some models appeared to be non-linear, become linear after transformation", illustrate with examples.
- 18. How non-parametric model different from partially linear model? (with appplications)

(6×2=12 weightage)

Part C (Essay Type Questions)

Answer any **two** questions. Weight **5** each.

- 19. Explain Poisson Regression.
- 20. Explain Recursive logistic models.
- 21. Discuss the formulation of a Truncated Regression model and its estimation process.
- 22. Explain Censored normal distribution with moments and Discuss about the types of data censored.

(2×5=10 weightage)