



QP CODE: 25047668



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Reg No :

Name :

MA DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

MA Econometrics

**Core Course - EM010305 - ECONOMETRICS OF LIMITED DEPENDENT VARIABLE
MODELS AND NON LINEAR REGRESSION**

2020 ADMISSION ONWARDS

14BE82BB

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Define logit model with randomized data.
2. Define Poisson regression.
3. What is Multinomial Probit Model.
4. What are Recursive logistic models.
5. What is truncation from above?
6. What is Stochastic Frontier Analysis used for?
7. What is hazard ratio (HR) in statistics?
8. What do you mean by a significant treatment effect?
9. Give two economic non-linear models which cannot be transformed to a linear model.
10. What does log linear model tells you?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Define qualitative dependent variable.
12. Describe grouped logit model with numerical example.
13. How will Informative & Non-Informative Priors affects the Posterior distribution? Explain.
14. What is a truncated distribution? Explain its various types.





15. Discuss in detail how censored data is different from truncated data with examples.
16. Explain Heckman correction approach.
17. Write a short note on likelihood ratio test statistic with respect to non-linear least square estimation.
18. Discuss about non-parametric regression with its application.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Briefly explain the three approaches to developing a probability model for a binary response variable.
20. Explain Generalized Extreme-Value Model.
21. Discuss the formulation of a Truncated Regression model and its estimation process.
22. Elaborate Parametric, Non-parametric and Semi-parametric Models of Duration.

(2×5=10 weightage)

