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School of Liberal Education**Bachelor of Arts Honours in Economics
Semester End Examination - Nov 2023****Duration : 180 Minutes
Max Marks : 100****Sem V - K1UB505T - Econometrics I**General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Analyze the dataset and identify potential predictor variables for the multiple linear regression model. K1 (2)
- 2) The average test marks in a particular class is 79. The standard deviation is 5. If the marks are distributed normally, how many students in a class of 200 did not receive marks between 75 and 82? K2 (4)
- 3) Elaborate the procedure of testing hypothesis. K2 (6)
- 4) Incorporate dummy variables in OLS regression models. K3 (9)
- 5) Interpret the coefficients of the multiple linear regression model in the context of the problem domain. K3 (9)
- 6) Give an example of a situation where the binomial distribution would be an appropriate model. K5 (10)
- 7) Implement a multinomial logit model for categorical outcomes. K4 (12)
- 8) How can you use the binomial distribution to calculate cumulative probabilities? K5 (15)
- 9) Explain the concept of the 68% confidence interval for a normal distribution. K5 (15)
- 10) Interpret the model's R-squared value and adjusted R-squared value to measure the proportion of variance explained by the model. K6 (18)