SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai — 600 044. M.Sc. - END SEMESTER EXAMINATIONS APRIL - 2022 SEMESTER - II 20PBSET2002 - Categorical Data Analysis

Total Duration : 3 Hrs.

Total Marks : 60

Section A

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. Explain Odds ratio in detail.
- 2. Classify the relationship between odds ratio and relative risk.
- 3. Interpret the components of generalized linear models.
- 4. Ilustrate the test of overall regression and goodness of fit.
- 5. Describe the test of independence in two way tables using Yates correction for continuity.
- 6. Prepare ML estimators for Poisson Log- linear model.
- 7. Explain Wald test.
- 8. Describe McNemar's test.

Section B

Part A

Answer any **TWO** questions $(2 \times 10 = 20 \text{ Marks})$

- 9. Describe contingency tables in binomial sampling.
- 10. Explain the Fisher Exact test for 2×2 tables.
- 11. Examine Binomial GLM for 2×2 contingency tables.
- 12. Describe Logit models for Nominal responses.

Part B

Compulsory question $(1 \times 10 = 10 \text{ Marks})$

13. Examine Loglinear models for Two-way tables.
