

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. (BioStats) - END SEMESTER EXAMINATIONS APRIL - 2023
SEMESTER - II

20PBSET2002 - Categorical Data Analysis

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

1. Discuss the properties of Odds ratio.
2. Derive the Wald confidence interval for the difference of proportions.
3. Describe Fisher's exact test for 2x2 tables.
4. Explain the various components of a GLM?
5. Explain Logit model for binary data?
6. What is Cochran Armitage - Trend test? Illustrate any one of the same.
7. Discuss briefly about Nominal measures of association.
8. Explain the Kappa measure of agreement?

Section C

I - Answer any **TWO** questions ($2 \times 10 = 20$ Marks)

9. Explain the likelihood ratio Chi square test for testing the independence of two-way tables?
10. Distinguish between conditional and Marginal Odds ratio.
11. Describe Logistic regression model and interpret its parameters.
12. Illustrate the test of conditional independence due to Cochran-Mantel-Haenszel test.

II - Compulsory question ($1 \times 10 = 10$ Marks)

13. With suitable example explain the McNemar's test.

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