

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[AHS 1022]**

**OCTOBER 2022**

**Sub. Code: 2865**

**M.Sc. BIostatistics  
SECOND YEAR (From 2011-2012 onwards)  
PAPER I – APPLIED REGRESSION METHODS**

*Q.P. Code : 282865*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on: (2 x 20 = 40)**

1. Multiple regression for continuous data and residual analysis.
2. Kaplan – Meir survival analysis with an example.

**II. Write Short Notes on: (10x6 = 60)**

1. Sources of multicollinearity
2. Unconditional logistic regression.
3. Analysis of contingency tables.
4. Log linear models for three way tables.
5. Weighted Kappa.
6. Cox's proportional hazard model.
7. Relative risk and odds ratio.
8. Generalized Wilcoxon test for censored data.
9. Logistic regression for ordinal, polytomous data.
10. Hypothesis of independence.

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