

## STATISTICS PRACTICAL

Duration of Examination: Four Hours

x. Marks : Arts - 65

Science - 75

The distribution of marks will be as follows:

|                  | <b>B.A.</b>     | <b>B.Sc.</b>    |
|------------------|-----------------|-----------------|
| Practicals       | 39 Marks        | 45 Marks        |
| Practical Record | 13 Marks        | 15 Marks        |
| Viva-voce        | 13 Marks        | 15 Marks        |
| <b>Total :</b>   | <b>65 Marks</b> | <b>75 Marks</b> |

The following topics are prescribed for practical work:

Fitting of (i) Binomial distribution when (a) p-known (b) p-unknown, (ii) Poisson distribution (iii) Normal distribution.

Exercise based on area property of Normal distribution.

Fitting of curves: (i) Straight line (ii) Parabola (iii) Exponential and Power curves.

Calculation of correlation coefficient by (i) Karl Pearson's method and (ii) Spearman's rank method.

Construction of regression line.

6. Preparation of bivariate frequency distribution, calculation of correlation coefficient and construction of regression lines.
7. Calculation of Multiple and Partial correlation coefficients and construction of multiple regression equations (For three variables only)
8. Time Series : Determination of trend by (i) Least square method (ii) Moving average method (including weighted averages).
9. Determination of seasonal variation by (1) Simple average method (ii) Ratio to trend method (iii) Ratio to moving average method and (iv) Link relative method.
10. Construction of Index Numbers by - (i) Laspeyre's (ii) Paasche's (iii) Fisher's (iv) Dorbish-Bowley's and, (v) Marshall Edgeworth's formulas.
11. Tests of Ideal Index numbers.
12. (i) Fixed base and chain base Index numbers (ii) Whole sale price Index number (iii) Cost of living Index number (iv) Base shifting, splicing & deflating.

**Note :** "Students may be tried to familiarize and utilize statistical packages in solving the relevant statistical practical exercises on Computers".