B.A/B. Sc-III

Paper-III (Practical ST-603)

Time: 3 Hours   Max. Marks: B. Sc: 100

B.A: 60

Practical

Note: Five questions will be set. The candidate will be required to attempt
any three.

1.   To construct $\overline{X}$ and R-chart, and comment on the state of control of the process.
2.   To construct p-chart and d-chart, and comment on the state of control of the
        process.
3.   To obtain control limits for number of defects and comment on the state of
        control plotting the appropriate chart.
4.   To calculate price and quantity index numbers using the formulae given by Laspyre,
        Paasche, Marshal- Edgeworth and Fisher.
5.   To obtain cost of living index numbers for the given data using
        (i)Aggregate Expenditure Method. (ii) Family Budget Method
6   To test the given data whether the formulae given by Laspyre, Paasche, Marshal-
        Edgeworth and Fisher, satisfy reversal tests.
7   To work out trends using curve fitting method for given data.
8.   To work out trends using moving average method for given data.
9.   To obtain seasonal variation indices using simple average method.
10.   To obtain seasonal variation indices using ratio to moving average method.
11.   To calculate the crude and standardized death rates of the population
        using Direct Method and Indirect Method regarding one of the populations as standard
        population.
12.   To calculate the following for the given data
        CDR, CBR, Sex/Age SDR, GFR, TFR, GRR, NRR.
13.   To complete the given incomplete life table by computing various
        elements of life table.
14.   To interpolate the required value for the given data using Newton's
        Forward/backward interpolation formula for equal intervals.
15.   To interpolate the required value for the given data of using Newton's divided
        difference and Lagrange's interpolation formula.
16.   To evaluate the integral of the type $\int_{a}^{b} f(x)\, dx$ using

        (i) Trapezoidal rule, (ii) Simpson's one-third rule
        (iii) Simpson's three-eight rule
17   Fitting of Paretos curve to income data.
18.   Estimation of price- elasticity from time series data.

Distribution of   marks:

	B. Sc.	B.A
Class Record:	**10**	**06**
Viva Voce:	**10**	**06**

Practical: 80 48