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.

BCOM.(CS) END SEMESTER EXAMINATION APRIL/NOV - 2021 SEMESTER - III

20UBCCT3008 - Statistics-I

| Total Durat | ion: 3 Hrs | Total Marks: 75 |
|-------------|-----------------|------------------|
| MCQ | : 30 Mins | MCQ : 15 |
| Descriptive | : 2 Hrs.30 Mins | Descriptive : 60 |

Section B

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

- 1. Explain the methods of collecting primary data.
- 2. Explain the significance of diagrammatic representation of data.
- 3. Find the first and third quartile for the following data.

| CI | 0-4 | 4-8 | 8-10 | 10-13 | 13-16 | 16-20 |
|----|-----|-----|------|-------|-------|-------|
| F | 5 | 7 | 6 | 3 | 7 | 2 |

4. Find the geometric mean.

| X | 2 | 6 | 8 | 10 | 12 | 15 | 14 |
|---|---|---|---|----|----|----|----|
| F | 5 | 4 | 7 | 3 | 4 | 2 | 1 |

- 5. State the properties of standard deviation and give examples.
- 6. Find the mean deviation from mean and its coefficient.

23 10 47 5 14 18 20 23.

- 7. Define skewness and explain its types.
- 8. Find bowley's coefficient of skewness.

| CI | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 30-70 |
|----|------|-------|-------|-------|-------|-------|-------|
| F | 5 | 8 | 4 | 9 | 5 | 7 | 2 |

Section C

Answer any **THREE** questions $(3 \times 10 = 30 \text{ Marks})$

- 9. Write the scope of statistics in various field.
- 10. Draw histogram and find the value of mode.

| CI | 0-8 | 8-16 | 16-24 | 24-32 | 32-40 | 40-48 | 48-56 |
|----|-----|------|-------|-------|-------|-------|-------|
| F | 5 | 8 | 16 | 10 | 5 | 8 | 4 |

11. Find the Mean, Median and mode for the following data.

| Income | <100 | <200 | <300 | <400 | < 500 | <600 | <700 |
|----------------|------|------|------|------|-------|------|------|
| No. of persons | 12 | 24 | 40 | 52 | 60 | 68 | 70 |

12. Find the Consistent and Best Series from the following data.

| Series A | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|
| Series B | 42 | 42 | 40 | 32 | 38 | 28 | 50 | 20 | 25 | 30 |

13. Find the karl pearson coefficient of skewness.

| CI | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 |
|----|-----|------|-------|-------|-------|-------|-------|-------|
| F | 5 | 10 | 12 | 6 | 8 | 10 | 5 | 8 |