

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.

B.B.A. END SEMESTER EXAMINATIONS APRIL-2023

SEMESTER - III

20UBACT3007 - Business Statistics - I

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

1. What is the importance of studying statistics?
2. Distinguish between discrete data and continuous data.
3. Explain the different measures of central tendency.
4. Calculate the Geometric mean for the following table; given the weight of 31 persons in the sample survey.

Wg (lbs)	130	135	140	145	146	148	149	150	157
f	3	4	6	6	3	5	2	1	1

5. What is Frequency and class interval in a frequency distribution table?
6. Calculate the Quartile deviation and its coefficient from the following data:

X	20	30	40	50	60	70	80
f	13	61	47	15	10	18	36

7. Find the variance and the standard deviation for the following data:

x_i	4	8	11	17	20	24	32
f_i	3	5	9	5	4	4	1

8. Obtain the two regression lines from the following data:

$$N=20, \sum X = 80, \sum Y = 80, \sum X^2 = 1680, \sum Y^2 = 320, \sum XY = 480.$$

Section C

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

9. Brief note on the scope and limitations of statistics.

Contd...

10. Construct a frequency distribution table for the following weights (in gm) of 30 oranges using the equal class intervals, one of them is 40-45 (45 not included). The weights are: 31, 41, 46, 33, 44, 51, 56, 63, 71, 71, 62, 63, 54, 53, 51, 43, 36, 38, 54, 56, 66, 71, 74, 75, 46, 47, 59, 60, 61, 63.

- What is the class mark of the class intervals 50-55?
- What is the range of the above weights?
- How many class intervals are there?
- Which class interval has the lowest frequency?

11. Find the Mean, Median and Mode of the following data:

Size	40 - 49	50 - 59	60-69	70-79	80-89	90-99
Frequency	6	8	12	14	7	3

12. Compute mean deviation about median from the following data:

Height in inches	No. of students
58	15
59	20
60	32
61	35
62	35
63	22
64	20
65	10
66	8

13. Calculate Spearman's correlation for the following data

X	300	450	800	250	500	975	475	400
Y	273	486	734	297	631	872	396	475

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.

B.B.A. END SEMESTER EXAMINATIONS APRIL-2023

SEMESTER - III

20UBACT3007 - Business Statistics - I

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

1. What is the importance of studying statistics?
2. Distinguish between discrete data and continuous data.
3. Explain the different measures of central tendency.
4. Calculate the Geometric mean for the following table; given the weight of 31 persons in the sample survey.

Wg (lbs)	130	135	140	145	146	148	149	150	157
f	3	4	6	6	3	5	2	1	1

5. What is Frequency and class interval in a frequency distribution table?
6. Calculate the Quartile deviation and its coefficient from the following data:

X	20	30	40	50	60	70	80
f	13	61	47	15	10	18	36

7. Find the variance and the standard deviation for the following data:

x_i	4	8	11	17	20	24	32
f_i	3	5	9	5	4	4	1

8. Obtain the two regression lines from the following data:

$$N=20, \sum X = 80, \sum Y = 80, \sum X^2 = 1680, \sum Y^2 = 320, \sum XY = 480.$$

Section C

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

9. Brief note on the scope and limitations of statistics.

Contd...

10. Construct a frequency distribution table for the following weights (in gm) of 30 oranges using the equal class intervals, one of them is 40-45 (45 not included). The weights are: 31, 41, 46, 33, 44, 51, 56, 63, 71, 71, 62, 63, 54, 53, 51, 43, 36, 38, 54, 56, 66, 71, 74, 75, 46, 47, 59, 60, 61, 63.

- What is the class mark of the class intervals 50-55?
- What is the range of the above weights?
- How many class intervals are there?
- Which class interval has the lowest frequency?

11. Find the Mean, Median and Mode of the following data:

Size	40 - 49	50 - 59	60-69	70-79	80-89	90-99
Frequency	6	8	12	14	7	3

12. Compute mean deviation about median from the following data:

Height in inches	No. of students
58	15
59	20
60	32
61	35
62	35
63	22
64	20
65	10
66	8

13. Calculate Spearman's correlation for the following data

X	300	450	800	250	500	975	475	400
Y	273	486	734	297	631	872	396	475
