Assignment II: Unit I

Note: Submission date 12th January 2023.

1. The rainfall recorded at two cities are given below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| City A | 30 | 28 | 34 | 28 | 27 | 31 |
| City B | 32 | 26 | 40 | 25 | 28 | 34 |

Use appropriate measure of dispersion and comment on the variation.

2. Calculate quartile deviation for the following data:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Class interval | 100-149 | 150-199 | 200-249 | 250-299 | 300-349 |
| Frequency | 15 | 18 | 14 | 20 | 17 |

3. Calculate Mean Deviation from median for the following data:

Marks: 52, 61, 40, 62, 47, 61, 56.

4. Calculate Mean & mean deviation from mean from the following data. Also calculate its coefficient.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. of leaves taken in a year | 9 | 11 | 13 | 15 | 17 |
| No. of employees | 8 | 12 | 22 | 11 | 7 |

5. Calculate arithmetic mean & standard deviation for the following data:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marks | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| No. of students | 4 | 10 | 16 | 12 | 8 |

6. Calculate combined mean of the two groups for the following data & hence check

which group is more consistent.

|  |  |  |
| --- | --- | --- |
|  | Group I | Group II |
| Number | 100 | 200 |
| Mean | 50 | 45 |
| S.D | 5 | 3 |

7. Calculate standard deviation for the following data. Also find its coefficient of variation.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Marks | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 |
| No. of students | 3 | 15 | 27 | 15 | 8 | 2 |

8. Calculate quartile deviation and its coefficient for the following data:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Class interval | Below 5 | 5-10 | 10-15 | 15-20 | 20 and above |
| Frequency | 6 | 9 | 20 | 18 | 9 |

9. Calculate coefficient of range from the following data:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marks | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| No. of students | 8 | 10 | 12 | 8 | 4 |

10.Calculate mean deviation from mean for the following data:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Daily wages in Rs. | 200-400 | 400-600 | 600-800 | 800-1000 | 1000-1200 | 1200-1400 |
| No. of workers | 8 | 15 | 22 | 15 | 13 | 7 |