

Class Test
Dispersion

Date: 28/6/23

Full Marks: 20

1. Suppose a variable assumes the values 'a' and 'b' and $(n-2)$ other values all equal to $\frac{a+b}{2}$. Find the standard deviation. (4)
2. For a distribution of 85 observations, the mean and s.d. were found to be 57 and 3.5 respectively. On checking it was discovered that two observations which should correctly read as 36 and 69, had been wrongly recorded as 46 and 76 respectively. (5)
3. The scores of two golfers for 10 rounds each are ;
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|-----|----|----|----|----|----|----|----|----|----|----|
| A : | 58 | 59 | 60 | 54 | 65 | 66 | 52 | 75 | 69 | 52 |
| B : | 84 | 56 | 92 | 65 | 86 | 78 | 44 | 54 | 78 | 68 |
- Which may be regarded as the more consistent player? (5)
9. Show that mean absolute deviation is least when it is measured about median. (6)