VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

III. Measures of Central Tendency

1. Calculate (i) Mean (ii) Median (iii)S.D(iv) first four moments (both raw and central moments) for the following data: 9,27,18,54,45,72,36,63 and 81.

2. In a class of 50 students, 10 have failed and their average mark is 25. The total marks secured by the entire class are 2810. Using R find the average marks of those who have passed.

3. Coefficient of variation of two different distributions are 58% and 69%. Their standard deviations are 21.2 and 15.6 respectively. Find their arithmetic means using R.

4. The mean and standard deviation of 200 items are found to be 60 and 20 respectively. At the time of calculation two items were wrongly taken as 3 and 67 instead of 13 and 17, using R find the correct mean and standard deviation.

5. Mean and standard deviation of 100 items are calculated by a student as 50 and 5. But while calculating them, 2 items were taken as 40 and 50 instead of 30 and 60. Using R find the correct mean and standard deviation.

6. A sample of 90 values has mean 55 and standard deviation 3. A second sample of 110 values has mean 60 and standard deviation 2. Using R find the mean and standard deviation of the combined sample of 200 values.