Exercise 14.4

1. The following number of goals were scored by a team in a series of 10 matches:

2, 3, 4, 5, 0, 1, 3, 3, 4, 3

Find the mean, median & mode of these scores.

→ The data has 10 values. We arrange these values in the ascending order as below:

0, 1, 2, 3, 3, 3, 3, 4, 4, 5.

i) Mean $= \frac{0+1+2+3+3+3+3+4+4+5}{10} = \frac{28}{10}$

$= 2.8$

ii) We have 5th & 6th values each equal to 3 as the two middle most values.

Median $= \frac{3+3}{2} = 3$

iii) mode = 3

2. In a mathematics test given to 15 students, the following marks (out of 100) are recorded:

41, 39, 48, 52, 46, 62, 54, 40, 96, 52, 98, 40, 42, 52, 60

Find the mean, median & mode of this data.

→ Mean = $\frac{41+39+48+52+46+62+54+40+96+52+98+40+42+52+60}{15}$

$= \frac{823}{15} = 54.9$

First of all, we have to find median, arranging the given data in an ascending order:

39, 40, 40, 41, 42, 46, 48, 52, 52, 52, 54, 60, 62, 96, 98

$n = 15$, an odd number

Median = $\left(\frac{n+1}{2}\right)^{th}$ term = $\left(\frac{15+1}{2}\right)^{th}$ term = 8th term

Median = 52

Mode = 52 as it the maximum no of times.