

14.4

1.) The no. of goals scored by the team is 2, 3, 4, 5, 0, 1, 3, 3, 4, 3.

Mean of data = $\frac{\text{Sum of all observations}}{\text{Total number of observations}}$

$$\text{Mean score} = \frac{2+3+4+5+0+1+3+3+4+3}{10}$$

$$= \frac{28}{10}$$

$$= 2.8 \text{ goals}$$

Arranging the numbers of goals in ascending order, 0, 1, 2, 3, 3, 3, 4, 4, 5

The number of observations is 10, which is an even number. Therefore

$$\text{Median} = \frac{5^{\text{th}} \text{ term} + 6^{\text{th}} \text{ term}}{2} = \frac{3+3}{2}$$

$$= \frac{6}{2} = 3$$

Mode of data is the observation with the maximum frequency in data.

Therefore, the mode score of data is 3 as it has the maximum frequency as 4 in the data.

2. > So, Mean of data = $\frac{41+39+48+52+46+62+54+40+96+52+98+40+54+52+52}{15}$

$= \frac{822}{15} = \underline{\underline{54.8}}$

Arranging the scores obtained by 15 students in ascending order,

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

As the no. of observations is 15 which is odd therefore, the median of data will be $\frac{(15+1)}{2} = 8^{\text{th}}$ observation whatever the data is arranged in an ascending or descending order.

Therefore, median score of data = 52

Mode of data is the observation with the maximum frequency in data. Therefore, mode of this data is 52 having the highest frequency in data as 3.