

Ex. 14.4 Class IX

1. obs. in ascending order are 0, 1, 2, 3, 3, 3, 3, 4, 4, 5

$$(A) \text{ Mean} = \frac{\text{Sum of all obs.}}{\text{no. of obs.}}$$

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

$$= 2.8$$

$$(B) \text{ Mode} = 3 \quad (\because 3 \text{ is most frequent})$$

$$(C) \text{ no. of obs.} = 10 \text{ (even)}$$

$$\text{Middlemost obs. } \frac{n}{2}, \frac{n}{2} + 1$$

$$= \frac{10}{2}, \frac{10}{2} + 1$$

$$= 5^{\text{th}}, 6^{\text{th}}$$

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

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

$$= 3$$

2. obs. in asc. order are

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

$$(A) \text{ Mean} = \frac{822}{15} = 54.8$$

$$= 54.8$$

$$(B) \text{ Mode} = 52 \quad (\because \text{it is most frequent})$$

$$(C) \text{ no. of obs.} = 15 \text{ (odd)}$$

$$\text{Middlemost obs} = \frac{n+1}{2}$$

$$= \frac{16}{2}$$

$$= 8^{\text{th}}$$

$$\text{Median} = 52$$