Chapter 5
Measures of Central Tendency

1 Marks Questions

1. What is meant by central tendency?.

Ans. Single figure that represents the whole series is known as central tendency.

2. What are the types of mean?.

Ans. There are two types of mean simple and weighted.

3. Name any two partition values.

Ans. (i) Quartile (ii) Deciles (iii) Percentile

4. Give the meaning of arithmetic average.

Ans. When the sum of all items is divided by their number is known as arithmetic average.

5. Define mode.

Ans. The value which occurs most frequently in series is known as mode.

6. Pocket money of 8 students is Rs. 6,12,18, 24, 30, 36, 42 and 48, calculate mean.

Ans.

$$\overline{X} = \frac{X_1 + X_2 + X_3 + \text{---------} X_N}{N}$$

$$= \frac{6+12+18+24+30+36+42+48}{8}$$

$$= \frac{216}{8} = 27$$

7. Write the formula for weighted mean.

Ans.

$$\overline{X}_W = \frac{\sum W X}{\sum W}$$

8. What is the relation among the mean, median and mode?

Ans. Mode = 3 median 2 mean

9. Which partition value divide the total set of values into four equal parts.

Ans. Quartile

10. Give the meaning of combined mean.

Ans. When the mean of two or more than two series is computed collectively, it is known as combined mean.

11. A shoes manufacturing company only manufactures shoes for adults. Company wants to know the most popular size. Which type of central tendency will be the most appropriate?

Ans. Mode.

12. Which diagram is used for finding the value of mode graphically?

Ans. Histogram.

13. Mention one demerit of mode.

Ans. One demerit of mode is that it is not capable of algebraic treatment.

14. If the values of mean and median are 40 and 48. Find out the most probable value of mod.

Ans. Mode = 3 median 2 mean

= (3x 48) (2 x 40) = 144 80

= 64

15. Calculate mode from the following data 10, 8, 10, 6, 4, 12, 10, 8, 10, 18, 16, 10, 18, 10, 10.

Ans. Mode = 10

16. How is the value of median computed with the help of give curves?.

Ans. The point of intersection where 'less than' give curve and 'more than' give curve intersect each other gives us the value of median.

17. What is positional average?

Ans. Those averages whose value is worked out on the basis of their position in the statistical series.

18. What is the sum of deviations taken from mean in a series.

Ans. Zero.