## ACBSE Coaching for Mathematics and Science

## Class 07 Statics: Mean, Median, Mode, Pictograph, Bar Graph and Frequency Table SDV Book

## Test paper- 02

1. Find the mode from the following frequency distribution.

| Number    | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|-----------|----|----|----|----|----|----|----|----|
| Frequency | 6  | 17 | 8  | 15 | 18 | 9  | 10 | 12 |

2. Fill in the blanks

(a) The median of data 13, 17, 19, 21, 22 will be -----

(b)The value which occur maximum times in the given data is called ------

(c) Empirical formula is  $3(\text{median}) - 2(\text{Mean}) = \cdots$ .

(d) For what value of P the following data have 6 as model value ------ . { 2,4,6,6,4,9,6,9,3,P,4}

(e) For a given data, which of the following can be determined earliest. {Range,Mean,Median,Mode}

(f) For what value of x, the following data will have 4 as the mode? 2, 4, 6, 6, 4, 9, 3, 9, 3, x, 2

(g) While drawing a vertical bar graph, numerical data is shown -------

(i) on the horizontal axis

(iii) neither on horizontal nor on vertical axis

3.. Write true and false :

(a) The data 1,5, 6, 7, 8 has mean 7. (b) Mean and Median may be different for a given data.

(c) The mode is always one of the numbers in a data. (d) Mode is average of the numbers present in the data.

(ii) on the vertical axis

(iv) on any of the two axes

4. Find the value of unknown numbers if the median of the following data is 48, the data is in the in ascending order. 8, 14, 25, 33, x, x+ 4, 56, 69, 74, 80

5. If the median of 46, 64, 67, 60, 56, 45, 32, 55, 41, 90 is x - 5, find the value of x.

6. Find the value of x if the value of x/39 is the mode of the following data.

 $\frac{5}{15}, -\frac{2}{18}, \frac{3}{7}, \frac{1}{3}, \frac{9}{21}, \frac{25}{75}, \frac{1.3}{3.9}, \frac{8}{-72}, \frac{1}{9}, -\frac{81}{189}, -\frac{18}{162}, \frac{x}{39}, -\frac{15}{45}$ 

7. The mean, median and mode of four natural numbers is 8. The smallest number is 7. Find the other 3 numbers.

8. For what value of x, the following data will have the same mean, median and the mode?

7, 8, 10, x, 11, 14, 16

9. The mean marks secured by a student in five subjects is 75. If one more subject in which he secured 72 marks is included, calculate the new mean.

10. The mean of first 25 observations is 65 and the mean of next 10 observations is 62. Find the mean of all 35 observations.