

## 14. STATISTICS

1. The 'h' indicates in mode

$$\text{Mode} = l + \left[ \frac{f - f_0}{2f_1 - f_0 - f_1} \right] \times h \text{ is } \underline{\hspace{2cm}}$$

2. Mid values are used in calculating \_\_\_\_\_
3. Mean of 23, 24, 24, 22 and 20 is \_\_\_\_\_
4.  $\sum f_i x_i = 1390$ ,  $\sum f_i = 35$  then mean  $\bar{x}$  \_\_\_\_\_
5. \_\_\_\_\_ is based on all observations?
6. If the mode of the following data is 7, then the value of 'k' in 6, 3, 5, 6, 7, 5, 8, 7, 6, 2k+1, 9, 7, 13 is \_\_\_\_\_
7. The data arranged in descending order has 25 observations. \_\_\_\_\_ observation represents the median.
8. A. M. of  $6, -4, \frac{2}{3}, 1\frac{1}{4}, \frac{-7}{6}$  is \_\_\_\_\_
9. Median of 17, 31, 12, 27, 15, 19 and 23 is \_\_\_\_\_
10. A. M. of 1, 2, 3, ....., 10 is \_\_\_\_\_
11. Range of 1, 2, 3, 4, ....., n is \_\_\_\_\_
12. For the given data with 50 observations 'the less than ogive' and 'the more than 'ogive' intersect at (15.5, 20). The Median of the data is \_\_\_\_\_
13. The Mean of first 'n' odd natural numbers is  $\frac{n^2}{81}$ . then n = \_\_\_\_\_
14. A. M of 1, 2, 3, ....., n is \_\_\_\_\_
15. If the mean of 6, 7, x, 8, y, 14 is 9, then x = \_\_\_\_\_
16. The A.M. of 30 students is 42. Among them, two students got zero marks. Then A.M. of the remaining students is \_\_\_\_\_

17.

Marks	10	20	30
Number of students	5	9	3

From the above data the value of median is \_\_\_\_\_

18. Data having one Mode is called \_\_\_\_\_
19. A.M. of 1, 2, 3, ....., n is \_\_\_\_\_
20. Sum of all deviations taken from A.M. is \_\_\_\_\_
21. Mode of A, B, C, D, ....., Z is \_\_\_\_\_
22. Mean of first 5 Prime numbers is \_\_\_\_\_
23. The observation of an ungrouped data in their ascending order are 12, 15, x, 19, 25. If the Median of the data is 18, then x = \_\_\_\_\_
24. A.M. of a-2, a, a+2 is \_\_\_\_\_
25. Median of 1, 2, 4, 5 is \_\_\_\_\_
26. Class mark of the class 'x-y' is \_\_\_\_\_
27. L. C. F curve is drawn by using \_\_\_\_\_ and the corresponding cumulative frequency.
28. The modal class for the following distribution is \_\_\_\_\_

x	f
below 10	3
below 20	12
below 30	27
below 40	57
below 50	75
below 60	80

29. If the A. M of x, x+3, x+6, x+9 and x+12 is 10, then x = \_\_\_\_\_
30. If 35 is removed from the data 30, 34, 35, 36, 37, 38, 39, 40. then the Median increases by \_\_\_\_\_
31. Range of first 10 Whole numbers is \_\_\_\_\_
32. Construction of Cumulative frequency table is useful in determining the \_\_\_\_\_
33. Exactly middle value of data is called \_\_\_\_\_
34. In the formula of Mode

$$= l + \left[ \frac{f_1 - f_0}{2f - f_0 - f_2} \right] \times h, f_0 \text{ represents } \underline{\hspace{2cm}}$$

35. Median  $M = l + \left[ \frac{\frac{n}{2} - cf}{f} \right] \times n$ ; 'l' represents \_\_\_\_\_
36. The term "ogive" is derived from \_\_\_\_\_
37. Range of the data 15, 26, 39, 41, 11, 18, 7, 9 is \_\_\_\_\_
38. The Mean of first 'n' natural number is \_\_\_\_\_
39. Median of first 'n' natural number is \_\_\_\_\_

## ANSWERS

- 1) Length of the Class Interval;  
 2) Arithmetic Mean; 3) 22.6; 4) 39.71;  
 5) Mean; 6) 3; 7) 13th; 8) 0.55; 9) 19;  
 10) 5.5; 11) n-1; 12) 15.5; 13) 81;
- 14)  $\frac{n+1}{2}$  15)  $x + y = 19$ ; 16) 45; 17) 9;
- 18) unimodal data; 19)  $\frac{n+1}{2}$ ; 20) 0;  
 21) no mode; 22) 5.6; 23) 18; 24) a;
- 25) 3; 26)  $\frac{x+y}{2}$ ; 27) upper boundary; 28) 30 - 40; 29) 4; 30) 0.5;  
 31) 9;  
 32) Median; 33) Median; 34) frequency of preceding modal class;  
 35) lower limit of Median class; 36) ogee; 37) 34;
- 38)  $\frac{n+1}{2}$ ; 39)  $\frac{n+1}{2}$ .