**ASSIGNMENT (2020-21)**

**CLASS - X SUBJECT – MATHEMATICS**

**CH – 14 (STATISTICS)**

1. Construction of a cumulative frequency table is useful determining the

 $\left(a\right) $Mean $\left(b\right) $mode $\left(c\right) $medien $\left(d\right) $all of the above

1. The abscissa of the point of interaction of the ‘less than type’ and of the ‘more than type’ cumulative frequency curve of grouped data gives

       $\left(a\right)$ Mode  $\left(b\right)$ Median $\left(c\right) $mean $\left(d\right)$ all of the above

1. What should be the modal class

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Classes | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| Frequencies | 5 | 6 | 13 | 38 | 30 | 4 |

 $\left(a\right)$ 10-20 $\left(b\right)$ 30-40 $\left(c\right)$40-50 $\left(d\right)$50-60

1. What should come in the blank? Mode= (…………..) –2 (mean)

$\left(a\right)$ 3 (median) $\left(b\right)$ 4 (median) $\left(c\right)$2 (median) $\left(d\right)$ 5 (median)

1. Find the missing frequencies when the mean of data is 53.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Age (in years) | 0-20 | 20-40 | 40-60 | 60-80 | 80-100 | Total |
| Number of people | 15 | X | 21 | y | 17 | 100 |

1. Draw the cumulative frequency curve by more than method from the following data:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Income | 0 – 1000 | 1000 – 2000 | 2000 – 3000 | 3000 – 4000 | 4000 – 5000 | 5000 - 6000 |
| Number of persons | 7 | 15 | 35 | 28 | 10 | 5 |

1. Find the mean, median and the mode of the following frequency distribution.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Class | 1. 10
 | 10 - 20 | 20 – 30  | 30 – 40  | 40 - 50 | 50 - 60 | 60 - 70 |
| Frequency | 4 | 5 | 7 | 10 | 12 | 8 | 4 |

1. Find value of ‘q’ when mean is 47. 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Class | 0 – 20  | 20 – 40  | 40 – 60  | 60 – 80  | 80 – 100  |
| Frequency | 8 | 15 | 20 | q | 5 |

1. The percentage of marks obtained by 100 students in an examination are given below:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Marks | 30 – 35  | 35 – 40  | 40 – 45  | 45 – 50  | 50 – 55  | 55 – 60  | 60 – 65  |
| Frequency | 14 | 16 | 18 | 23 | 18 | 8 | 3 |

1. Draw a ‘less than ogive’ for the following data:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Class | 1 - 4 | 4 – 7  | 7 – 10  | 10 – 13  | 13 – 16  | 16 – 19  |
| Frequency | 6 | 30 | 40 | 16 | 4 | 4 |