INDIAN SCHOOL AL WADI AL KABIR
Dept. of Mathematics 2021-2022
Class XI - Revision Work Sheet (WS_4)

## Statistics

| 1 | Identify the scale of measurement for the following: <br> Military title : Lieutenant, Captain, Major <br> (a)Nominal <br> (b)Ordinal <br> (c)Internal <br> (d) Ratio |
| :---: | :---: |
| 2 | Identify the scale of measurement in the given scenario. <br> The teacher records the marks of statistics test of class XI students. <br> (a)Nominal <br> (b)Ordinal <br> (c)Interval <br> (d) Ratio |
| 3 | Identify the scale of measurement in the given scenario. <br> A meteorologist records the temperature of the days in ${ }^{\circ} \mathrm{C}$ for the month of January. <br> (a)Nominal <br> (b)Ordinal <br> (c)Interval <br> (d)Ratio |
| 4 | City of birth is an examples of a/an <br> (a) Nominal scale <br> (b) Ordinal scale <br> (c) Interval scale <br> (d) Ratio scale |
| 5 | Two graphical representations that can be used to represent nomial data are <br> (a) bar chart and histogram <br> (c) bar chart and pie chart <br> (b) pie chart and histogram <br> (d) histogram and frequency polygon |
| 6 | For drawing a frequency polygon of a continuous frequency distribution we plot the points whose ordinates are the frequencies of the respective classes and abscissae are respectively: <br> (a) upper limits of the classes <br> (b) lower limits of the classes <br> (c) class marks of the classes <br> (d) upper limits of preceding classes |
| 7 | Which of the following is used to visually examine the relationship between two quantitative variables? <br> (a) bar graphs <br> (b) pie charts <br> (c) histograms <br> (d) scatter plots |
| 8 | The measure of central tendency of a statistical data which takes into account all the data is <br> (a) mean <br> (b) median <br> (c) mode <br> (d) range |
| 9 | The mean of five numbers is 30 . If one number is excluded, their mean becomes 28 . The excluded number is <br> (a) 28 <br> (b) 30 <br> (c) 35 <br> (d) 38 |

10 The mean of 100 observations is 50 . If one of the observation which was 50 is replaced by 150 , then the resulting mean will be
(a) 50.5
(b) 51
(c) 51.5
(d)52

11 If $\bar{x}$ is the mean of n observations $\mathrm{x}_{1}, \mathrm{x}_{2}, \mathrm{x}_{3} \cdots \ldots, \mathrm{X}_{\mathrm{n}}$, then the value of $\sum(\mathrm{xi}-\bar{x})$ is
(a) -1
(b) 0
(c) 1
(d) $n-1$

12 Median of the numbers $4,4,5,7,6,7,7,3,12$ is
(a) 4
(b) 5
(c) 6
(d) 7

13 The median of the data $78,56,22,34,45,54,39,68,54,84$ is
(a) 45
(b) 49.5
(c) 54
(d) 56

14 The most frequently occurring number in a set of values is called
(a) mean
(b) median
(c) mode
(d) range

15 Mode of the data : $15,14,19,20,14,15,16,14,15,18,14,19,15,17,15$ is
(a) 14
(b) 15
(c) 16
(d) 17

16 The variance of first 5 natural numbers is
(a) 1
(b) 2
(c) 3
(d) 4

17 If for a distribution $\Sigma \mathrm{x}_{\mathrm{i}}{ }^{2}=2400$ and $\Sigma \mathrm{x}_{\mathrm{i}}=250$ and the total number of observations is 50, then standard deviation is
(a) $\sqrt{ } 20$
(b) $\sqrt{ } 21$
(c) $\sqrt{ } 22$
(d) $\sqrt{ } 23$

18 The mean of 100 observations is 50 and their standard deviation is 10 . If 5 is added to each observation, then new mean and new standard deviation respectively will be
(a)50,10
(b) 50,15
(c) 60,10
(d) 55,10

19 A set of $n$ variates $\mathrm{x}_{1}, \mathrm{x}_{2}, \mathrm{x}_{3} \ldots \ldots . . . \mathrm{x}_{\mathrm{n}}$ has mean $\bar{x}$ and standard deviation $\sigma$. The mean and standard deviation of $n$ values $\frac{x_{1}}{k}, \frac{x_{2}}{k}, \frac{x_{3}}{k}, \ldots \ldots \ldots \ldots \ldots \ldots \frac{x_{n}}{k}(\mathrm{k} \neq 0)$ respectively are
(a) $\mathrm{k} \bar{x}, \frac{\sigma}{k}$
(b) $\frac{\bar{x}}{k}, \frac{\sigma}{k}$
(c) $\mathrm{k} \bar{x}, \mathrm{k} \sigma$
(d) $\frac{\bar{x}}{k}, \mathrm{k} \sigma$

20 The mean, median and Karl Pearson's coefficient of Skewness of a frequency distribution are 50,54 and -0.5 respectively. The standard deviation of the distribution is
(a)24
(b) 25
(c) 12
(d) 15

| Answers |  |  |  |  |  |  |  |  |  |  |
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|  | $\mathbf{1 ( b )}$ | 2(d) | 3(c) | 4(a) | 5(c) | $\mathbf{6 ( c )}$ | 7(d) | 8(a) | 9(d) | 10(b) |
|  | $\mathbf{1 1 ( b ) ~}$ | $\mathbf{1 2 ( c )}$ | $\mathbf{1 3 ( c )}$ | $\mathbf{1 4 ( c )}$ | $\mathbf{1 5 ( b )}$ | $\mathbf{1 6 ( b )}$ | $\mathbf{1 7 ( d )}$ | $\mathbf{1 8 ( d )}$ | $\mathbf{1 9 ( b )}$ | 20(a) |

