THE LAIDLAW MEMORIAL SCHOOL AND JUNIOR COLLEGE, KETTI
ENTRANCE EXAMINATION
SUBJECT: MATHEMATICS
CLASS : VIII
READING TIME : 5 Mins
WRITING TIME : 1 HOUR
DATE : / /2022
TOTAL MARKS : 25
NO. OF PAGES : 02
I Answer the following:
$10 \times 1=10$

1) Subtract the sum of -524 and 678 from - 92 .
2) Which is greater $: \frac{2}{3}$ or $\frac{7}{9}$ ?
3) Solve: $4.56+0.8+32.5$
4) Insert three rational numbers between $\frac{3}{9}$ and $\frac{3}{7}$.
5) Find the value of $x$, if $2^{x}=32$.
6) If $A=\{3,4,5,6\}, B=\{2,5,6,7,8\}$, find $A \cup B$.
7) Divide $₹ 1500$ among $\mathrm{A}, \mathrm{B}$ and C in the ratio $2: 5: 3$.
8) Find $20 \%$ of 250 .
9) Add: $4 a^{3} b-7 a^{2} b^{2}+8 a b, 6 a^{2} b^{2}-a b-6 a^{3} b$.
10) The following number of goals were scored by a team in a series of 10 matches. $2,3,4,5,1,2,3,3,4,3$. Find the median score.

## II Answer the following:

 $\mathbf{5 \times 2}=10$1) One - fourth of a number decreased by 7 gives 5 . Find the number.
2) In the figure given below, $\mathrm{AB} \| \mathrm{CD}$ and EF is a transversal intersecting the parallel lines AB and CD at G and H respectively. Find the values of $x$ and $y$

3) The angles of a triangle are in the ratio $5: 4: 3$. Find the measure of each angle.
4) Find the area of square plot whose perimeter is 136 m .
5) If the mean of $24, x, 25,28,26$ and 34 is 29 . Find the value of $x$.

## III Answer any two of the following:

1) What must be added to $2 x^{2} y^{2}-5 x+7$ to get the sum $-5 x^{2} y^{2}+7 x-9$ ?
2) Solve: $\frac{x-2}{3}+1>\frac{x-3}{5}, x \in I$
3) A field is in the form of a parallelogram. Its one diagonal is 80 m long and the perpendicular distance of this diagonal from either of the outlying vertices is 20 m as shown in figure. Find the area of the field.

