## TERM 2

Model question 3 T2
7th Standard
Maths
Reg.No. $\square$

## I.Answer all the questions.

## II.Use blue pen only.



Part-A

1) The two quantities to be compared are called the $\qquad$ of the ratio.
2) The first term of the ratio is called the $\qquad$ and the second term is called the $\qquad$ -.
3) In ratio, only quantities in the $\qquad$ units can be compared.
4) If the terms of the ratio have common factors, we can reduce it to its lowest terms by cancelling the $\qquad$ -.
5) When both the terms of a ratio are multiplied or divided by the same number (other than zero) the ratio remains $\qquad$ The obtained ratios are $\qquad$ .

Equality of two ratios is called a $\qquad$ If a,b;c,d are in proportion, then a:b::c:d.
In a proportion, the product of extremes= $\qquad$ _.
Part-B
8) Find the area of a rhombus whose diagonals are $15 \mathrm{~cm}, 12 \mathrm{~cm}$
9) Find the area of a rhombus whose diagonals are $13 \mathrm{~cm}, 18.2 \mathrm{~cm}$
10) Find the area of a rhombus whose diagonals are $74 \mathrm{~cm}, 14.5 \mathrm{~cm}$
11) Find the area of a rhombus whose diagonals are $20 \mathrm{~cm}, 12 \mathrm{~cm}$
12) One side of a rhombus is 8 cm and the altitude ( height ) is 12 cm . Find the area of the rhombus.
13) Area of a rhombus is 4000 sq . m . The length of one diagonal is 100 m . Find the other diagonal.
14) A field is in the form of a rhombus. The diagonals of the field are 70 m and 80 m .

Find the cost of levelling it at the rate of Rs3 per sq. m.
15) Find the area of the parallelogram whose base and height are:
(i) $\mathrm{b}=14 \mathrm{~cm}, \mathrm{~h}=18 \mathrm{~cm}$
16) Find the area of the parallelogram whose base and height are:
ii) $\mathrm{b}=15 \mathrm{~cm}, \mathrm{~h}=12 \mathrm{~cm}$
17) Find the area of the parallelogram whose base and height are:
(iii) $\mathrm{b}=23 \mathrm{~cm}, \mathrm{~h}=10.5 \mathrm{~cm}$
18) Find the area of the parallelogram whose base and height are:
(iv) $\mathrm{b}=8.3 \mathrm{~cm}, \mathrm{~h}=7 \mathrm{~cm}$
19) One of the sides and the corresponding height of a parallelogram are 14 cm and 8 cm respectively. Find the area of the parallelogram
20) A ground is in the form of a parallelogram. Its base is 324 m and its height is 75 m . Find the area of the ground
21) Find the height of the parallelogram which has an area of $324 \mathrm{sq} . \mathrm{cm}$. and a base of 27 cm .
22) In the given figure, state the property that is used in each of the following statement
(i) If $1 \| m$ then $\angle 1=\angle 5$
(ii) If $\angle 4=\angle 6$ then I $\| \mathrm{m}$
(iii) If $\angle 4+\angle 5=180^{\circ}$ then $I \| m$

23) Name the required angles in the figure
i) The angle vertically opposite to $\angle A M N$
(ii) The angle alternate to $\angle \mathrm{CNQ}$
(iii) The angle corresponding to $\angle B M P$
(iv) The angle corresponding to $\angle B M N$

24) In the given figure identify
(i) Pairs of corresponding angles
(ii) Pairs of alternate interior angles.
(iii) Pairs of interior angles on the same side of the transversal
(iv) Vertically opposite angles

25) Given I||m, find the measure of $x$ in the following figures

26) Given I\| $m$, find the measure of $x$ in the following figures

27) Given I\|m, find the measure of $x$ in the following figures

28) Given $I \| m$, find the measure of $x$ in the following figures

29) Given $I \| \mathrm{m}$ and $\angle 1=70^{\circ}$, find the measure of $\angle 2, \angle 3, \angle 4, \angle 5, \angle 6, \angle 7$ and $\angle 8$

30) In the given figures below, decide whether I || m ? Give reasons?

31) In the given figures below, decide whether I \|m? Give reasons?

32) In the given figures below, decide whether I ||m? Give reasons?

33) In the given figures below, decide whether I || m? Give reasons?

34) Given I\|m, find the measure of $\angle 1$ and $\angle 2$ in the figure shown.

35) Construct the angles of following measures with ruler and compass. $60^{\circ}$
36) Construct the angles of following measures with ruler and compass. $30^{\circ}$
37) Construct the angles of following measures with ruler and compass. $120^{\circ}$
38) Construct the angles of following measures with ruler and compass. $90^{\circ}$

