# T3-Geometry And Pratical Geometry <br> Model Question Paper VIII 

## Maths

Reg.No.

## I. Answer all the questions

Time : 01:15:00 Hrs

1) The point of concurrency of the medians of a triangle is known as
(a) incentre
(b) circle centr
(c) orthocentre
(d) centroid
2) The point of concurrency of the angle bisectors of a triangle is known as
(a) incentre
(b) circle centre
(c) orthocentre
(d) centroid
3) The point of concurrency of the perpendicular bisectors of a triangle is known as
(a) incentre
(b) circumcentre
(c) orthocentre
(d) centroid
4) The relation between radius and diameter of a circle is $\qquad$
$\begin{array}{lll}\text { (a) radius }=2 \times \text { diameters } & \text { (b) radius }=\text { diameter }+2 & \text { (c) diameter }=\text { radius }+2\end{array}$ (d) diameter $=2$ (radius)
5) The longest chord of a circle is $\qquad$
(a) radius
(b) secant
(c) diameter
(d) tangent

## Part-B

6) In $\triangle A B C, \angle B=90^{\circ}, A B=18 \mathrm{~cm}$ and $B C=24 \mathrm{~cm}$. Calculate the length of $A C$
7) A square has the perimeter 40 cm . What is the sum of the diagonals?
8) From the figure $P T$ is an altitude of the triangle $P Q R$ in which $P Q=25 \mathrm{~cm}, P R=17 \mathrm{~cm}$ and $P T=15 \mathrm{~cm}$. If $Q R=x \mathrm{~cm}$. Calculate $x$.
9) A rectangular field is of dimension 40 m by 30 m . What distance is saved by walking diagonally across the field?
10) Draw concentric circles with radii 3 cm and 5 cm and shade the circular ring. Find its width.

Part-C
11) $\angle Q$ and $\angle R$ of a triangle $P Q R$ are $25^{\circ}$ and $65^{\circ}$. Is $\triangle P Q R$ a right angled triangle? Moreover $P Q$ is 4 cm and $P R$ is 3 cm . Find $Q R$
12) A painter sets a ladder up to reach the bottom of a second storey window 16 feet above the ground. The base of the ladder is 12 feet from the house. While the painter mixes the paint a neighbour's dog bumps the ladder which moves the base 2 feet farther away from the house. How far up side of the house does the ladder reach?
13) Define the arc of a circle.
14) Draw concentric circles for the following measurements of radii. Find out the width of each circular ring. 3.5 cm and 5.5 cm
15) Draw concentric circles for the following measurements of radii. Find out the width of each circular ring. 5 cm and 6.5 cm

