## TSOM

Tenkasi District
Second Mid Term Test - 2023

$$
21-11-2023
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Time: 1.30 Hours

## Standard 9

## MATHS <br> Section - A

## Choose the best answer:

1) $P Q$ and $R S$ are two equal chords of a circle with centre $O$ such that $\mid P O Q=7 \psi^{\prime}$ then $O R S=$
a) $60^{\circ}$
b) $70^{\circ}$
c) $55^{\circ}$
d) $80^{\circ}$
2) A chord is at a distance of 15 cm from the centre of the circle of radius 25 cm . The length of the chord is
a) 25 cm
b) 20 cm
C) 40 cm
d) 18 cm
3) $A D$ is a diameter of a circle and $A B$ is a chord. If $A D \Rightarrow 30 \mathrm{~cm}, A B=24 \mathrm{~cm}$ then the distance of $A B$ from the centre of the circle is
a) 10 cm
b) 9 cm
c) 8 cm
d) 6 cm
4) If the $y$ ordinate of a point is zero, then the point always lies
a) in the I quadrant
b) in the II quadrant
c) On $x$ axis
d) on $y$-axis
5) If $(x+2,4)=(5, y-2)$ then the co-ordinates $(x, y)$ are $\qquad$
a) $(7,12)$
b) $(6,3)$
c) $(3,6)$
d) $(2,1)$
6) The ratio in which the $x$ axis divides the line segment joining the points $(6,4)$ and $(1,-7)$ is
a) $2: 3$
b) $3: 4$
c) $4: 7$
d) $4: 3$
7) If $(1,-2),(3,6),(x, 10)$ and $(3,2)$ are the vertices of the parallelogram taken in order then the value of $x$ is
a) 6
b) 5
C) 4
d) 3

## Section - B

$5 \times 2=10$

## Note: i) Answer any 5 questions.

ii) Question number 14 is compulsory.
8) The angles of a quadrilateral are in the ratio $2: 4: 5: 7$. Find all the angles
9) The diameter of the circle is 52 cm and length of one of its chord is 20 cm . Find the distance of the chord from the centre.
10) Solve : $2 x-y=3,3 x+y=7$ Using by method of elimination.
11) Find the distance between the points $(-4,3)$ and $(2,-3)$
12) Find the mid-points of the line segment joining the points $(-2,3)$ and $(-6,-5)$.
13) Find the co-ordinates of the point which divides the line segment joining the points $(3,5)$ and $(8,-10)$ internally in the ratio $3: 2$.

Kindly send me your answer keys to padasalai.net@gmail.com
14) The point $(3,-4)$ is the centre of a circle. If $A B$ is a diameter of the circle and $B=(5,-6)$. Find the co-ordinates of $A$.

## Section - C

$5 \times 5=25$

## Note: i) Answer any 5 questions.

ii) Question number 21 is compulsory.
15) Prove that, In a parallelogram, opposite sides are equal.
16) If PQRS is a cyclic quadrilateral in which $\operatorname{PSR}=70^{\circ}$ and $Q P R=40^{\circ}$ then find PRO

17) Find all the angles of the given cyclic quadrilateral $A B C D$ in the figure.

18) Show that the points $A(5,4) B(2,0), C(-2,3)$ taken in order form an isoletes triangle.
19) If the mid point $(x, y)$ of the line joining $(3,4)$ and $(P, 7)$ lies on $2 x+2 y+1=0$ then what will be the value of $P$ ?
20). Find the co-ordinates of the points of trisection of the line joining the points $A(-5,6)$ and $B(4,-3)$.
21) Show that the points $A(3,1) B(6,4), C(8,6)$ are collinear. (lies on a straight line)

SIVAKUMAR.M,
Section - D
22) Draw the graph of $y=3 x-1$
(OR)

Solve graphically : $x+y=7, x-y=3$. SriRammatric | $1 \times 5 S$ |
| :---: |
| $1 \times 8=8$ | Vallam-622809 renkasitrist.

