CLASSIC STUDY ONE OF THE BEST ONLINE STUDY PLAT FORM

Name of Student	Class	Subject	Board	Chapter
	10th	Mathematics	FB	7
Date :_____	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

i	One revolution =?						
a	180°	b	360°	c	720°	d	1530°
ii	Area of circle =?						
a	$2\pi r$	b	πr^2	c	$4\pi r^2$	d	$\pi r^2\theta$
iii	A part of circumference of circle is called:						
a	Chord	b	Radius	c	Segment	d	Arc
iv	The angles having same initial and terminal sides called:						
a	Quadrantal angles	b	Cotermimnal angles	c	Right angles	d	None of these
v	3.5 revolutions =?						
a	3π	b	3.5π	c	7π	d	10π
vi	Which one is quadrantal angle:						
a	30°	b	60°	c	90°	d	45°
vii	225° lies in the quadrant:						
a	1^{st}	b	2^{nd}	c	3^{rd}	d	4^{th}
viii	cos $cos\ \theta$ =?						
a	$\frac{y}{x}$	b	$\frac{x}{y}$	c	$\frac{x}{r}$	d	$\frac{y}{r}$
ix	tan $tan\ \theta$ 180° =?						
a	0	b	1	c	-1	d	∞
x	Value of sin $sin\ \theta\ and$ cos $cos\ \theta$ is same at an angle of:						
a	0°	b	90°	c	45°	d	360°
xi	$\frac{1}{2}cosec\theta$ 45° =?						
a	$\frac{1}{2\sqrt{2}}$	b	$\frac{1}{\sqrt{2}}$	c	$\sqrt{2}$	d	$\frac{\sqrt{3}}{2}$
xii	If $tan\theta = \sqrt{3}$ then θ =?						
a	90°	b	45°	c	60°	d	30°
xiii	20° =?						
a	360'	b	630'	c	1200'	d	3600'
xiv	$tan\theta$ =?						
a	$\frac{sin\theta}{cos\theta}$	b	$\frac{1}{cot\theta}$	c	Both a&b	d	None of these
xv	$sin^2\theta + cos^2\theta$ =?						
a	1	b	0	c	$sin\theta$	d	$cos\theta$

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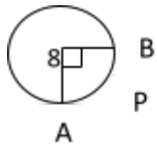
Section - B

Q. No.2:- Solve any twelve. All questions carry equal marks.

1. Locate the angles 135° and 150°.
2. Express into decimal 60° 30' 30''.
3. Show that l = rθ.
4. Find the distance travelled by a cyclist moving on a circle of radius 15m if he makes 3.5 revolutions.
5. What is the length of arc APB?



6. Find area of sector having radius 6cm and central angle of 60°.
7. Find trigonometric ratios of 45°.
8. Show that $sin^2\theta + cos^2\theta = 1$.
9. If P (-3, -4) is a point in plane. Find all the trigonometric ratios.
10. Prove that $sec\theta - cos\theta = tan\theta\, sin\theta$.
11. Prove that $tan\theta + cot\theta = sec\theta\, cosec\theta$.
12. Write in single trigonometric function $tanx\ sinx\ secx$.
13. Define quadrental angles.
14. Define one radian?
15. Find r when l = 52 and θ = 45°.

Section – C

Note: Attempt only three questions. All question carry equal marks.

Q. No.3:- If $cos\theta = \frac{-2}{3}$ and terminal arm of the angle θ in quadrant II. Find the values of remaining trigonometric ratios.

Q. No.4:- A television antenna of 8 feet height is located on the top of the house. From a point on the ground the angle of elevation to the top of house is 17° and to the top of antenna is 21.8°. Find height of house.

Q. No.5:- Prove the identity $\frac{1}{1-cos\theta} + \frac{1}{1+cos\theta} = 2\ cosec^2\theta$.

Q. No.6:-prove that area of sector of circular region is $\frac{1}{2}r^2\theta$.