CONIC SECTIONS

CIRCLE

Q.1 If the geometric center of a regular hexagon is the origin point and its area is $6\sqrt{3}$ cm^2,then the equation of its circumcircle is_____ .

(A) $x^2+y^2=8$ (B) $x^2+y^2=6$

(C) $x^2+y^2=2$ (D) $x^2+y^2=4$

Q.2 The equation of the circle that has a diameter $\overline{AB}$, with $A(-2,3)$ and $B(-2,11)$,is .

(A) $x^2+y^2+4x-14y+53=0$

(B) $x^2+y^2+4x-14y+37=0$

(C) $x^2+y^2-4x+14y+37=0$

(D) $x^2+y^2-14x+4y+37=0$

Q.3 If a circle M passes through the two points of intersection of the two circles $x^2+y^2+4x=28$ and $x^2+y^2=10x$ and its center is $(-4, 0)$, then the equation of circle M is.

(A) $(x+4)^2+y^2=52$ (B) $(x-4)^2+y^2=20$

(C) $(x+4)^2+y^2=2\sqrt{13}$ (D) $(x-4)^2+y^2=2\sqrt{5}$

ANSWER KEY

1. (D) $x^2+y^2=4$

2. (B) $x^2+y^2+4x-14y+37=0$

3. (A) $(x+4)^2+y^2=52$