D.A.V. PUBLIC SCHOOL, CRRC, Medical Road, Gaya

Sunday Test (Date – 03rd Dec. 2023)

Class – XI **Time : 40 Min**

Sub. – Mathematics **F.M. - 20**

SECTION-A (2X5=10)

1) Find the equation of a circle with centre (2,2) and passes through the point (4,5).

2) Find the equation of the hyperbola where foci are (0, ±12) and the length of the latus rectum is 36.

3) Vertex (0,0) passing through (2,3) and axis is along x-axis ,find the equation of the parabola.

4) If b=3 , c=4 ,centre at the origin foci on the x –axis, find the equation of the ellipse.

5) Find the centre and the radius of the circle $x^2+y^2+8x+10y-8=0$

SECTION-B (5X2=10)

6) If a parabolic reflector is 20cm in diameter and 5cm in deep find the focus.

7) Find the area of the triangle formed by the lines joining the vertex of the parabola $x^2=12y$ to the ends of its latus rectum.