Q.No.	DAY - 30
176	**EXERCISE 5.2** 1. Find the equation of the parabola in each of the cases given below: (ii) passes through $(2,-3)$ and symmetric about y -axis. (iv) end points of latus rectum $(4,-8)$ and $(4,8)$.
177	2. Find the equation of the ellipse in each of the cases given below: (ii) foci $(0,\pm4)$ and end points of major axis are $(0,\pm5)$. (iii) length of latus rectum 8, eccentricity $=\frac{3}{5}$, centre (0, 0) and major axis on x -axis.
178	3. Find the equation of the hyperbola in each of the cases given below: (ii) Centre $(2,1)$, one of the foci $(8,1)$ and corresponding directrix $x=4$ (iii) passing through $(5,-2)$ and length of the transverse axis along x axis and of length 8 units.
179	4. Find the vertex, focus, equation of directrix and length of the latus rectum of the following: (iv) $x^2-2x+8y+17=0$ (v) $y^2-4y-8x+12=0$
180	6. Prove that the length of the latus rectum of the hyperbola $\frac{x^2}{a^2}-\frac{y^2}{b^2}=1$ is $\frac{2b^2}{a}$.
181	7. Show that the absolute value of difference of the focal distances of any point P on the hyperbola is the length of its transverse axis.