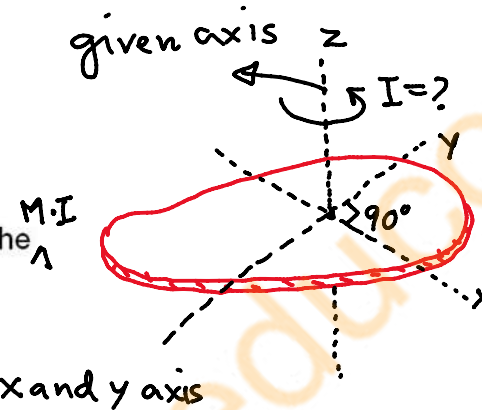


$$= MR^2 \left(\frac{2}{5} + 1 \right)$$

$$\underline{I = \frac{7}{5} MR^2}$$

✓ Theorem of Perpendicular Axes:

The moment of inertia of a rigid plane lamina about any axis perpendicular to its plane and passing through it, is the sum of the same body about two mutually perpendicular axes lying in the plane of the lamina and intersecting one another at the same point through which the given perpendicular axis is passing.



$$\boxed{I_z = I_x + I_y}$$

Ex: Find MI of a uniform Ring of mass M and of radius R , about one of its diameter.

$$I_x = I_y = ?$$

$$\text{we know } I_z = MR^2$$

$$I_z = I_x + I_y$$

