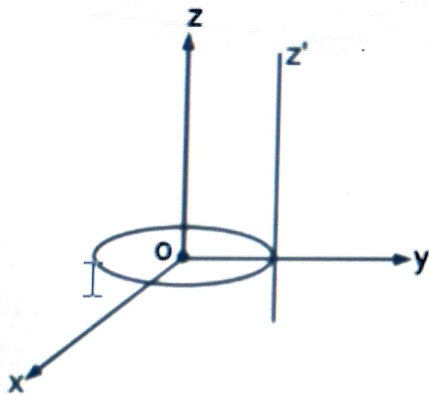


A thin circular disk is in the xy plane as shown in the figure. The ratio of its moment of inertia about z and z' axes will be :



(1) 1 : 4

(2) 1 : 5

(3) 1 : 3

(4) 1 : 2

Ans.

(3)

Sol.

$$I_z = \frac{mR^2}{2}$$

$$I_{z'} = \frac{3}{2} mR^2 \quad \frac{I_z}{I_{z'}} = \frac{1}{3}$$