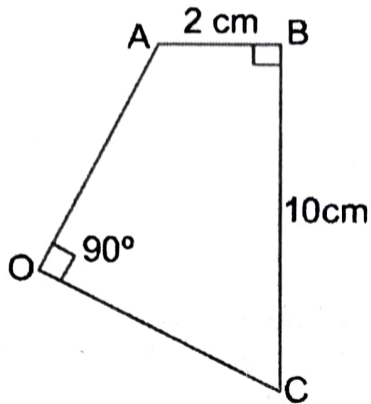


The figure shows an uniform slab of mass 7kg. Find the moment of inertia about the axis normal to the plane of drawing and passing through the point O. Given $OA = OC$, $BC = 10$ cm and $AB = 2$ cm.



(A) 84 kg cm^2

(B) 168 kg cm^2

(C) 188 kg cm^2

(D) 198 kg cm^2

(B)

$$I_0 = \frac{1}{4} \times (4M) \frac{a^2}{6} = \frac{Ma^2}{6} = \frac{7 \times 144}{6} = 168 \text{kg cm}^2$$