

Consider a thin uniform square sheet made of a right material . If its side is 'a', mass m and moment of inertia I about one of its diagonals, then :

(1) $I > \frac{ma^2}{12}$

(2) $I = \frac{ma^2}{12}$

(3) $\frac{ma^2}{24} < I < \frac{ma^2}{12}$

(4) $I = \frac{ma^2}{24}$

Ans. (2)

Sol. For uniform thin square sheet

$$I_1 = I_2 = I_3 = \frac{ma^2}{12}$$

