Fig. 6.a
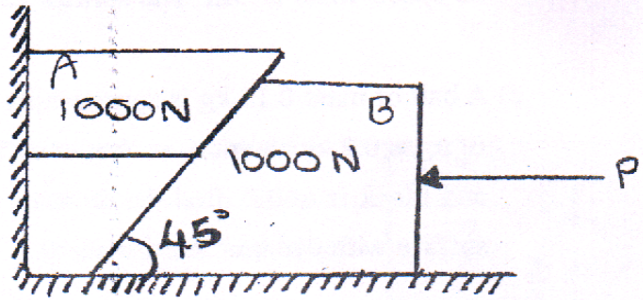

Fig. 6.b

b) A block weighing 1000N is to raised by applying a horizontal force P on another block B of 1000N as shown in fig. 6.b. Calculate the minimum force P to push the block A up. Take μ=0.25 at all faces.   [6]

c) In the mechanism shown in fig.6.c angular velocity of rod DC is $\pi/6$ rad/second. Determine angular velocity of CB and AB.   [8]
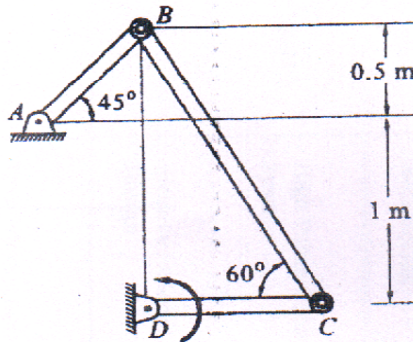

Fig. 6. c

Q7 a) Find the moment of inertia of shaded area shown in fig 7.a about x- axis and y-axis [6]
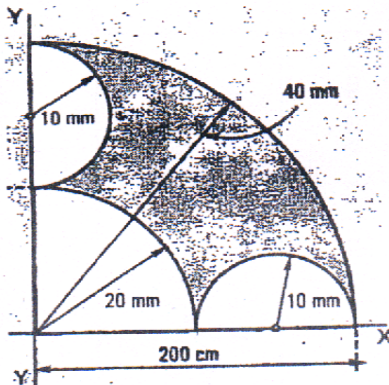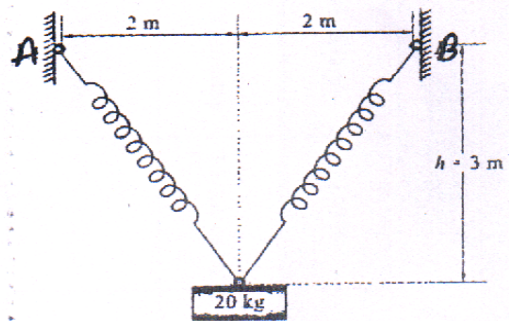

Fig. 7.a

Fig. 7.b

[TURN OVER