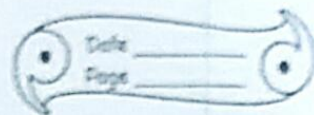


## HOME-ASSIGNMENT



1. Find the moment of force of 20 N about an axis of rotation at a distance of 40 cm from the force.

Ans. Moment of force =  $F \times D$   
 $= 20 \times 40$   
 $= 800 \text{ Nm} = 8 \text{ Nm}$

2. Define force. Write its SI unit.

Ans. Force - Force is applied to move an object.

SI unit of force = N

3. Define the term of moment of force.

Ans. Moment of force is the rotational effect of a force, which is equal to the force multiplied by the perpendicular distance between an axis and the force.

2. The moment of force of 20 N about a point is 2 Nm. Find the perpendicular distance of force.

Ans. Moment of force =  $F \times D$   
In this equation,  $D = \frac{\text{moment of force}}{F}$

$\therefore \frac{20}{2} = 10 \text{ m}$  (Ans)

— X —

1 unit of force = 1

Define the term of moment of force.

The moment of force is the rotational effect of a force, which is equal to the force multiplied by the perpendicular distance between a point and the force.