

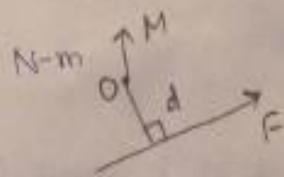
Moment of force

(35)

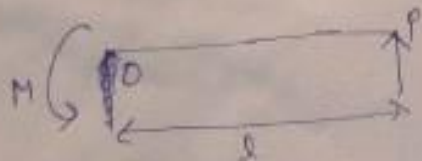
Moment of a force \rightarrow A force can rotate a nut when applied by a wrench or can open a door while the door rotates on its hinges. A force thus, can produce a rotary motion besides producing a translatory motion. The measure of this turning effect produced by a force on a body can be called as the moment of force.

Moment of a force about an Axis \rightarrow It is equal to the product of the force and perpendicular distance of the point from the line of action of the force.

$$M_o = F \times d$$



O = moment centre
d = arm of the force



Anticlockwise moment -ve



clockwise moment +ve