

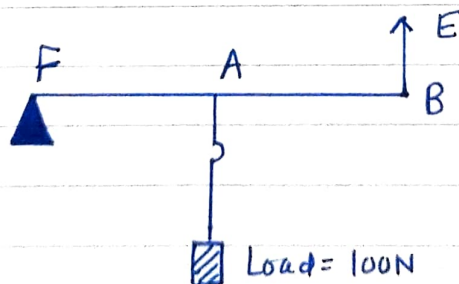
Date: $\rightarrow$ 23.12.24
Subject: - PHYSICS

TENDER HEART HIGH SCHOOL; SEC-33B, CHD.

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Ch. Machines, (CLASS-X)
Practice Assignment

1. A fulcrum divides a crow-bar in the ratio of 3:1. What weight will be lifted, if an effort of 100N is applied at the end of its longer arm?
(a) 400N (b) 100N (c) 300N (d) 500N
2. The MA of sugar tongs is:-
(a) < 1 (b) > 1 (c) $= 1$ (d) None of these.
3. A machine is driven by a 100 kg mass that falls 8m in 4 sec. It lifts a load of mass 500kg. What is the input power to the pulley? Calculate.
4. The MA of a machine is 5 and its efficiency 80%. It is used to lift a load of 200 kgf to a height of 20m. What is the effort required?
(a) 10 kgf (b) 20 kgf (c) 40 kgf (d) 50 kgf
5. If $FA = 40\text{cm}$, $AB = 60\text{cm}$, Find MA of the lever.



- (a) 1 (b) 1.5 (c) 2 (d) 2.5
6. The MA of a lever of third order is always less than one?
Give one example of this class of lever:
 7. Write the relationship b/w the MA and VR (velocity ratio) for
(a) Ideal Machine (b) Practical machine?