

Machines

1. State True or False and if False rewrite the correct statement

- i) In a beam balance the load arm and effort arm are equal.**

- ii) A wheel barrow is a lever of first order.**

- iii) A movable pulley helps to apply the effort in a convenient direction.**

- iv) A crowbar helps us to move a heavy rock.**

- v) Mechanical advantage of a single fixed pulley is 1.**

2. A man applies an effort of 50 N to lift a load of 200 N. The distance of the load from the fulcrum is 10 m. Find the effort arm and mechanical advantage.

3. One boy of weight 80 N is sitting on one side of a sea – saw at a distance of 1 m from the fulcrum. Where must another boy of weight 40 N sit in order to balance the sea – saw.