

Q1) Fill in the blanks:-

- 1.) In class II levers, the _____ is in between the fulcrum and effort.
- 2.) A pulley is used to change _____
- 3.) _____ is a modified form of an inclined plane.
- 4.) _____ is an example of 1st class lever.

Q2) Define the following:-

- a) Efficiency
- b) Mechanical advantage
- c) Work
- d) Energy
- e) Pulley.

Q3) Answer the following:-

- a) Differentiate between the three types of levers
- b) State two functions of a machine.
- c) What is a wedge?
- d) How will you take care of the machines?
- e) 'A machine is 75% efficient'. Explain the statement.

Q4) Numericals:-

- a) A machine requires an effort of 10kgf for a load of 50kgf. Find its mechanical advantage.
- b) Calculate the mechanical advantage of a lever in which the effort arm is 40cm and the load arm is 12cm.