LOYOLA SCHOOL, BHUBANESWAR

Second Class Evaluation - November 2025

Class: VI **Subject: Physics** **F.M.= 20** **Time: 40 mins**

I. Select the correct alternatives: **[4]**

1. The force applied on a machine to do work is called the
   a. load c. energy
   b. effort d. fulcrum

2. The mechanical advantage of a machine is
   a. load x effort c. load + effort
   b. load / effort d. effort / load

3. A pair of scissors is an example of
   a. wedge c. inclined plane
   b. lever d. screw

4. For levers of class III
   a. MA = 1 c. MA > 1
   b. MA <1 d. MA =0

II. Answer the following:

1. Explain why
   a. some machines are called force multipliers
   b. a pulley is a useful machine **[2]**

2. Give two differences between an ideal and an actual machine **[2]**

3. Write any two ways we can take care of machines. **[2]**

4. In a lever, fulcrum is at one end at a distance of 30 cm from the load and effort is at the other end at a distance of 90 cm from the load. Find
   (a)the length of the load arm
   (bi)the length of the effort arm
   (c)the mechanical advantage of the lever. **[3]**

5. Define: **[4]**
   (a) work (b) efficiency (c) mechanical advantage (d) a pulley

6. (a) Draw a neat labelled line diagram of a class two lever showing F, L and E with their direction.
   (b) Give two examples of class2 lever. **[3]**

*************ALL THE BEST**************