



PT. DARMA BANGSA EDUKASI
SMP DARMA BANGSA BANDAR LAMPUNG

Jl. Zainal Abidin Pagar Alam No. 93A Labuhan Ratu Bandar Lampung 35142
Phone (0721) 700931 – 771556, e-mail : official@darmabangsa.sch.id

FINAL EXIMINATION SEMSTER 1
SMP DARMA BANGSA BANDAR LAMPUNG
ACADEMIC YEAR 2021/2022

Mata Pelajaran / Subject Matter	: Physics
Kelas / Class	: VIII
Semester	: 1
Hari & Tgl. Pelaksanaan / Date	: December 6 th , 2021
Name	:

A. Multiple choice

Choose the correct answer of the following questions

- What is the unit of measure for force?
 - Ampere
 - Newton
 - Seconds
 - Joule
- Newton's first Law of Motion states that if there is no net force acting on an object it will:
 - remain at rest
 - have no acceleration
 - move with constant velocity
 - all of the above
- What does Newton's Second Law of Motion state?
 - $a = m.F$
 - $F = m.a$
 - $F = \frac{m}{a}$
 - $m = F.a$
- How much net force is required to accelerate a 2000 kg car at 3.00 m/s²?
 - 2000 N
 - 6000 N
 - 4000 N
 - 8000 N
- If you apply a net force of 3 N on 0,1 kg -box, what is the acceleration of the box?
 - 5 m/s²
 - 20 m/s²
 - 10 m/s²
 - 30 m/s²
- Which of the following is contact force?
 - Electrical force
 - Friction
 - Magnetic force
 - Gravitational Force
- Which of the following are the effects of force, *except*?
 - to change the direction
 - to move a rest object
 - to stop a moving object
 - to change the color of flower

This options for Questions no 9 - 12

A. Lever (tuas)

B. Pulley (katrol)

C. Wheel & Axle

D. Inclined Plane

E. Wedge

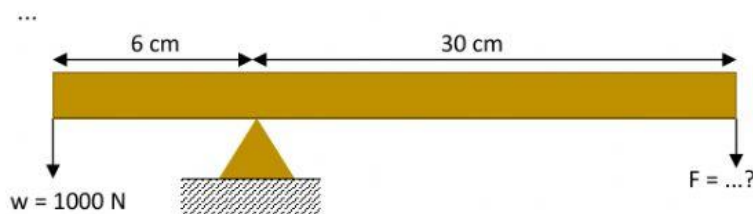
8. These two parts act as one simple machine. They roll and are found on cars, bikes and wheelbarrows. A B C D E

9. This simple machine can be used to lift a weight. It has a fulcrum, or pivot point, which can be located in the centre, near the end or at the end. A B C D E

10. It is a type of simple machine that uses a wheel with a groove in it and a rope. The rope fits into the groove and one end of the rope goes around the load. You pull on the other end. A B C D E

11. This simple machine is a flat surface with one end higher than the other. This allows for heavy objects to slide up to a higher point rather than be lifted. It is generally easier to slide something than to lift it.. A B C D E

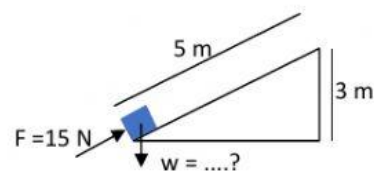
12. To make the lever on the figure below in equilibrium condition, the value of force F is



- a. 200 N
b. 500 N

- c. 3000 N
d. 9000 N

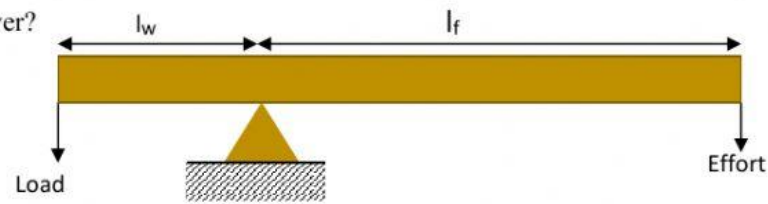
13. Look the figure below. An object is pushed by force of 15 N to rise 3 m high. The weight of the object is ...



- a. 100 N
b. 75 N

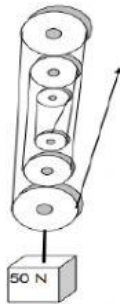
- c. 50 N
d. 25 N

14. What should you do to reduce the amount of effort needed to lift something using a first class lever?



- a. move the fulcrum to the middle of the lever
 - b. move the fulcrum closer to the load
 - c. move the fulcrum closer to the effort
15. Among the following which pulley has the greatest the Mechanical Advantage?

a.



b.



c.

