



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

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

A. Multiple choice

Choose the correct answer of the following questions

1. What is the unit of measure for force?
 - Ampere
 - Newton
 - Seconds
 - Joule
2. 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
3. What does Newton's Second Law of Motion state?
 - $a = m \cdot F$
 - $F = m \cdot a$
 - $F = \frac{m}{a}$
 - $m = F \cdot a$
4. How much net force is required to accelerate a 2000 kg car at 3.00 m/s^2 ?
 - 2000 N
 - 6000 N
 - 4000 N
 - 8000 N
5. If you apply a net force of 3 N on 0,1 kg -box, what is the acceleration of the box?
 - 5 m/s^2
 - 20 m/s^2
 - 10 m/s^2
 - 30 m/s^2
6. Which of the following is contact force?
 - Electrical force
 - Friction
 - Magnetic force
 - Gravitational Force
7. 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	

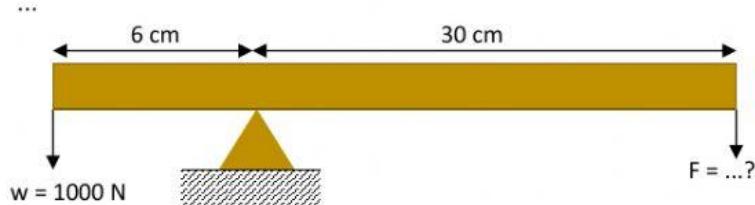
8. These two parts act as one simple machine. They roll and are found on cars, bikes and wheelbarrows. A B C D E

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

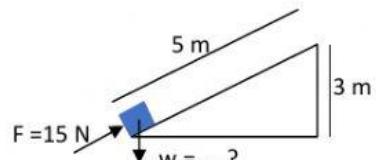
11. This simple machine is a flat surface with one end higher than the other. This allows for heavy objects to slide up to a higher point rather than be lifted. It is generally easier to slide something than to lift it.. A B C D E

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

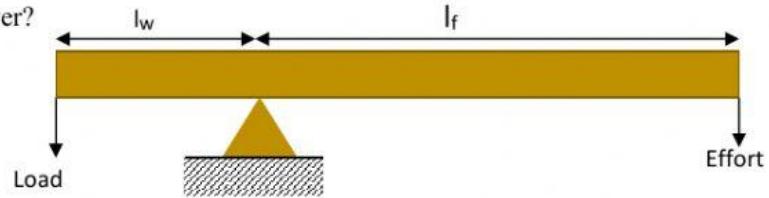


- a. 200 N
- b. 500 N
- c. 3000 N
- d. 9000 N

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 ...



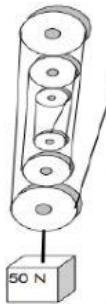
14. What should you do to reduce the amount of effort needed to lift something using a first class lever?



- 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.

