



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 15.04.20

Duration: 40 min

Worksheet 29

Full Marks: 15

FORCE AND PRESSURE/ TURNING EFFECT OF FORCE

Choose the Correct options:

1. If no net force is applied on a body, then it is said to be in
 - (a) distance
 - (b) equilibrium
 - (c) linear motion
 - (d) motion
2. The torque depends upon
 - (a) force
 - (b) moment arm
 - (c) both A and B
 - (d) none of above
3. The line along which a force acts is called
 - (a) line of action of force
 - (b) line of acting torque
 - (c) axis of rotation
 - (d) moment arm
4. If the force 'F' is multiplied by arm 'L', we get
 - (a) momentum
 - (b) distance
 - (c) torque/moment
 - (d) inertia
5. Two unlike parallel forces of the same magnitude but not along the same line forms a
 - (a) couple
 - (b) inertia
 - (c) gravity
 - (d) friction
6. If the sum of clockwise moments acting on a body is equal to the sum of anticlockwise moments acting on it, then the body is
 - (a) balanced
 - (b) unbalanced
 - (c) rigid
 - (d) flexible
7. The turning effect of a force is called the force's
 - (a) momentum
 - (b) distance
 - (c) torque/moment
 - (d) inertia
8. Point where force causes system to move without rotation is
 - (a) center of mass
 - (b) midpoint of body
 - (c) edge of the body
 - (d) none of above
9. The door is opened or closed due to the
 - (a) weight
 - (b) turning effect on it
 - (c) distance from roof
 - (d) height

10. Two children sitting on a see saw are not swinging, the net torque is

- (a) greater than 1
- (b) less than 1
- (c) zero
- (d) infinite

11. Torque is turning effect of

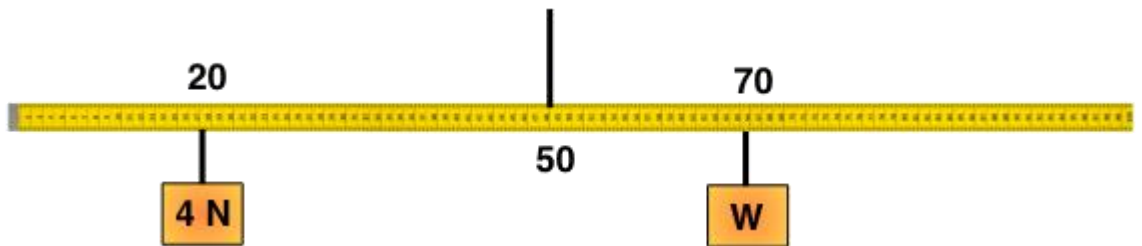
- (a) force
- (b) moment of force
- (c) line of action of force
- (d) frictional force

12. A couple is produced by

- (a) one unlike parallel force
- (b) two unlike parallel forces
- (c) like parallel force
- (d) none of above

13. A metre-stick is suspended at the 50 cm mark. A 4 N weight is placed at the 20 cm mark as shown. It is balanced by another weight at the 70 cm mark. What is the value of the second weight?

- (a) 4 N
- (b) 1.1 N
- (c) 1.7 N
- (d) 6 N



14. Formula One racing cars need a high degree of stability when turning bends on the race track. Which TWO of the following features of these racing cars contribute to this stability?

- (a) They are usually painted red.
- (b) Their wheels have a wide base.
- (c) They can go from 0 to 160 km per hour in about six seconds.
- (d) They have a low centre of gravity.

15. In what way may the turning effect of a force be increased?

- (a) By increasing the perpendicular distance between the force and the fulcrum.
- (b) By reducing the applied force.
- (c) By lubricating the fulcrum with oil or grease.
- (d) By decreasing the perpendicular distance between the force and the fulcrum.