



RAMAGYA SCHOOL, NOIDA
V/SCIENCE/2017-18
OLYMPIAD PRACTICE WORKSHEET

Q1. Pick out the odd one.

- a) Coal
- b) Biomass
- c) Geothermal
- d) Solar

Q2. Gravity: Downward force :: _____ : Upward force.

- a) Applied force
- b) Magnetic force
- c) Buoyant force
- d) Frictional force

Q3. Which of the following is the renewable source of energy?

- a) Water
- b) Biomass
- c) Petrol
- d) both (a) and (b)

Q4. Which of the following is the example of kinetic energy?

- a) A boy is sleeping
- b) A fan is off.
- c) A car is moving
- d) A girl watching television

Q5. Which of the following is an example of simple machines?

- a) Screw
- b) Wheel and axle
- c) Bicycle
- d) Both (a) and (b)

Q6. Slide is an example of _____

- a) Pulley
- b) inclined plane
- c) Wedge
- d) lever

Q7. _____ is a simple machine that uses grooved wheels and a rope to raise, lower or move a load?

- a) Lever
- b) Inclined plane
- c) Wheel and axle
- d) Pulley

Q8. Which form of energy does the flowing water possess?

- a) Gravitational energy
- b) Potential energy
- c) Electrical energy
- d) Kinetic energy

Q9. Match the following:

List I		List II	
A	Wheel and axle	1	Bike ramps
B	Pulley	2	Knives
C	Inclined plane	3	Roller skates
D	Wedge	4	Cranes

A B C D

- a) 3 4 1 2
- b) 2 1 3 4
- c) 3 2 1 4
- d) 1 3 2 4

Q10. What simple machine uses a slanted surface that connects a lower level to a higher level?

- a) Inclined plane
- b) Screw
- c) Wedge
- d) Lever

Q11. If gravitation suddenly stopped, Earth would move _____.

- a) in orbit with the sun
- b) in the opposite direction
- c) nowhere
- d) in a straight line

Q12. Which is the best example of gravity?

- a) A car hits a tree, and its motion stops
- b) A breeze blows, and a sailboat moves
- c) A book is pushed, and it moves across the table
- d) A person drops a ball, and it falls to the ground

Q13. When upthrust is equal to weight of object then it

- a) floats
- b) sinks
- c) moves
- d) stops

Q14. If an object is at rest then forces are

- a) balanced
- b) unequal
- c) higher
- d) lower

Q15. A force which opposes motion is known as

- a) friction
- b) gravity
- c) pull
- d) push

Q16. What is the position of the load in a second-class lever?

- a) Between the fulcrum and the effort
- b) On the same side of the fulcrum
- c) Before the effort
- d) None of these

Q17. Which of the following does not have a simple machine in it?

- a) A ceiling fan
- b) A water bottle
- c) An eraser
- d) A pair of spectacles

Q18. Which form of energy is depicted in the given figure?



- a) Solar energy
- b) Thermal energy
- c) Geothermal energy
- d) Wind energy

Q19. Match the following:

List I		List II	
A	Sun	1	Biomass energy
B	Earth	2	Solar energy
C	Forests	3	Hydropower energy
D	Rain	4	Geothermal

A B C D

- a) 3 1 4 2
- b) 2 4 1 3
- c) 1 3 2 4
- d) 4 2 1 3

Q20. With the increase in population and needs of people the non-renewable resources such as coal, petrol and natural gas are exhausting day by day. What can be the result if we continue using these resources without thinking?

- a) Nothing will happen.
- b) These resources will be produced again
- c) One day these resources will get finished
- d) None of these