DELHI PUBLIC SCHOOL, DURGAPUR
QUESTION BANK FOR PERIODIC ASSESSMENT-II (2018-19)
CLASS-VI
SUBJECT: PHYSICS

TOPIC: MEASUREMENT

1. Why can't hand span and cubit be used as standard units?
2. Why we should not use an elastic tape for measuring the length?
3. State the 3 precautions which should be taken while using a metre scale to measure length.
4. "Pace or footstep cannot be used as standard unit of length". Comment
5. What is the magnitude of temperature on SI scale?
   for :- (a) Lower standard point of Celsius thermometer?
   (b) Upper standard point of Fahrenheit thermometer?
6. State the temperature of the following in Celsius & Fahrenheit Scale:
(a) Pure melting ice.
(b) Pure boiling water.
7. If 8 marbles of same size are placed side by side, such that their total thickness is 12 cm. Find the diameter of one marble in centimeters, correct to one decimal place.
8. (i) Name the fundamental unit of length in Standard International system.
   (ii) Name two sub-multiples of fundamental unit of length, and state their numerical values.
   (iii) Name one multiple of fundamental unit of length and state its numerical value.
9. A postage stamp is 12 mm in breadth and 20 mm in length. Find the area of stamp in,
   (i) mm^2 (ii) cm^2
10. The length of a field is 250 m and breadth is 80 m. find the area of the field, in,
   (i) m^2 (ii) hectares.
11. The distance of Kota Bharu city to Kuala lumpur city is 474 km. Find the distance in the units of meter and centimeter.
12. The mass of a lorry is 2 tons. Determine its mass in gram (g)
13. What is measurement?
14. Write down the difference between mass and weight of an object.
15. Define Mean Solar Day. What is the S.I unit of time?
16. What is the significance of constriction?
17. Write down the differences between Clinical & Laboratory thermometer.

TOPIC: FORCE

1. How can we decide whether an object is moving faster than the other?
2. What happens when two forces of same magnitude act in same direction?
3. A ball is in rest. When it is pushed, it starts moving- explain why?
4. What is role of force on the speed of moving object?
5. What is gravitational force?
6. What is electrostatic force? Why is it called non-contact force?
7. We observe that the wheels of buses and trucks are heavier than the wheels of car or scooters. Why?
8. Friction is necessary evil- explain with examples.

9. Give two examples of situations in which applied force causes a change in the shape of an object.
10. How to change the speed and the direction of a moving body?
11. What are the effects of force?
12. What would happen, if the force of friction disappears?
13. Why is it difficult to walk on muddy ground?
14. (i) What do you understand by, (a) magnitude of force, (b) direction of force?
15. Show the following forces :

(a) 50 N force acting towards east.
(b) 100 N force acting towards west.
(c) 20 N force acting towards north-west.

16. Two bullocks A and B are pulling a cart in the same direction with a force of 1000 N and 800 N. What is the resultant force?
17. Two teams A and B are pulling a rope in opposite direction. The team A exerts a force of 4000 N towards east and team B exerts a force of 4150 N towards west. What is the magnitude of resultant force? State the direction of resultant force.
18. Give two examples, where the force of friction is necessary.
19. List the factors on which the force of friction depends.
20. State two ways of increasing and decreasing friction.
21. What do you understand by the term weight of a body?

(ii) How will you prove that weight is a kind of force?
(iii) Name the device used for measuring force.
(iv) Draw a neat diagram for the device named by you and describe it.

22. Name the force which:

(a) stops a ball, rising vertically upward
(b) stops a speeding car
(c) makes a moving cricket ball to move faster
(d) makes the ripe fruits to fall to ground
(e) makes a runner to stop
(f) makes a steam engine to move

SIMPLE MACHINE

1. Give reasons for the following:-

a) A machine cannot be 100% efficient.
b) M.A of a 2nd class lever is always greater than 1.
c) Use of pulley makes the work easier.

2. A boy of 20 kg sits at a distance of 80 cm from the fulcrum of a see-saw. Calculate the mass of the boy who sits another side at a distance of 16 cm from the fulcrum in such a way that the see-saw is balanced.
3. A body is acted upon by a force of 10 N and displacement caused is 20 m. Find the work done by the body.
4. A force of 200 N does a work of 1000 J. Find the distance through which force acts
5. A broom is a lever. Where is the fulcrum? Explain.
6. Answer the following:-

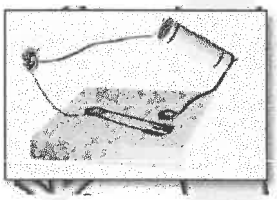
a) What simple machine would you use to get up on a slide?
b) What simple machine would you use to chop down a tree?
c) What simple machine would you use to open a door?
d) What simple machine would you use to take the flag down?
e) What simple machine would you use to get a big rock off the bike path?

f) What simple machine would you use to hold two boards together?
g) What simple machine would you use to keep a door from shutting?
7. State the principal of Lever.
8. Why would you use the single fixed pulley?
9. What is a wedge?
10. The floor of a bathtub is an inclined plane. Explain.
11. What is Mechanical advantage?
12. Define wedge. Give the example of it.
13. What do you mean by efficiency of a machine?
14. Where is a screw jack used?
15. Why a screw takes less force to move into wood than a nail?
16. Show with the help of diagrams, the differences among the first, second and third kinds of lever.
17. Describe the use of inclined plane.
18. A load of 400 N can be lifted by a force of 40 N with the help of a lever. Find its mechanical advantage.
19. State he principle of levers.
20. Name six types of simple machine. Why are they called so?

TOPIC: ELECTRICITY

1. Mention the conditions under which a bulb can't glow when connected in a circuit.

2. a) Mention the components used in the figure beside.
   b) What type of circuit is this?
   c) Why isn't the bulb glowing?



3. Why we should not join the two terminals of an electric cell without connecting them through a switch or a device like a bulb?

4. Define the following terms:-
   Electric circuit, electric current, cell, battery
5. Give the difference between Primary & Secondary cells.
6. What are terminals?
7. Name few devices where electric cell are used

SYLLABUS :

1. MEASUREMENT
2. FORCE
3. SIMPLE MACHINE
4. ELECTRICITY

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