

I. ONE MARK QUESTIONS**Multiple choice questions**

1. Which change can occur when you add heat energy to water?
 - a) The water can change from a liquid to a solid
 - b) The water can change from a gas to a liquid
 - c) The water can change from a liquid to a gas
 - d) The water can change from a solid to a liquid

2. What is sublimation?
 - a) a substance used in a chemical reaction.
 - b) the process by which particles leave a liquid and become a gas.
 - c) the process by which a solid changes directly into a gas.
 - d) a substance made by a chemical reaction.

3. Evaporation is when
 - a) a substance changes from a liquid into a solid material.
 - b) a substance changes from a liquid to a gas (or vapor) naturally.
 - c) a substance changes from a gas (or vapor) into a liquid.

4. What are states of matter?
 - a) The temperature at which a liquid boils and becomes a gas.
 - b) A law that states that for a fixed amount of gas at a constant temperature, the volume of the gas increases as its pressure decreases and the volume of the gas decreases as its pressure increases.
 - c) A term used to describe a physical or chemical change in which energy is given off.
 - d) The physical forms in which a substance can exist; includes solid, liquid, gas, and plasma.

5. Force changes the
 - (a) motion of body
 - (b) speed of body
 - (c) shape of body

(d) all of these

6. Which of the following is responsible for wearing out of bicycle tyres?

- (a) Muscular force
- (b) Magnetic force
- (c) Frictional force
- (d) Electrostatic force

7. Force of friction depends on

- (a) roughness of surface
- (b) smoothness of surface
- (c) inclination of surface
- (d) all of these

8. A toy car released with the same initial speed will travel farthest on

- (a) muddy surface
- (b) polished marble surface
- (c) cemented surface
- (d) brick surface

9. Friction is a

- (a) non-contact force
- (b) contact force
- (c) magnetic force
- (d) electrostatic force

10. Which of the following produces least friction?

- (a) Sliding friction
- (b) Rolling friction
- (c) Composite friction
- (d) Static friction

Choose the term to fill in the blanks.

11. has to be applied to change the of a object.
(moving, direction, force)

12. When an elephant drags a wooden log over the land, the forces that are applied on the log are , and
(muscular force, mechanical force, gravitational force, frictional force)

13. A ball was set rolling on a large table. If its is to be changed, a will have to be applied on it.
(force, motion, gravitation)

14. The force of friction always acts the motion.

(along, against)

15. One or more forces are acting in the following examples. Name them.

(a) An object falling from a tall building

(b) An aeroplane flying in sky

(c) Squeezing sugarcane juice with a squeezer

(d) Winnowing foodgrain

16. Convert the following quantities as indicated.

a) 10 quintal = _____ metric ton.

b) 1 cm = _____ metre.

c) 1 mm = _____ metre.

d) 1 yard = _____ ft.

e) 1 decimetre = _____ meter.

f) 1 decametre = _____ metre.

g) 1 hectometre = _____ metre

h) 1 gram = _____ kg.

i) 1 mg = _____ kg.

j) 1 lb = _____ g.

k) 1 h = _____ s

l) 1 year = _____ s.

m) 1 day = _____ s.

n) 1 decametre² = _____ m².

o) 1 hectare = _____ m²

p) 1 km² = _____ m².

q) 1 dm² = _____ cm²

r) 1 cm² = _____ m²

s) 1 mm² = _____ m²

t) 1 square yard = _____ m²

u) 1 square ft = _____ m²

v) 1 acre = _____ m²

2 MARK QUESTION

17. what are the effects of friction?

18. what are the factors affect force of friction and how?

19. define static ,friction , sliding friction & rolling friction.

20. what are the disadvantages of friction ?

21. Why does a matchstick catch fire when rubbed on the rough surface of the box?

22. The sole of shoes get worn after some time. Explain why?

24.

Convert the following quantities as indicated

- (a) 12 inch = ft
- (b) 1 ft = cm
- (c) 20 cm = m
- (d) 4.2 m = cm
- (e) 0.2 km = m
- (f) 0.2 cm = mm
- (g) 1 yard = m

3MARK QUESTIONS

25. Define –

- Applied force
- Tension
- Frictional force

26. Compare properties of solids, liquids and gases.(any 3 points)

27. Most substances can change from one state to another under different conditions of temperature and pressure. Explain with examples.

28. Why ?

- (a) Machines are oiled from time to time.
- (b) An object thrown upwards comes down after reaching a point.
- (c) Powder is sprinkled on a carom board.

29. Explain increasing and decreasing friction with suitable examples.

30. Cartilage is present in joints of our body, which helps in their smooth movement. If cartilage wears off, how would this affect the movement of joints?

31. Define mass. State its (1) S.I. (2) C.GS and (3) E.P.S units. How are they related?

32. Convert the following quantities as indicated:

- (a) 200 kg =metric tonne
- (b) 150 kg =quintal
- (c) 10lb = kg
- (d) 250 g = kg
- (e) 0.01 kg = g
- (f) 5mg = kg

33. What is a clinical thermometer? State its special feature. Draw a labeled neat diagram of a

clinical thermometer showing the range of temperature marked on it.

What is the normal temperature of the human body? How is it indicated in a clinical thermometer?

34. Fill in the blanks .

(a) The S.I. unit of length is _____ of time is _____ of mass is _____ .

(b) °C is the unit of _____.

(c) 1 metre tonne = _____ .

(d) The zero mark in Celsius thermometer is the melting point of _____ .

(e) The thermometer used to measure the human body is called the _____ thermometer.

(f) The normal temperature of human body is _____ °C or, _____ °F.

35. When crystal of potassium permanganate is placed in a beaker , purple color

Spreads through out the water. What does this observation tell us about the nature of Potassium permanganate and water? Explain with an activity.

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