ICSE Board

Class VII

Physics

Sample Paper – 2

Time: 2 hrs **Total Marks: 75**

General Instructions:

1. **All** questions are **compulsory**.
2. Questions 1 to 15 carry one mark each.
3. Questions in 2A and 2B carry one markeach.
4. Questions in 3A and 3B carry one markeach.
5. Question in 4A and 4B carries one mark each.
6. Questions in 5A carry one mark each and 5B carry five marks.
7. Questions in 6 carry two marks each.
8. Question 7A and 7B carry ten marks in total.

Question 1

Choose the correct answer out of the four available choices given under each question. [15]

1. The pendulum of a clock has:
   (a) Periodic motion
   (b) Circular Motion
   (c) Rectilinear Motion
   (d) All of the above

2. 1 tonne is equal to
   (a) 100 quintal
   (b) 1000 quintal
   (c) 10 quintal
   (d) 100000 quintal

3. Plastic covering on electric wires provides
   (a) Good looks
   (b) Insulation
   (c) Good connection
   (d) Colour distinction

4. Which waves are employed in SONAR?
   (a) X-rays
   (b) InfrasonicWave
   (c) Ultrasonic Wave
   (d) SONAR wave

5. How does the alphabet M look in a pinhole camera?
(a) W
(b) M
(c) Both possible
(d) None

6. The device used to measure temperature is called
(a) Scale
(b) Pressure gauge
(c) Thermometer
(d) Barometer

7. A ray of light travelling parallel to the principle axis after reflection from aconcave mirror passes through the
(a) Focus
(b) Center of curvature
(c) Pole
(d) None of these

8. Rate of distance travelled with time is termed as
(a) Displacement
(b) Acceleration
(c) Velocity
(d) Speed

9. Sound is produced by_____objects.
(a) vibrating
(b) fast moving
(c) stationary
(d) rotating

10. Air is a _____ conductor of electricity while water is a _____conductor of electricity
(a) good, bad
(b) bad, good
(c) good, very good
(d) bad, very bad

11. In which of the following, is the transfer of heat by convection currentsimpossible.
(a) Oil
(b) Milk
(c) Water
(d) Meta

12. What kind of image is formed by a plane mirror?

(a) Real and inverted
(b) Real and erect
(c) Virtual and erect
(d) Virtual and inverted

13. Why does ice float on water?

(a) Because density of ice is higher than that of water.
(b) Because density of ice is less than that of water.
(c) Because density of ice and water is the same but ice is a solid.
(d) Ice does not float on water.

14. When is a body said to be in motion?

(a) When it moves in a straight line
(b) When it moves in a circular path
(c) When it move in a swinging motion
(d) All of the above

15. A switch is said to be OFF if it_____the path of current flow.

(a) makes
(b) breaks
(c) completes
(d) none of the above

Question 2

(A) Answer the following questions in one word orone sentence. [5]

1. Name the unit in which frequency of an oscillating body is measured.
2. Give the relation between acceleration, change in velocity and time.
3. Name the cell which can be recharged.
4. What are the ways by which heat transfer occurs from one place toother?
5. Name two types of spherical mirrors.

(B) Fill up the blanks and rewritethe sentences: [5]

1. S.I. unit of weight is_____.
2. Metals are_____conductors of electricity.
3. The straight line passing through the centre of curvature and pole of a spherical mirror is called its _____.
4. Pitch of the sound depends on _____.
5. A stone tied to a string has_____ motion when it is whirled around.

Question 3

(A) Match the items in column A with the appropriate items incolumn B. [5]

Column A	Column B
Sonar	Opaque
Wood	Conductor
graphite	Current
ampere	Density
Kg/m^3	Echo

(B) Define the following: [5]

1. Rest
2. Convection
3. Timbre or quality
4. Reflected ray
5. Mass

Question 4

(A) Identify and classify the following types of motions as rotatory, vibratory, oscillatory, rectilinear, curvilinear, or random motion: [5]

A car moving on a straight road	
A train moving along a curved track	
A child on a swing	
A freely falling stone	
Motion of a ceiling fan	

(B) Give one word for the following [5]

1. The emission of light from living organisms like plants and animals.
2. The force with which the Earth attracts a body towards its centre.
3. A device used to either break the electric circuit or to completeit.
4. The time taken by a freely oscillating pendulum to complete oneoscillation.
5. The shadow cast by heavenly bodies on each other.

Question 5

(A) State whether the following statements are Trueor False [5]

1. Fuses should be connected to the neutral wire
2. The S.I. unit of relative density is kg/m^3.
3. Heat always flows from a hotter object to a colder object.
4. Sound propagates faster through solids than through liquids.
5. A pinhole camera forms only black and white images.

(B)

1. State three ways of conserving electric energy at home. [2]
2. What are transparent objects, translucent objects and opaque objects? Give examples. [3]

Question 6

Answer the following questions in short:

1. What do you mean by sublimation?
   Give examples of substances that sublime. [2]
2. A cork floats in water, while an iron nail sinks. Give reason. [2]
3. If an object is placed at a distance of 10 cm in front of a plane mirror, how far would the object be from its image? [2]
4. Why are copper and aluminium used for making wires? [2]
5. What are the three main properties of sound waves? [2]

Question 7

(A)

1. How is the density of an irregularly shaped solid such as a stone determined? [4]
2. A body moving with a velocity 5m/s achieves a velocity of 20 m/s in 30 s. Calculate the acceleration of the body? [3]

(B)

1. State the characteristics of an image formed by a concave mirror when the object is placed at the focus. Explain with a ray diagram [3]