

**ICSE Board**  
**Class VIII Physics**  
**Sample Paper – 2**

**Time: 2 hrs**

**Total Marks: 75**

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**General Instructions:**

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

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

1. Electric charges can flow through
  - (a) Both conductors and insulators
  - (b) Insulators
  - (c) Conductors
  - (d) Neither conductors nor insulators
2. A freely suspended magnet would come to rest in the
  - (a) East west direction
  - (b) North south direction
  - (c) South east direction
  - (d) North west direction
3. The change of state from vapour to liquid at a constant temperature is called
  - (a) Fusion
  - (b) Vapourisation
  - (c) Freezing
  - (d) Condensation
4. The type of lens used as a magnifying glass
  - (a) Concave lens
  - (b) Convex lens
  - (c) Concavo-convex lens
  - (d) Convexo-concave lens

5. Our solar system belongs to the
  - (a) Seyfert galaxy
  - (b) Milky way galaxy
  - (c) Whirl pool galaxy
  - (d) Andromeda galaxy
  
6. If the weight of a body is more than the weight of fluid displaced by it, then the body
  - (a) Sinks
  - (b) Floats
  - (c) First floats and then sinks
  - (d) None of these
  
7. Air in motion possesses
  - (a) Potential energy
  - (b) Kinetic energy
  - (c) Electrical energy
  - (d) Geothermal energy
  
8. When a positively charged body is brought close to another positively charged body, it will show
  - (a) Attraction
  - (b) Repulsion
  - (c) No effect
  - (d) None of these
  
9. The Earth's magnetic field is maximum
  - (a) At the poles of the Earth
  - (b) At the centre of Earth
  - (c) At the outer surface of the Earth
  - (d) None of these
  
10. Speed of light is maximum in
  - (a) Air
  - (b) Water
  - (c) Glass
  - (d) Vacuum
  
11. Land breeze blows
  - (a) During the day
  - (b) During the night
  - (c) Both during day and night
  - (d) None of the above

**12.** An image which can be captured on a screen is called

- (a) Erect
- (b) Inverted
- (c) Virtual
- (d) Real

**13.** Liquid pressure is measured by

- (a) Anemometer
- (b) Odometer
- (c) Manometer
- (d) Barometer

**14.** The direction of buoyant force is always

- (a) Vertically downward
- (b) Vertically upward
- (c) Along the surface
- (d) At any angle with the surface of liquid

**15.** Small insects like water striders can walk on water due to

- (a) Surface tension
- (b) Strong feet
- (c) Elastic tension
- (d) Attraction between feet and water

### Question 2

**(A)** Match the columns and rewrite them correctly.

[5]

	Column A		Column B
1	1 Calorie	1	Myopia
2	Concave lens	2	No unit
3	Silver	3	Hydroelectric energy
4	Water in a dam	4	Insulator
5	Relative density	5	Wind energy
		6	Conductor
		7	4.2 Joules

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

1. The space around a magnet where its influence can be felt is called \_\_\_\_\_.
2. \_\_\_\_\_ protects buildings from the damage caused by lightning.
3. Water is used as a \_\_\_\_\_ in thermal power stations.
4. A ray of light passing through \_\_\_\_\_ of a lens passes undeviated.
5. The force of attraction between molecules of the same substance is called \_\_\_\_\_.

### Question 3

**(A)** State whether the following statements are true or false. Correct the false statement and rewrite it. [5]

1. Earth is the largest planet of the solar system.
2. In an electric motor, mechanical energy is converted into electrical energy.
3. Good conductors have excess of free electrons.
4. Convex lenses are always tapering in the middle and thicker at their edges.
5. During vapourisation, temperature of a liquid remains constant.

**(B)** Give reasons for the following: [5]

1. A gas can be easily compressed.
2. Dispersion of light occurs when it passes through a prism.
3. Kilometre is not a convenient unit to measure distances in the universe.
4. A piece of tile or stone feels colder than a piece of wood, even though both are at the same temperature.
5. A normal atom is electrically neutral though it contains charged particles like electrons and protons.

### Question 4

**(A)**

1. Define: [2]
  - (a) Refraction of light
  - (b) Angle of refraction
  - (c) Angle of incidence
2. Define surface tension. Give two examples where surface tension is seen. [3]

**(B)**

1. What is an electroscope? Name two kinds of electroscopes. [2]
2. Draw field lines when two bar magnets are placed with their opposite poles facing each other. List any two properties of magnetic field lines. [3]

**Question 5**

(A)

1. Differentiate between renewable and non-renewable sources of energy with one example for each. [2]
2. What is heat? State three factors on which the amount of heat gained or lost by a body depends. [3]

(B)

1. Write any six characteristics of matter and its constituent particles. [3]
2. State the uses of a convex lens. [2]

**Question 6**

(A)

1. Differentiate between : [3]
  - (a) Planets and satellites
  - (b) Stars and planets
2. Give two consequences of high latent heat of steam. [2]

(B)

1. Name the two factors on which buoyant force depends. State the relationship between the buoyant force on an object and the weight of a liquid displaced by it? [2]
2. Define the following: [3]
  - (a) Conduction
  - (b) Principal axis
  - (c) Valence electrons.

**Question 7**

(A)

1. A coil of insulated wire is connected to a galvanometer. What would be seen if a bar magnet brought towards one face of the coil is: [3]
  - (a) Moved quickly towards it? What does the change indicate?
  - (b) Moved quickly away from it?
  - (c) Name the phenomena involved and explain it.
2. State the characteristics of liquid pressure. [2]

(B)

1. What are constellations? Name any three constellations. [2]
2. State the type of lens used to get a [3]
  - (a) Virtual and diminished image of an object
  - (b) Real and diminished image of an object

Justify your answers in the above two cases by drawing ray diagrams.