

ICSE Board
Class VIII
Physics
Sample Paper- 2

Time: 2hrs

Total Marks: 75

General Instructions:

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

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. Buoyant force exerted by a fluid on a body is equal to the
 - (a) Mass of the body
 - (b) Weight of the body
 - (c) Apparent loss of weight of the body
 - (d) None of these

3. The change of state from vapour to liquid at a constant temperature is called
 - (a) Fusion
 - (b) Vapourization
 - (c) Freezing
 - (d) Condensation

4. The specific heat of water is
 - (a) 42000 Jkg⁻¹C⁻¹
 - (b) 4200 Jkg⁻¹C⁻¹
 - (c) 420 Jkg⁻¹C⁻¹
 - (d) 4250 Jkg⁻¹C⁻¹

- 5.** Our solar system belongs to the
- (a) Seyfert galaxy
 - (b) Milky way galaxy
 - (c) Whirl pool galaxy
 - (d) Andromeda galaxy
- 6.** Time taken by light to reach the Earth from the Sun is
- (a) 18 minutes and 10 seconds
 - (b) 8 minutes and 10 seconds
 - (c) 10 minutes and 16 seconds
 - (d) 16 minutes and 10 seconds
- 7.** Air in motion possesses
- (a) Potential energy
 - (b) Kinetic energy
 - (c) Electrical energy
 - (d) Geothermal energy
- 8.** The direction of magnetic lines of force due to a current carrying straight conductor when the electric current flows upwards is
- (a) Clockwise
 - (b) Anticlockwise
 - (c) Upwards
 - (d) Downwards
- 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.** Sea breeze occurs due to a fall in pressure over the surface of
- (a) Air
 - (b) Water
 - (c) Land
 - (d) Sea
- 11.** Land breeze blows
- (a) During the day
 - (b) During the night
 - (c) Both during day and night
 - (d) None of the above

12. When light is dispersed by a prism, the colour least dispersed is

- (a) Violet
- (b) Indigo
- (c) Yellow
- (d) Red

13. Liquid pressure is measured by

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

14. Earth behaves like a huge bar magnet with its Magnetic North Pole situated near the

- (a) Geographical South Pole
- (b) Geographical North Pole
- (c) Geographical East Pole
- (d) Geographical West Pole

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. Steam from within the Earth can be used to generate electricity. This is called _____ energy.
2. In a step up transformer, the _____ coil is thicker; less heavily insulated and has less number of turns.
3. The pressure exerted by a solid is directly proportional to its _____ and inversely proportional to its _____.
4. When an ebonite rod is rubbed with fur, the charge acquired by the ebonite rod is _____.
5. Between air and water, _____ is the denser medium.

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.

(A) Give reasons for the following. [5]

1. A concave lens is used in spectacles for the correction of myopia.
2. The Sun appears to move from the east to the west.
3. A comb rubbed on dry hair attracts small bits of paper.
4. Water has a tendency to form spherical droplets.
5. An ice-cube is used for cooling a drink.

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. Why are astronauts made to wear special suits? [2]
2. Give three observations in our daily life where the principle of evaporation produces cooling. [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. State the 'right hand thumb' rule to find the direction of the magnetic field around a current-carrying straight conductor. Illustrate using a diagram. [3]
2. State the law of floatation. Why does ice float on the surface of water? [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. Define- 'specific latent heat of fusion'. Calculate the specific latent heat of fusion of ice when 200 g at 0°C is converted to water by supplying 67200 J of heat. [2]
2. Differentiate between the following: [3]
 - (a) Concave and convex lens
 - (b) Solids and liquids

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. State any four precautions which one should take while using energy in everyday life. [2]
2. How do you charge a body by induction? Explain with the help of an example. [3]