

## ICSE Class 8 Physics Important Questions

1. Choose the correct answer out of the four available choices given under each question.

a) The fluid between the retina and the lens is called

- (a) Aqueous humor
- (b) Vitreous humor
- (c) Choroid
- (d) Sclerotic

b) Which among the following is false?

- (a) A denser liquid exerts a greater up thrust
- (b) Relative density has no unit
- (c) Icebergs have  $1\frac{1}{12}$  parts above water
- (d) A body experiences a loss in weight in a liquid

c) The attractive property of a magnet is maximum at

- (a) The North Pole only
- (b) The South Pole only
- (c) Both the poles
- (d) The center of the magnet

2. Match the columns and rewrite them correctly.

|   | Column A                        |   | Column B       |
|---|---------------------------------|---|----------------|
| 1 | Brightest planet                | 1 | Convex lens    |
| 2 | Myopia                          | 2 | A battery      |
| 3 | Chemical energy to sound energy | 3 | Venus          |
| 4 | Potential difference            | 4 | Water          |
| 5 | Concave meniscus                | 5 | Mercury        |
|   |                                 | 6 | A fire cracker |
|   |                                 | 7 | Concave lens   |
|   |                                 | 8 | volt           |

3. Fill up the blanks and rewrite the sentences:

1. Rainbow is produced due to \_\_\_\_\_ of white light.
2. We use water in hot bags for \_\_\_\_\_ because it will keep us warm.

3. A glass slab appears to be \_\_\_\_ in water than in air.
  4. The \_\_\_\_\_ Pole of the Earth's magnet is closer to the geographic South Pole.
  5. If the Moon is in the \_\_\_\_\_ core of the Earth's shadow, it is known as a total lunar eclipse.
4. State whether the following statements are True or False. Correct the false statement and rewrite it.
    - a. A concave lens always forms an inverted image.
    - b. A camel can run faster in deserts than a horse.
    - c. Non-renewable sources of energy can never get exhausted.
    - d. While charging by induction, there is no loss of charge.
    - e. An electromagnet is a temporary magnet.
  5. Give reasons for the following.
    - a. It takes some time to see objects in a cinema hall when we just enter it from bright sunlight.
    - b. Heavy trucks have 6-8 tyres.
    - c. In a hydroelectric power plant more electrical power can be generated if the water falls from a greater height.
    - d. Soaps and detergents help in cleaning clothes.
  6. For which position of an object does a convex lens form a real and inverted image of the same size as that of object? Draw a labelled ray diagram to show the formation of the required image.
  7. What is a galaxy? Name the different kinds of galaxies.
  8. Identify the poles of the magnet in the figures (1) and (2) below:

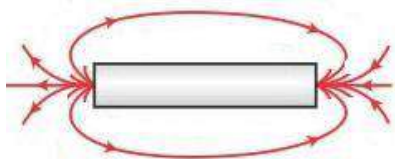


Figure 1

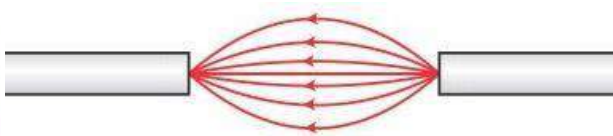


Figure 2

9. What is electromagnetic induction?
10. In what way can the magnitude of the induced current be increased?
11. Water wets the glass surface while mercury does not. Explain.
12. Give three differences between myopia and hypermetropia.

13. What are the do's and don'ts during a thunderstorm when you are outside the house?
14. For what purposes is solar energy used?
15. Describe the advantages of high specific heat capacity of water as a coolant.
16. What happens to the equivalent resistance and the current in a parallel circuit when more and more resistances are added?
17. Name the physical quantity whose unit is volt/ampere.
18. What is meant by potential difference between two points?
19. Write a note on tides.
20. Ram throws a stone in the pond. It displaces 1.5 kg of water. Calculate the buoyant force acting on the stone ( $g = 9.8 \text{ m/s}^2$ ).
21. 'A ray of light incident on a rectangular glass slab immersed in any medium emerges parallel to itself'. Draw a labelled ray diagram to justify the statement.
22. State the rules for construction of ray diagrams for a convex lens along with the ray diagram.
23. How much current will an electric bulb draw from a 220 V source, if the resistance of the filament of the bulb is  $1200 \Omega$ ?
24. What is Pascal's law? Demonstrate it with the help of an experiment.
25. Land breeze is set up during the night. Why?