

BRAIN INTERNATIONAL SCHOOL

Science Assignment

Class: VIII

Nov'2024

Chapter -11 Chemical Effects of Electric Current

1. Choose the correct option:

- (i) Which one of the following solutions will not conduct electricity?
(a) lemon juice (b) vinegar (c) tap water (d) vegetable oil
- (ii) An electrolyte is a
(a) solid that conducts electricity.
(b) liquid that conducts electricity and breaks up chemically in the process.
(c) liquid that does not conduct electricity.
(d) solid that does not conduct electricity.

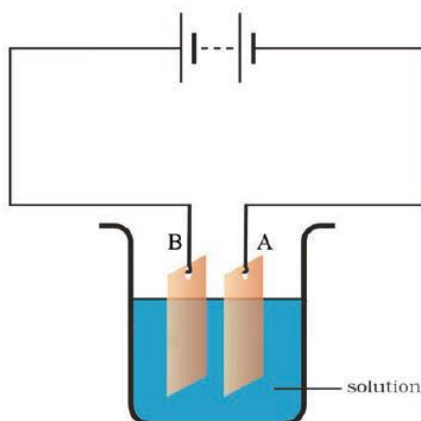
2. In each of the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

- a) Both A and R are true, and R is correct explanation of the assertion.
b) Both A and R are true, but R is not the correct explanation of the assertion.
c) A is true, but R is false.
d) Both assertion and reason are false.
- (i) Assertion (A): When water falls as rain drop, many impurities dissolve in it.
Reason (R): Presence of chemicals and impurities makes rainwater a good conductor of electricity.
- (ii) Assertion (A): An LED has longer life than bulbs and CFL's.
Reason (R): Smaller electrical devices have longer life.

3. Answer the following questions:

1. Why is it dangerous to handle electrical appliances with wet hands or while standing on a wet floor?
2. Riya wants to deposit silver on an iron spoon. She took silver nitrate (AgNO_3) solution in a beaker and setup a simple circuit for electroplating. Which terminal of the battery should the spoon be connected to? What material should the other electrode be made of?
3. You are provided with a magnetic compass, an empty match box, a battery of two cells and connecting wires. Using these objects how will you make a tester for testing an electric circuit? Draw the necessary circuit diagram and explain.
4. Define electrolysis. Through diagram represent movement of ions during electrolysis. Write one important application of electrolysis in our daily life.
5. A child staying in the coastal regions tests the drinking water and also the sea water with his tester. He finds that the compass needle deflects more in case of sea water. Can you explain the reason?

6. Observe the circuit given below:

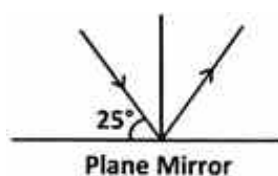


Raman set up this circuit for purification of copper. What will be the nature of – (i) plate A (ii) plate B (iii) the solution. Explain the process of purification.

Chapter-13: Light

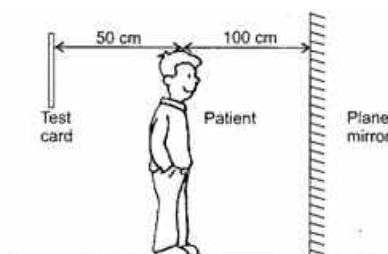
1. Choose the correct option:

1. Observe the figure. Find the angle between the incident and the reflected ray.



- (a) 65° (b) 90° (c) 130° (d) 25°

2. An optician holds a test card 50 cm behind a patient. The patient then looks in the plane mirror which is 100 cm away. How far away from the patient's eyes is the image of the test card?



- (a) 100 cm (b) 150 cm
(c) 200 cm (d) 250 cm

2. In each of the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

- a) Both A and R are true, and R is correct explanation of the assertion.
- b) Both A and R are true, but R is not the correct explanation of the assertion.
- c) A is true, but R is false.
- d) Both assertion and reason are false.

- (i) Assertion (A): In bright light the size of the pupil is small.
Reason (R): Pupil controls the amount of light entering to the eye.
- (ii) Assertion (A): An image formed by a mirror the left of the object appears on the right and the right appears on left.
Reason (R): This is happened because of parallel inversion.

3. Answer the following questions:

1. What is cataract? How is it caused? How can it be formed?
2. Eyes of the nocturnal birds have large cornea and a large pupil. How does this structure help them?
3. List the difference between the reflection and the dispersion of light.
4. How is the phenomenon of reflection used in making a kaleidoscope? What are the applications of a kaleidoscope?
5. (a) What is the function of iris in the human eye?
(b) Explain the ways by which you can take care of your eyes.
6. Write down the names of parts of the eye in the blank spaces shown in Fig.

