

Chapter: 16

Q.1 A) Choose the correct alternative and rewrite the sentence (2)

1) Mirrors reflect most of the light that falls on it because it is a

- | | |
|----------------|------------------------|
| a. transparent | b. luminous |
| c. opaque | d. reflecting surface. |

2) Object which emit light of their own are called

- | | |
|-------------------------|------------------------|
| a. non-luminous objects | b. transparent objects |
| c. translucent objects | d. luminous objects |

Q.2 B) Solve the following questions. (3)

1) **State True or False** (1)

1) Laws of reflections are followed only by regular reflection.

2) **Find the odd one out** (1)

1) Sun, Moon, Fire, Stars

3) **Name the following** (1)

The reflection of light from a plane and smooth surface.

Q.2 Solve the following questions. (Any two) (4)

1) **Solve the numerical problem:**

If the reflected ray makes an angle of 45° with the normal. What angle must the incident ray make with the normal ?

2) **Draw and Label the diagram**

Draw 'Reflection of Light' showing the following.

- | | | |
|-----------------------|------------------------|-----------------------|
| a. Incident ray | b. Normal | c. Reflected ray |
| d. Angle of incidence | e. Angle of reflection | f. Point of incidence |

3) **Give scientific reasons**

In saloon, one can observe the hair on the back side.

Q.3 Answer the following in detail (Any TWO) (6)

1) Classify the following into regular and irregular reflection when beam of light strikes it.

(Polished wooden table, Chalk powder, Cardboard surface, Marble floor with water spread over it, Mirror, Piece of paper)

2) How do we see the image of the Moon in water ?

3) Swara and Yash were looking in a water filled vessel. They could see their images clearly in the still water. At that instant, Yash threw a stone in the water. Now their images were blurred. Swara could not understand the reason for the blurring of the images. Explain the reason for blurring of the images to Swara by answering the following questions.

- i. Is there a relation between the reflection of light and the blurring of the images?
- ii. Are laws of reflection followed in these types of reflection?
- iii. Which type of reflection of light can you notice from this?

Q.4 Solve the following questions.

(5)

- 1) Describe an experiment to prove the laws of reflection.

