DELHI PUBLIC SCHOOL JAMMU
SESSION - 2025-26
MONTH - MAY
ASSIGNMENT

CLASS - X
SUBJECT - PHYSICS

1. What happens to the speed of light when it passes from air into glass? 1
A) Increases
B) Decreases
C) Remains the same
D) Becomes zero

2. Assertion and Reason Question:

Assertion (A): Light bends towards the normal when it enters a denser medium from a rarer medium.
Reason (R): The speed of light is greater in the denser medium.

Choose the correct option:
(a) Both A and R are true, and R is the correct explanation of A.
(b) Both A and R are true, but R is not the correct explanation of A.
(c) A is true, but R is false.
(d) A is false, but R is true. 1

3. What is meant by refraction of light? Explain with the help of a labeled diagram. 2

4. State the laws of refraction of light. Explain with the help of a ray diagram. 3

5. Explain the formation of a real and inverted image by a convex lens. Use ray diagrams. Also mention two uses of convex lenses. 5

6. Read the following passage and answer the questions:

Light travels at different speeds in different media. When it passes from one medium to another, it changes its direction—a phenomenon known as refraction. This is why a pencil dipped in water appears bent. Lenses work on this principle. Convex lenses converge light rays and are used in magnifying glasses and cameras, while concave lenses diverge light rays and are used in spectacles for correcting short-sightedness. The bending of light also causes optical illusions like the apparent depth of water bodies.

1. Why does a pencil appear bent when placed in water? 1
2. Name one application each of a convex lens and a concave lens. 1
3. What is the principle behind the working of a lens? Explain briefly. 2

OR

List two effects or uses of refraction in daily life mentioned in the passage. 2