

## QUIZEN – Light CBSE10P01.2

<b>Learning Level 1</b>	<b>Learning Level 2</b>	<b>Learning Level 3</b>
Q - Remembering (knowledge-based questions) U - Understanding (comprehension-based questions)	I - Applying (application-based questions) Z - Analyzing (analysis-based questions)	E - Evaluating (evaluation-based questions) N - Creating (creation-based questions)

### Learning Level 1:

1. What is the phenomenon of refraction of light?
2. What is the critical angle of a medium?
3. Define the term 'optical centre' of a lens.
4. What is the unit of power of a lens?
5. What is the angle of deviation of a ray of light when it passes through a glass prism?

### Learning Level 2:

1. A ray of light travelling in air is incident at an angle of 45 degrees on a glass slab. If the refractive index of glass is 1.5, find the angle of refraction.
2. A concave lens always produces a virtual, erect and diminished image of an object. Justify this statement.
3. A convex lens is used to form an image of an object on a screen. Where should the object be placed to get a real and inverted image?
4. A ray of light is incident at an angle of 60 degrees on a glass prism. If the refractive index of glass is 1.5, find the angle of deviation.
5. A convex lens produces an image of an object that is twice the size of the object. If the object is placed at a distance of 10 cm from the lens, find the focal length of the lens.

### Learning Level 3:

1. A student has two glass slabs of different thicknesses. He wishes to find the refractive index of each slab. Describe the steps he should follow to perform the experiment.
2. A convex lens produces a real and inverted image of an object. How would the image change if the distance between the object and the lens is doubled?
3. A student has two convex lenses of different focal lengths. He wishes to find the focal length of each lens. Describe the steps he should follow to perform the experiment.
4. A glass prism is used to produce a deviation of 45 degrees in a ray of light. If the refractive index of glass is 1.5, find the angle of incidence.
5. A concave lens of focal length 20 cm produces an image of an object that is 3 times smaller than the object. Where should the object be placed?

