



**INDIAN SCHOOL DARSAIT**  
**CLASS –VII (SCIENCE)**  
**Topic:LIGHT**



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**Name of the student :**

**Date:**

**Roll No :**

**I**

**Fill in the blanks**

- a. Light travels along \_\_\_\_\_ path.
- b. When an object is placed very close to the concave mirror , the nature of the image formed is \_\_\_\_\_.
- c. To obtain an image on a screen we would require a \_\_\_\_\_ mirror and a \_\_\_\_\_ lens.
- d. Splitting of white light is called \_\_\_\_\_.

**II**

**Write down the names of mirrors or lenses used by the following persons.**

- a. Dentist --
- b. Astrologer --
- c. Driver --

**III**

**Match the words in column A to the phrases in column B**

Column A

Column B

- |                   |  |
|-------------------|--|
| a. Real image     | i. Reflecting surface caved inward     |
| b. Concave mirror | ii. Image is formed laterally inverted |
| c. convex lens    | iii. Consists of seven colours         |
| d. plane mirror   | iv. image cannot be obtained on screen |
| e. White light    | v. Converges light                     |
| f. virtual image  | vi. Can be obtained on a screen        |

**IV**

**Give one word answer:**

- i) An image that cannot be formed on a screen.
- ii) An image that can be formed on a screen.
- iii) A spherical mirror which has inner side as the reflecting surface.
- iv) A spherical mirror which has outer side as the reflecting surface.
- v) The phenomenon of left appearing right and right appearing left on reflection in a plane mirror.
- vi) A transparent medium bounded by two surfaces of which at least one is spherical.
- vii) The lens which is thinner in the middle than at the edges.
- viii) The lens which is thicker in the middle than at the edges.
- ix) The lens which always form erect, virtual and smaller image than the object.

x) The mirror which always form erect, virtual and smaller image than the object.

V

**Very short answer questions**

1. State one similarity between a plane mirror and a convex mirror.
2. Deepu found his image as erect and smaller in size in the shiny surface of the bell on his new bicycle. Can you recognize the type of mirror?
3. A person stands in front of a magic mirror. His head appears smaller, body appears of the same size and legs appear bigger. What can you say about the combination of mirror starting from the top?

VI

**Short answer type questions**

4. Give reasons for the following.
  - a. Convex lens can burn a piece of paper using sunlight
  - b. A convex mirror is used as a rear view mirror in vehicles.
  - c. Newton's disc appears white when it is rotated.
5. Differentiate real and virtual images.
6. What happens when
  - (a) light falls on a shiny surface.
  - (b) A concave mirror is held facing the sun and reflected light is obtained on a piece of paper.
  - (c) A ray of light falls on a face of a prism.
  - (d) Newton's disc is rotated at a high speed.
  - (e) A parallel beam of light strikes on (i) a convex lens (ii) concave lens
7. With the help of a diagram, explain an activity to show that white light consists of seven colours.
8. State three important characteristics of an image formed in a plane mirror.