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**SUBJECT:-** PHYSICS

**CLASS:-** XTH

**DATE:**10/10/XX

**SUBJECT TEACHER:- MR. NEEL NIRANJAN**

**CHAPTER 2. (LIGHT - REFLECTION) (BASED ON NCERT PATTERN)**

**(REVISION)**

**Question 1.** What are the important differences between looking at a photograph of your face and looking at yourself in a plane mirror ?

**Solution :** A image of our face in a plane mirror is laterally inverted, so left is right and right is left. However, in a photograph of our face this is not the case.

**Question 2.** (a) A wall reflects light and a mirror also reflects light. What difference is there in the way they reflect light ?

(b) Which type of reflection of light leads to the formation of images ?

**Solution :** (a) A wall has a rough surface, so the reflection by a wall is a diffuse reflection. A parallel beam of light incident on it is reflected in different directions. A mirror surface is smooth, so the reflection by a mirror is a regular reflection. A parallel beam of light incident on it, gets scattered by making reflected rays in different directions.

(b) Regular reflection

**Question 3.** What is the difference between regular reflection of light and diffuse reflection of light ? What type of reflection of light takes place from :

(a) a cinema screen (b) a plane mirror (c) a cardboard (d) still water surface of a lake

**Solution :** In regular reflection, a parallel beam of incident light is reflected as a parallel beam in one direction; while in diffuse reflection, a parallel beam of incident light is reflected in different directions.

(a) Regular reflection

(b) Regular reflection

(c) Diffuse reflection

(d) Regular reflection