

REVISION PRACTICE ASSIGNMENT (RPA)

SUBJECT- PHYSICS

SESSION-2020-21

CLASS- X

TOPIC: CHAPTER – 10 [LIGHT-REFLECTION OF LIGHT]

Answer the following questions as instructed: - F.M : 20

SECTION I: Objective Questions - MCQ Types

1 X 5 =5

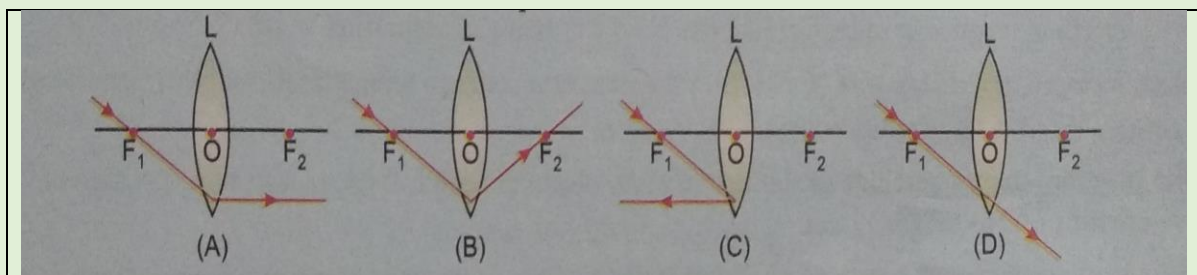
1. A ray of light passing through a point situated on the principal axis of a lens goes straight without suffering any deviation. The point is called the

- (a) Principal focus
- (b) Optical centre.
- (c) Pole.
- (d) Centre of curvature

2. a biconvex lens can form a virtual and erect image of an object placed in front of the lens when the object is placed

- (a) between optical centre and focal point
- (b) at focal point F.
- (c) at 2F
- (d) anywhere beyond the focus point

3. In the following figure, four possible paths of a refracted ray of light corresponding to an incident ray have been shown. Which diagram shows the correct path?



- (a) A
- (b) B
- (c) C
- (d) D

4. An object is placed at a distance of 20 cm from a concave lens of focal length 20cm. The distance of virtual image of the object from the lens is

- (a) 20 cm.
- (b) 10 cm.
- (c) 5 cm.
- (d) Infinity

5. Focal length of a convex lens is 20 cm. Its power is

- (a) +5 D
- (b) -5 D
- (c) +0.05 D
- (d) - 0.05 D

SECTION II: Objective Questions : Answer on one word only 1 X 5 = 5

- 6. power of which lens is considered to be negative.
- 7. What is the SI unit of power of lens.
- 8. Name the lens which is thicker at the centre than the edge.
- 9. Which lens is used as a magnifying glass.
- 10. Which lens always forms a virtual and diminished image.

SECTION III: Short Answer Type Questions 2 X 3 = 6

- 11. Define power of lens. Write its SI unit.
- 12. (a) State the laws of Refraction
(b) State the Snell's Law.
- 13. Write any two uses of :- (a) Convex lens (b) Concave lens

14. Draw the ray diagram of the image formation in Convex lens when the object is:-

- (i) at infinity
- (ii) beyond 2F
- (iii) at 2F
- (iv) between 2F and F
- (v) at F
- (vi) between F and Optical centre.

Q. Also discuss the nature of the image formed.