SLIP TEST- 6
CHAPTER- 6 : REFRACTION OF LIGHT AT CURVED SURFACES

Name:……………………………….. Section:………… Roll No:………....   **Max.Marks:20**
……..

**I. Answer the following questions. Each carries four marks.**   **2 x 4 = 8 M**

1) Define a lens. Name different types of lenses. Draw the diagrams.

2) If an object placed at a centre of curvature on the principal axis of a convex lens, where will be the image formed? Explain with a neat ray diagram. Also write the character of the image.

II. Answer the following questions briefly. Each carries two marks.   **2 x 2 = 4 M**

3) Write the lens maker's formula. Explain the terms in it.

4) What is the focal length of double concave lens kept in air with two spherical surfaces of radii R_1 = 30cm and R_2 = 60cm. Take refractive index of lens as n=1.5

III. Answer the following in one or two sentences. Each carries one marks.   **2 x 1 = 2 M**

5) Define the focus of a lens.

6) Complete the refracted ray in the figure.
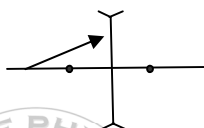
IV. Choose the correct choice and write down in the given brackets.   **6 x 1 = 6 M**

7) Which one of the following materials cannot be used to make a lens?   [   ]

    A. water   **B.** glass   **C.** plastic   **D.** clay

8) Which of the following is true?   [   ]

    A. the distance of virtual image is always greater than the object distance for convex lens

    B. the distance of virtual image is not greater than the object distance for convex lens

    C. convex lens always forms a real image

    D. convex lens always forms a virtual image

9) Focal length of the Plano-convex lens whose refractive index is '**n**' and its radius of curvature of the surface is 'R'   [   ]

    A. f = R   **B.** f = R/2   **C.** f = R/(n−1)   **D.** f = (n−1)/R

10) $\frac{1}{f} = \frac{1}{u} + \frac{1}{v}$ This formula is   [   ]

    A. Mirror formula   **B.** Lens formula

    C. Lens maker's formula   **D.** Refraction formula at curved surfaces

11) Which of the following can acts as converging lens   [   ]

    A. Biconvex lens   **B.** Plano-convex lens

    C. Concavo convex lens   **D.** All of the above

12) The light ray gets refracted twice through glass slab. The perpendicular distance between incident ray and final emergence ray is called   [   ]

    A. Reflection   **B.** Refraction

    C. Lateral shift   **D.** Angle of deviation