Wisdom Institution

Activity 05 Concave Lenses MCQ

Answer all the questions below.

01. A concave lens of focal length f produces an image 1/3 of the size of the object, the distance of the object from the lens is
    a. 2f
    b. 3f/2
    c. 4f
    d. 2f/3

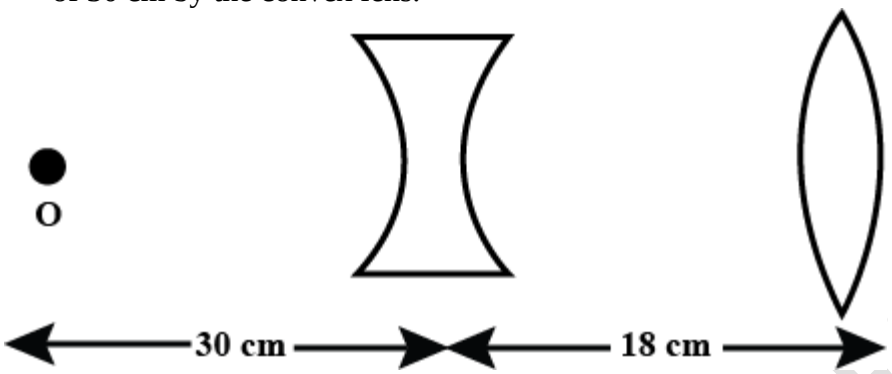
02. Concave and convex lenses, each have the same focal length 20cm and they are put in contact to form a combination lens. This combination lens is used to view an object of 5cm length, kept at a distance 20cm from the lens combination. As compared to the object the image will be
    a. Magnified and inverted.
    b. Reduced and erect.
    c. Of the same size as the object and erect.
    d. Of the same size as the object but inverted.

03. Fill in the blank. The image produced by a concave lens is _____.
    a. always virtual and reduced in size
    b. always virtual and enlarged
    c. always real
    d. sometimes real, sometimes virtual

04. A convex lens is in contact with a concave lens.The magnitude of the ratio of their focal length is 2:3. Their equivalent focal length is 30 cm. Their individual focal lengths are (in cms)

    a. −75,50
    b. −10,15
    c. 75,50
    d. −15,10

05. An object (O) is placed in front of a concave lens of focal length 20 cm as shown in the figure. Determine the focal length of the convex lens if a real image is formed at a distance of 30 cm by the convex lens.



a. 15 cm
b. 30 cm
c. 45 cm
d. 60 cm