Sri Chaitanya high school

Sub: science. R-T/1

1. A concave mirror produces three times magnified (enlarged) real image of an object placed at 10 cm in front of it. Where is the image located?

(a) 30 cm

(b) 40 cm

(c) -30 cm

(d) -40 cm

2.A convex lens forms a real and inverted image of a needle at a distance of 50 cm from it. Where is the needle placed in front of the convex lens if the image is equal to the size of the object?

(a) 0.25 m

(b) 0.30 m

(c) 0.35 m

(d) 0.40 m

3.No matter how far you stand from a mirror, your image appears erect. The mirror is likely to be-

(a) Plane

(b) Concave

(c) Convex

(d) Either plane or convex

4. The image formed by a concave mirror is observed to be virtual, erect and larger than the object. Where should be the position of the object?

(a) Between the principal focus and the centre of curvature

(b) At the centre of curvature

(c) Beyond the centre of curvature

(d) Between the pole of the mirror and its principal focus.

5. . An object 5.0 cm in length is placed at a distance of 20 cm in front of a convex mirror or radius of curvature 30 cm. The position of the image is-

(a) 8.57 cm

(b) 9.10 cm

(c) 8.15 cm

(d) 7.15 cm

6. A student wants to project the image of a candle flame on a screen 80 cm in front of a mirror by keeping the candle flame at a distance of 20 cm from its pole. The magnification of the image produced is-

(a) -4

(b) -2

(c) -6

(d) -1

7.Choose the correct relation between u, v and R for spherical mirrors.

A. u+v=R

B. u-v=R

C.none

8.Assertion : Convex mirror is used as a rear view mirror. Reason : Convex mirror always forms inverted image.

(a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) Assertion is true but Reason is false.

(d) Both Assertion and Reason are false.

9. Assertion : Magnification of real images is taken negative. Reason : agnification is ratio of image distance and object distance.

(a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) Assertion is true but Reason is false.

(d) Both Assertion and Reason are false.

10. Assertion : Convex mirror is used as a shaving mirror. Reason : Convex minor always forms an enlarged image.

(a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) Assertion is true but Reason is false.

(d) Both Assertion and Reason are false