

S.2 PHYSICS |

REVISION QUESTIONS

TOPIC: Light

Reflection at Curved mirrors.

Attempt the Questions and submit Work for
Marking on the eLearning Platform [Q & A Forum](#) or
to Mr. Ssendawula (WhatsApp : [0700 37 7992](tel:0700377992))

1. A concave mirror may be used as

- (i) a magnifying mirror.
- (ii) a torch reflector.
- (iii) a driving mirror.

- A. (i) only.
- C. (ii) and (iii) only.
- B. (i) and (ii) only.
- D. (i), (ii) and (iii).

2. A concave mirror can be used as a shaving mirror because when an object is placed between the focus and the pole, the image formed is

- A. magnified, virtual and erect.
- C. diminished, real and inverted.
- B. magnified, real and inverted.
- D. diminished, virtual and erect.

3. Which of the following information is true about concave and convex mirrors?

Concave mirror

- A. Converges light
- B. Diverges light
- C. Refracts light
- D. Has a wide field of view.

Convex mirror

- A. Diverges light
- B. Converges light
- C. Reflects light
- D. Has a narrow field of view.

4. The bulb in a projector is placed.

- A. at the focal point of the reflector.
- B. at the centre of curvature of the reflector.
- C. between the focal point and the centre of curvature of the reflector.
- D. between the pole and the centre of curvature of the reflector.

5. An object is placed between the focal point and the centre of curvature of a concave mirror. Which of the following fully describes the image formed?

- A. Real, inverted, magnified
- B. Virtual, erect, magnified

- C. Real, inverted, diminished
 - D. Real, erect, diminished.
6. A converging mirror produces a virtual, magnified and erect image when
- A. The object is between the pole and the principal focus
 - B. The object is between the principal focus and the centre of curvature
 - C. The object is beyond the centre of curvature
 - D. The object is at infinity

Essay Questions

1. An object 3cm high is placed at right angles to the principle axis of a concave mirror of focal length 7.5cm. if the object is 30cm from the pole of the mirror, using a scale diagram, obtain the position and size of the image formed.
2. (i) By use of ray diagram, explain how a parabolic mirror is used as a solar concentrator.
(ii) State any two applications of parabolic mirrors.
3. (a) Define the following terms as applied to a concave mirror;
 - (i) Linear magnification
 - (ii) Centre of curvature of a concave mirror
 - (iii) principal focus
 (b) State **two** uses of a concave and **two** of convex mirrors.
4. Describe an experiment to determine the focal length of a concave mirror using an illuminated object.
- (5) A concave mirror of focal length 15 cm forms a real image 6 cm high at a distance of 60 cm from the mirror. By graphical construction, find;
 - (i) The position of the object.
 - (ii) The height of the object.
 - (iii) magnification of image.
- (6) An object placed at a certain distance in front of a diverging mirror of radius of curvature 20cm forms an image 30cm away from the mirror. By scale drawing, determine the position of the object from the mirror.