

6. What is a virtual image? Give one situation where a virtual image is formed.

Answer: The image which cannot be taken on a screen is called virtual image. When some object is placed very close to the concave mirror we don't get any image on the white screen placed behind the mirror. Such image is called virtual image.

7. State two differences between a convex and a concave lens.

Answer:

Convex lens	Concave lens		
(i) Convex lens can form both real and virtual images.	(i) Concave lens always forms a virtual image.		
(ii) It can form magnified image.	(ii) Image is always diminished in size.		

8. Give one use each of a concave and a convex mirror.

Answer

Use of concave mirror:

Concave mirror is used by dentists to examine the teeth.

Use of convex mirror:

Convex mirror is used as side view mirror in vehicles.

9. Which type of mirror can form a real image? Answer: Concave mirror can form a real image.

10. Which type of lens forms always a virtual image? Answer: Concave lens always forms a virtual image.

Choose the correct option in Questions 11-13:

- 11. A virtual image larger than the object can be produced by a
- (i) concave lens
- (ii) concave mirror
- (iii) convex mirror
- (iv) plane mirror

Answer: (ii) concave mirror

12. David is observing his image in a plane mirror. Die distance between the mirror and his image is 4 m. If he moves 1 m towards the mirror, then the distance between David and his image will be (i) 3 m (ii) 5 m (iii) 6 m (iv) 8 m

Answer: (iii) 6 m

13. The rear view mirror of a car is a plane mirror. A driver is reversing his car at a speed of 2 m/s. The driver sees in his rear mew mirror the image of a truck parked behind his car. The speed at which the image of the truck appears to approach the driver will be

(i) 1 m/s (ii) 2 m/s (iii) 4 m/s (iv) 8 m/s

Answer: (ii) 4 m/s