Light

<1M>

1.Does light travels in straight line?

2.Can a shiny surface change the direction of the light?

3.Does light get reflected from a plane mirror?

4.What is a real image?

5.What is a virtual image?

6.What is a concave lens?

7.What is a convex lens?

8.Can we obtain an image on screen by a plane mirror?

9.Which type of lens always forms a virtual image?

10.Another candle appears behind the mirror when we place a candle in front of it.
(A) The candle behind the mirror is known as the image.(B) The candle in front of the mirror is called the object.
(C) Both (1) and (2).
(D) None of the above.

11.Convex mirror has its reflecting (shining) surface-
(A) Similar to the inner surface of a spoon. (B) Bulging in.
(C) Both (a) and (b). (D) Neither (a) nor (b).

12.An image formed by a plane mirror, that cannot be obtained on a screen is called a-
(A) Real Image. (B) Virtual Image. (C) Erect Image. (D) Inverted image.

13.By using a concave mirror, we can see an image that is-
(A) Real or virtual. (B) Smaller or larger than the object.
(C) Inverted or erect. (D) All of these.

14.By using a convex mirror, we can see an image that is-
(A) Real, inverted and enlarged. (B) Virtual, erect and diminished.
(C) Real, erect and diminished. (D) Virtual, erect and enlarged.

15.Those lenses which are thicker in the middle than at the edges are-
(A) Concave lenses. (B) Diverging lenses.
(C) Magnifying lenses. (D) Magnifying glasses or convex lenses.

16.The nature and size of an image depend upon-
(A) The time of conducting the experiment. (B) The position of the object.
(C) The kind of the object. (D) The position of the object in case of mirrors only.

17.Concave lenses are also known as-

(A) Diverging lenses because they diverge light.
(B) Converging lenses because they converge light to a point.
(C) Diverging lenses because they bend the light outward.
(D) Only (a) and (c).

18.Sunlight consists of-
(A) White colour only. (B) Five colours. (C) Seven colours. (D) Blue colour.

19.The correct sequence of seven colours of a rainbow is-
(A) Blue, Orange, Red, White, Purple, Yellow, Green.
(B) Violet, Blue, Indigo, Green, Red, Yellow, Orange.
(C) Red, Orange, Yellow, Green, Blue, Indigo, Violet.
(D) Red, Orange, Yellow, Green, Violet, Indigo, Blue.

20.Concave mirror has its reflecting (shining) surface-
(A) Bulging in. (B) Bulging out.
(C) Like the outer surface of a spoon. (D) Both (b) and (c).

21.The image can be obtained on a screen, if-
(A) The screen is placed behind the plane mirror.
(B) The screen is placed in front of the plane mirror.
(C) The screen is placed in front or behind the plane mirror.
(D) The image cannot be obtained on a screen using a plane mirror.

22.In an image obtained by a plane mirror, left side of the object appears to be-
(A) Theleft side of the image. (B) Theright side of the image.
(C) Thetop of the image. (D) Thebottom of the image.

23.In the side mirror of a car, the images of all the objects appear-
(A) Equal to the objects. (B) Smaller than the objects.
(C) Larger than the objects. (D) As points.

24.The shape of a mirror can be-
(A) Plane. (B) Convex. (C) Concave. (D) All the three.

25.The distance of the image from a plane mirror is-
(A) More than the distance of the object from the mirror.
(B) Less than the distance of the object from the mirror.
(C) Same as the distance of the object from the mirror.
(D) None of these.

26.If a small circular disc with seven rainbow colours painted on it, is rotated, we see-
(A) The seven colours rotating in the same sequence.
(B) The seven colours become brighter.
(C) Black colour.
(D) White colour.

27.The image formed by a plane mirror is-
(A) Of smaller size, if the mirror is larger.
(B) Of smaller size, if the mirror is smaller.
(C) Of the same size as that of the object - does not matter if the mirror is small or large.
(D) Of larger size, if the mirror is larger.

28.Objects become visible to us because-
(A) Light is absorbed by them. (B) Light is reflected by them before reaching our eyes.
(C) They obstruct the path of light. (D) None of these.

29.Direction of reflected light changes if-
(A) The mirror is rotated slightly. (B) The object is moved sideways.
(C) Both (1) and (2). (D) None of these.

30.You cannot see the flame of a lighted candle through a bent pipe, but you can see it through a straight pipe, because:
(A) Light travels in a straight line. (B) Pipe is polished.
(C) Bent pipe was blocked. (D) All of these.

31.When light falls on a polished or shiny surface-
(A) The light is absorbed by it. (B) The direction of light changes.
(C) The light gets deflected in different directions. (D) All of these.

32.The change in direction of light after striking a mirror is called-
(A) Beam of light. (B) Searchlight. (C) Reflection of light. (D) Path of light.

33.Those transparent glasses which are thinner in the middle than at the edges are-
(A) Concave lenses. B) Magnifying glasses. C) Used in microscopes. D) Used in telescopes.

34.The image formed by a plane mirror will be-
(A) Larger. B) Erect. (C) Inverted. (D) Tilted.

35.Which of the following mirror is used by the doctors?
(A) Convex. (B) Plane. (C) Concave. (D) Both concave and convex.

36.Reflector of a torch has-
(A) Plain surface. (B) Concave surface. (C) Convex surface. (D) Irregular surface.

37.Can you identify lenses just by touching?
(A) No. (B) Yes. (C) Only convex lenses. (D) Only concave lenses.

38.A circular disc with all the seven colours of rainbow painted on it in correct sequence, is called-
(A) Circular disc. (B) Rainbow disc. (C) VIBGYOR disc. (D) Newton's disc.

39.We can see a rainbow only when-
(A) Our face is towards the Sun. (B) Our back is towards the Sun.
(C) We look at the Sun. (D) We look anywhere in the sky.

40.What do you mean by reflection of light?

41.How are objects visible?

<2M>

42.Explain why we can't see the flame of a candle through a bent pipe?

43.How do we know that ambulance is coming behind our vehicles?

44.How can we see the image formed by a lens?

45.What are the characteristics of the image formed by a concave lens?

46.What are the characteristics of the image formed by a convex mirror?

47.What are the characteristics of the image formed by a plane mirror?

48.Which lens is used as magnifying glass? Why?

49.How are convex mirrors used?

50.List various uses of lenses?

<3M>

51.Explain an activity in which images are interchanged sideways.(lateral version)

52.Differentiate between concave lens and convex lens.

53.State the characteristics of the image formed by a concave mirror when the object is placed very close.

54.Which mirrors are used as side mirrors in scooters and cars? Justify your answer.

55.What are the uses of concave mirrors?

56.What are concave mirrors and convex mirrors?

<5M>

57.Differentiate between real and virtual image.

58.Explain Newton's disc.