

Multiple Choice Questions

Question 1: Light is a form of energy produced by a _____ .

1. luminous object
2. transparent object
3. non-luminous object
4. opaque object

Answer: 1

Question 2: An example for non-luminous object is _____.

1. a candle
2. the sun
3. an electric bulb
4. the moon

Answer: 4

Question 3: The phenomenon by which the incident light falling on a surface is sent back into the same medium is known as _____.

1. polarization
2. reflection
3. refraction
4. absorption

Answer: 2

Question 4: When light is incident on a polished surface _____ reflection takes place.

1. regular
2. irregular
3. diffused
4. normal

Answer: 1

Question 5: An object becomes invisible when it undergoes _____ reflection.

1. regular
2. irregular
3. diffused
4. normal

Answer: 1

Question 6: According to the laws of reflection,

1. $\angle i = \angle r$
2. $\angle i > \angle r$
3. $\angle r > \angle i$
4. $\angle i \neq \angle r$

Answer: 1

Question 7: The image formed by a plane mirror is always _____.

1. real and erect
2. virtual and erect
3. real and inverted
4. virtual and inverted

Answer: 2

Question 8: The centre of the sphere of which the spherical mirror forms a part is called _____.

1. centre of curvature
2. focus
3. pole
4. vertex

Answer: 1

Question 9: The focus of a concave mirror is _____.

1. real
2. virtual
3. undefined
4. at the pole

Answer: 2

Question 10: A converging mirror is known as _____.

1. convex mirror
2. plane mirror
3. concave mirror
4. cylindrical mirror

Answer: 3

Question 11: The relation between the focal length and radius of curvature of mirror is _____.

a

1. $\frac{f}{2} + 1 = f$

2. $R + 2 = f$

3. $f = R/2$

4. $f = 2 R$

Answer: 3

Question 12: Radius of curvature of a concave mirror is always _____ to the mirror.

1. parallel

2. perpendicular

3. inclined at 60°

4. inclined at 45°

Answer: 2

Question 13: An image formed by a convex mirror is always _____.

1. virtual, erect and diminished

2. virtual, real and magnified

3. real, inverted and diminished

4. real, erect and magnified

Answer: 1

Question 14: If the image formed by a concave mirror is virtual, erect and magnified, then the object is placed _____.

1. between the pole of the mirror and the focus

2. beyond the centre of curvature

3. at the centre of curvature

4. at the focus

Answer: 1

Question 15: Dentists use a _____ to focus light on the tooth of a patient.

1. concave mirror

2. convex mirror

3. plane mirror

4. cylindrical mirror

Answer: 1

Question 16: An object is placed 1.5 m from a plane mirror. How far is the image from the person?

1. 3 m
2. 1.5 m
3. 2 m
4. 1 m

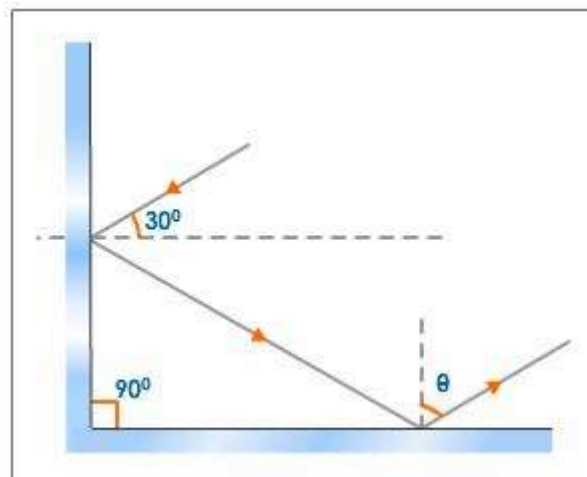
Answer: 1

Question 17: An object placed 2m from a plane mirror is shifted by 0.5 m away from the mirror. What is the distance between the object and its image?

1. 2 m
2. 1.5 m
3. 5 m
4. 3 m

Answer: 3

Question 18: What is the value of q in the following diagram?



1. 30°
2. 45°
3. 90°
4. 60°

Answer: 4

Question 19: What is the angle between the incident and reflected rays when a ray of light is incident normally on a plane mirror?

1. 90°
2. 45°
3. 180°
4. 0

Answer: 4

Question 20: Name the type of image that can be obtained on a screen.

1. Virtual
2. Real
3. Diverging
4. Converging

Answer: 2

Question 21: A ray of light is incident on a plane mirror and the angle of incidence is 25° . What is the angle of reflection?

1. 0
2. 50°
3. 90°
4. 25°

Answer: 4

Question 22: A ray of light is incident on a plane mirror and the angle of reflection is 50° . Calculate the angle between the incident ray and the reflected ray.

1. 50°
2. 25°
3. 90°
4. 100°

Answer: 4

Question 23: Which of the following is used to make a periscope?

1. Concave mirror
2. Convex mirror
3. Plane mirror
4. Lens

Answer: 3

Question 24: Which mirror has a wider field of view?

1. Convex mirror
2. Concave mirror
3. Plane mirror
4. Cylindrical mirror

Answer: 1

Question 25: The focal length of a concave mirror is 15 cm. What is its radius of curvature?

1. 15 cm
2. 30 cm
3. 7.5 cm
4. 45 cm

Answer: 2

Question 26: The focal length of a mirror is 15 cm. Identify the type of mirror.

1. Concave mirror
2. Plane mirror
3. Convex mirror
4. Cylindrical mirror

Answer: 3

Question 27: A ray of light passing through the _____ retraces its path.

1. focus
2. centre of curvature
3. pole
4. vertex

Answer: 2

Question 28: When an object is placed at the focus of a concave mirror, the image will be formed at _____.

1. infinity
2. focus
3. centre of curvature
4. pole

Answer: 1

Question 29: Butter paper is an example for _____ object.

1. a transparent
2. a translucent
3. an opaque
4. a luminous

Answer: 2

Question 30: An object of size 2.0 cm is placed perpendicular to the principal axis of a concave mirror. The distance of the object from the mirror equals to the radius of curvature. The size of the image will be _____.

1. 0.5 cm
2. 1.5 cm
3. 1.0 cm
4. 2.0 cm

Answer: 4

Question 31: If an incident ray passes through the centre of curvature of a spherical mirror, the reflected ray will _____.

1. pass through the focus
2. pass through the centre of curvature
3. pass through the pole
4. retrace its path

Answer: 4