OUR OWN HIGH SCHOOL, AL WARQA'A, DUBAI

GRADE : X **PHYSICS – LIGHT REFLECTION AND REFRACTION** **23/11/2011**

MULTIPLE CHOICE QUESTIONS

Question: 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

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

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

Question: 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

Question: 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

Question: The focus of a concave mirror is _____.

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

Question: A converging mirror is known as _____.

1. convex mirror
2. plane mirror

3. concave mirror
4. cylindrical mirror

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

1. $\frac{f}{2} + 1 = f$
2. R + 2 = f
3. f = R/2
4. f = 2 R

Question: 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

Question: 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

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

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

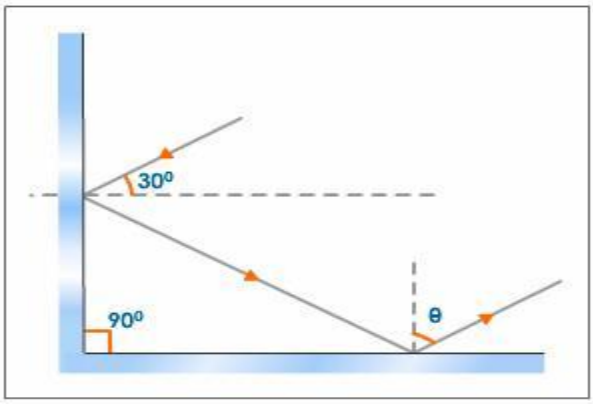
Question: An object is placed 1.5 m from a plane mirror. How far is the image from the person?

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

Question: 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

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



1. 30^o
2. 45^o
3. 90^o
4. 60^o

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

1. 90^o
2. 45^o
3. 180^o
4. 0

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

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

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

1. 50^o
2. 25^o
3. 90^o

4. 100^{o}

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

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

Question: Which mirror has a wider field of view?

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

Question: 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

Question: 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

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

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

Question: 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

Question: 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

Question: 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