

## MULTIPLE CHOICE QUESTIONS

Choose the correct answer from the following choices:

**i) Which of the following quantities is not changed during refraction of light?**

- a) its direction
- b) its speed
- c) its frequency
- d) its wavelength

**ii) A converging mirror with a radius of 20 cm creates a real image 30 cm from the mirror. What is the object distance?**

- a) 5.0 cm
- b) -7.5 cm
- c) 15 cm
- d) 20 cm

**iii) An object is placed at the center of curvature of a concave mirror. This image produced by the mirror is located:**

- a) beyond the center of curvature
- b) at the center of curvature
- c) between the center of curvature and the focal point
- d) at the focal point

**iv) An object is 14 cm in front of a convex mirror. The image is 5.8 cm behind the mirror. What is the focal length of the mirror?**

- a) 4.1 cm
- b) 8.2 cm
- c) 9.9 cm
- d) 20 cm

**v) The index of refraction depends upon:**

- a) the focal length
- b) the speed of light
- c) the image distance
- d) the object distance

**vi) Which type of image is formed by a concave lens on a screen?**

- a) inverted and real
- b) inverted and virtual
- c) upright and real
- d) upright and virtual

**vii) Which type of image is produced by the converging lens of human eye if it views a distant object?**

- A) real, erect, same size

- c) Virtual. Erect, diminished
- b) real, inverted, diminished
- d) Virtual, inverted, magnified

**viii) Image formed on a camera is:**

- a) real, inverted, and diminished
- c) virtual. Upright and magnified
- b) virtual, upright and diminished
- d) real, inverted and magnified

**ix) If a ray of light in glass is incident on an air surface at an angle greater than the critical angle, the ray will:**

- a) refract only
- b) reflect only
- c) partially refract and partially reflect
- d) diffract only

**x) If array of light in glass is incident on an air surface at an angle greater than the critical angle, the ray will:**

- a) be absorbed
- b) totally reflected
- c) partially reflected and partially transmitted
- d) totally transmitted

