

## CBSE Class 12 Physics Answer Key 2026 for 55/1/3

**Q)** An electromagnetic wave passes from a vacuum into a dielectric medium with relative electrical permittivity  $(\frac{3}{2})$  and relative magnetic permeability  $(\frac{8}{3})$ . Then, its:

**Correct Answer:** c) wavelength is halved, and frequency remains unchanged

**Q)** In an unbiased p-n junction, at equilibrium, which of the following statements is true?

**Correct Answer:** c) diffusion and drift currents are equal and opposite

**Q)** The electric potential for various points in the x-y plane is given by  $V = 1.0x^2 - 2.0y^2$ , where V is in Volts and x,y are in meters. The angle that the electric field at point (2.0m, 1.0m) makes with the positive x-axis is?

**Correct Answer:** a) 45 degrees

**Q)** The ratio of the potential energy to the kinetic energy of an electron in the nth orbit of the Bohr model of the hydrogen atom is?

a)  $-\frac{1}{2}$

b)  $\frac{1}{2}$

c) 2

d) -2

**Correct Answer:** d) -2

**Q)** Welders wear special glass goggles or face masks with a glass window to protect their eyes from?

a) Infrared rays

b) Ultraviolet waves

c) X-rays

d) Microwaves

**Correct Answer:** b) Ultraviolet waves

**Q)** The phenomenon of interference is shown by?

a) Longitudinal mechanical wave only

b) Transverse mechanical wave only

c) Electromagnetic waves only

d) all these waves

**Correct Answer:** d) all these waves

