

NEET Sample Paper for Physics

Q.1 For the travelling harmonic wave $y(x, t) = 2.0 \cos 2\pi(10t - 0.0080x + 0.35)$ where x and y are in cm and t is in second. The phase difference between oscillatory motion of two points separated by a distance 4 m will be;

- (1) 9.4π rad
- (2) 2.4π rad
- (3) 6.4π rad
- (4) 7.4π rad

Q.2 The capacity of a parallel plate capacitor depends on;

- (1) the material used to make the plate.
- (2) the thickness of the plates.
- (3) the potential applied across the plates.
- (4) the separation between the plates.

Q.3 The electrostatic force between the metal plates of an isolated parallel plate capacitor C having a charge Q and area A , is;

- (1) independent of the distance between the plates.
- (2) linearly proportional to the distance between the plates.
- (3) inversely proportional to the distance between the plates.
- (4) proportional to the square root of the distance between the plates.

Q.4 An object is placed at a distance of 40 cm from a concave mirror of focal length 15 cm. If the object is displaced through a distance of 20 cm towards the mirror, the displacement of the image will be;

- (1) 30 cm away from the mirror.
- (2) 36 cm away from the mirror.
- (3) 36 cm towards the mirror.
- (4) 30 cm towards the mirror.

Q.5 On forward biasing the p-n junction it;

- (1) reduces the majority carrier current to zero.
- (2) raises the potential barrier.
- (3) lowers the potential barrier.
- (4) increases the electric field in depletion.