CBSE Class 12 Physics Question Paper 2026 PDF - GetMyUni

SECTION A

1. In a Young's double-slit experiment, the fringe width is found to be β. If the entire apparatus is immersed in a liquid of refractive index μ, the new fringe width will be :

(a) β (b) $\mu\beta$ (c) $\frac{\beta}{\mu}$ (d) $\frac{\beta}{\mu^2}$

2. A light of frequency ν is incident on a metal surface whose work function is W_0. The kinetic energy of emitted electron is K. If the frequency of the incident light is doubled then the kinetic energy of emitted electron will be :

(a) 2K (b) more than 2K

(c) between K and 2K (d) less than K

3. Which of the following statements is ***not*** true for nuclear forces ?

(a) They are stronger than Coulomb forces.

(b) They have about the same magnitude for different pairs of nucleons.

(c) They are always attractive.

4. A particle of mass m and charge –q is moving with a uniform speed v in a circle of radius r, with another charge q at the centre of the circle. The value of r is :

(a) $\frac{1}{4\pi\,\varepsilon_0\,m}\left(\frac{q}{v}\right)$ (b) $\frac{1}{4\pi\,\varepsilon_0\,m}\left(\frac{q}{v}\right)^2$

(c) $\frac{m}{4\pi\,\varepsilon_0}\left(\frac{q}{v}\right)$ (d) $\frac{m}{4\pi\,\varepsilon_0}\left(\frac{q}{v}\right)^2$

5. Photons of energy 3·2 eV are incident on a photosensitive surface. If the stopping potential for the emitted electrons is 1·5 V, the work function for the surface is :

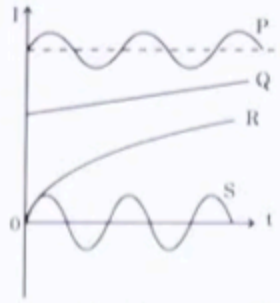
(a) 1·5 eV (b) 1·7 eV (c) 3·2 eV (d) 4·7 eV

6. Which one of the following has relative magnetic permeability between 0 and 1 ?

(a) Aluminium (b) Alnico

(c) Water (d) Sodium

7. The figure shows variation of current (I) with time (t) in four devices P, Q, R and S. The device in which an alternating current flows is :



(a) P (b) Q (c) R (d) S

8. Name the electromagnetic waves also known as 'heat waves'.

(a) Radio waves (b) Microwaves
(c) X-rays (d) Infrared waves

9. A plane wavefront is incident on a concave mirror of radius of curvature R. The radius of the refracted wavefront will be :

(a) 2R (b) R (c) $\frac{R}{2}$ (d) $\frac{R}{4}$

10. A proton and an alpha particle have the same kinetic energy. The ratio of de Broglie wavelengths associated with the proton to that with the alpha particle is :

(a) 1 (b) 2 (c) $2\sqrt{2}$ (d) $\frac{1}{2}$

11. The direction of induced current in the loop abc is :

(a) along abc if I decreases
(b) along acb if I increases
(c) along abc if I is constant
(d) along abc if I increases