

Roll No. of Candidate : _____

PHYSICS

Intermediate Part-II, Class 12th (1st A 423 - II) Paper: II Group - II

Time: 20 Minutes

OBJECTIVE Code: 8474 Marks: 17

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

1. Most penetrating among the followings are
(A) Alpha rays (B) Beta rays (C) Neutrons (D) Gamma rays
2. Switching time of a photo diode is in
(A) 10^{-9} s (B) 10^{-4} s (C) 10^{-6} s (D) 10^{-15} s
3. Most stable isotope among the followings is
(A) Fe^{58} (B) U^{235} (C) Pu^{239} (D) Pb^{82}
4. The diode in a half wave rectifier conducts for _____ during a complete AC cycle.
(A) 90° (B) 180° (C) 360° (D) 45°
5. For lyman series, longest wavelength is emitted when $n =$ _____
(A) 1 (B) 2 (C) ∞ (D) 5
6. Highest occupied band in solids is _____ band.
(A) conduction (B) forbidden (C) core (D) valence
7. Wavelength of radiations emitted from a thermal object depends only on
(A) temperature (B) colour of surface (C) size of surface (D) nature of surface
8. When plane of coil is placed parallel to magnetic field, torque on it is
(A) zero (B) maximum (C) intermediate (D) infinite
9. No inertial frame of reference is preferred over another inertial frame
(A) false (B) true
(C) true for static frames (D) true for dynamic frames
10. When a solenoid containing steady current is gently pressed, magnetic field inside it,
(A) increases (B) decreases (C) vanishes (D) remains same
11. _____ charges produce electromagnetic waves.
(A) static (B) steadily moving (C) heavy (D) oscillating
12. Velocity of free electrons in metals at room temperature is of the order of
(A) 10^5 m/s (B) 10^8 m/s (C) 10^3 m/s (D) 10^{-3} m/s
13. In a capacitor, voltage _____ current by _____.
(A) lags, π (B) leads, $\pi/2$ (C) lags, $\pi/2$ (D) leads, π
14. Inside a charged metallic box, electric field intensity is
(A) zero (B) strong (C) weak (D) variable
15. _____ uses a transformer with many secondary coils
(A) TV receiver (B) door bell (C) Transistor radio (D) AC generator
16. When applied potential difference is increased; capacitance of parallel plate capacitor
(A) increases (B) decreases (C) remains same (D) reduces to zero
17. Average output power of an AC generator for resistive load is _____ if peak current and voltage are I_0 & V_0 respectively
(A) $V_0 I_0$ (B) $\frac{V_0 I_0}{2}$ (C) zero (D) $2 V_0 I_0$