

Physics

PR - XII (01) (23)

۱۔ ہر سوال کے سامنے چار دائرے دیئے گئے ہیں صرف صحیح جواب والا دائرہ چھروں۔

۲۔ دائروں کو شیڈ (بھرنے) کے لیے نیلے یا کالے رنگ کا پین استعمال کریں۔

۳۔ جواب میں ایک سے زائد دائرے بھرنا سے جواب غلط تصور ہوگا۔

Time: 20 Min

SECTION-A

Marks: 18

- 1) Self-inductance (L) in terms of magnetic flux (ϕ), no of turns (N) and electric current (I) can be written as _____.

$L = \frac{N\phi}{I}$ $L = N\phi$ $L = \frac{I\phi}{N}$ $L = \frac{N}{I\phi}$
- 2) The ratio of power in AC circuit to that of DC circuit is equal to _____.

$\sin \phi$ $\cos \phi$ $\tan \phi$ $\sec \phi$
- 3) Pair production can't take place in vacuum because ____ is not conserved.

Momentum Charge Energy Mass
- 4) An electric charge q is placed at the centre of cube of side 'a' the electric flux on its one side will be

$\frac{q}{4\pi\epsilon_0}$ $\frac{q}{a^2\epsilon_0}$ $\frac{q}{6\epsilon_0}$ $\frac{q}{\epsilon_0}$
- 5) ${}^A_ZX \rightarrow {}^{A-4}_{Z-2}Y + ? + Q$ The given reaction is completed by _____.

Alpha (α) Beta (β) Gamma (γ) Sigma (δ)
- 6) By increasing applied anode voltage, wavelength (λ) of x-rays _____.

Increases Remains unchanged
 Decreases Becomes infinite
- 7) The seismometer works on the principle of _____.

Electromagnetism Maxwell equations
 Electromagnetic induction Ampere's Law
- 8) ${}^{238}_{92}\text{U}$ contains ____ number of nucleons.

146 238 92 330
- 9) For one complete cycle, the simple mean value of AC is _____.

Zero $V_m/2$ $2V_m$ $0.707 V_m$
- 10) "mho" is a unit of _____.

Resistivity Conductivity
 Resistance Conductance
- 11) The function of unipolar junction transistors depends on _____.

Majority carriers Minority carriers
 Both A&B None of these
- 12) The super conductor has a ____ resistance.

Moderate High Zero Infinite
- 13) How much voltage is required to make 2A flow through a resistance of 8Ω ?

$16 A\Omega^{-1}$ $16\Omega A^{-1}$ $16 A\Omega$ $16 A^{-1}\Omega^{-1}$
- 14) Which of the given is a boson?

Photon Neutino Proton Pion
- 15) The reverse process of x-rays production can be related to _____.

Compton effect Photoelectric effect
 Pair production None of these
- 16) Volt per meter is a non SI unit of _____.

Electric force Electric power
 Voltage Electric intensity