

Note : Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1	The energy of photon is given by : (A) $\frac{1}{2}mv^2$ (B) v_0e (C) m_0c^2 (D) hf
2	The sum of negative and positive peak values is : (A) Average value (B) rms value (C) Peak value (D) p-p value
3	The unit of \vec{E} is NC^{-1} and that of \vec{B} is $NA^{-1}m^{-1}$ then the unit of $\frac{\vec{E}}{\vec{B}}$ is : (A) ms^{-2} (B) $m^{-1}s^{-1}$ (C) ms (D) ms^{-1}
4	The common emitter current amplification factor β is given by : (A) $\frac{I_C}{I_E}$ (B) $\frac{I_C}{I_B}$ (C) $\frac{I_E}{I_B}$ (D) $\frac{I_B}{I_C}$
5	Resistance in choke is : (A) Large (B) Very small (C) Zero (D) Infinite
6	Sec/Ohm is equal to : (A) Farad (B) Coulomb (C) Joule (D) Ampere
7	Number of neutrons in ${}^{235}_{92}U$: (A) 92 (B) 235 (C) 143 (D) 327
8	Commutators are used in : (A) D.C. generators (B) A.C. generators (C) A.C. motor (D) A.C. rotator
9	The factor $\frac{h}{m_0c}$ in Compton equation has the dimension of : (A) Pressure (B) Length (C) Mass (D) Momentum
10	If a charged body is moved against the electric field, it will gain : (A) P.E. (B) K.E (C) Mechanical energy (D) Electrical potential energy
11	In p-type substances, the majority charge carriers are : (A) Electrons (B) Protons (C) Holes (D) Neutrons
12	When a wire of resistance R is cut into two equal parts then resistance of each wire is : (A) Double (B) Half (C) Remain same (D) One forth
13	Energy of the 4 th orbit in hydrogen atom is : (A) -2.51 eV (B) -3.50 eV (C) -13.6 eV (D) -0.85 eV
14	The gain of non-inverting amplifier is : (A) $1 + \frac{R_2}{R_1}$ (B) $1 + \frac{R_1}{R_2}$ (C) $\frac{-R_2}{R_1}$ (D) $\frac{-R_1}{R_2}$
15	X-rays are the electromagnetic radiations having the wavelength in range : (A) $10^{-12}m$ (B) $10^{-10}m$ (C) $10^{-8}m$ (D) $10^{-6}m$
16	To construct a step up transformer : (A) $N_s > N_p$ (B) $N_s < N_p$ (C) $N_s = N_p$ (D) $N_s N_p = 1$
17	The magnetic force is simply a : (A) Reflecting force (B) Restoring force (C) Deflecting force (D) Gravitational force