Inter (Part-II) 2019

Physics	Group-I	PAPER: II
Time: 20 Minutes	(OBJECTIVE TYPE)	Marks: 17

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) $v_o e$

(c) $m_o c^2$ (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 $\frac{h}{m_o c}$ 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-fourth

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