PHYSICS   PAPER-II   (OLD SCHEME)   TIME ALLOWED: 20 Minutes
GROUP-I   **OBJECTIVE**   MAXIMUM 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. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled.   Do not solve question on this sheet of OBJECTIVE PAPER.**

Q.No.1

(1)   The ratio of self induced emf to the rate of change of current in the coil is known as:-

     (A) Self induction   (B) Mutual induction (C) Self inductance   (D) Mutual inductance

(2)   SI unit of inductive reactance of a coil is:-

     (A) Henry   (B) Hertz   (C) Ampere   (D) Ohm

(3)   Power dissipated in a pure inductor is:-

     (A) Large   (B) Small   (C) Infinite   (D) Zero

(4)   A solid having regular arrangement of molecules throughout its structure is called:-

     (A) Polymeric solid (B) Perfect solid   (C) Crystalline solid (D) Amorphous solid

(5)   The number of valence electrons in Ge & Si atoms are:-

     (A) 3   (B) 4   (C) 5   (D) 2

(6)   Depletion region carries:-

     (A) Negative charge (B) No charge   (C) Positive charge   (D) Positive ions

(7)   Light was considered as electromagnetic wave by scientist:-

     (A) Ampere   (B) Maxwell   (C) Newton   (D) Hertz

(8)   Rest mass of photon is:-

     (A) $1.67 \times 10^{-27} kg$ (B) Zero   (C) $9.1 \times 10^{-31} kg$ (D) Infinite

(9)   The diameter of nucleus is of the order of:-

     (A) $10^{-8} m$ (B) $10^{-10} m$ (C) $10^{-12} m$ (D) $10^{-14} m$

(10)   One a.m.u is equal to:-

     (A) $1.66 \times 10^{-19} kg$ (B) $1.66 \times 10^{-24} kg$ (C) $1.66 \times 10^{-27} kg$ (D) $1.66 \times 10^{-34} kg$

(11)   When a nucleus emits an $\alpha - particle$, its atomic mass decreases by:-

     (A) 1   (B) 2   (C) 3   (D) 4

(12)   SI unit of charge is:-

     (A) Ampere   (B) Volt   (C) Coulomb   (D) Calorie

(13)   Charge on an electron was determined by:-

     (A) Ampere   (B) Maxwell   (C) Millikan   (D) Thomson

(14)   The Current through a metallic conductor is due to motion of:-

     (A) Protons   (B) Neutrons   (C) Electrons   (D) Free electrons

(15)   The field around a moving charge is called:-

      (A) Gravitational field (B) Electric field   (C) Magnetic field   (D) Conservative field

(16)   The SI unit of magnetic induction is:-

     (A) Weber   (B) Tesla   (C) Weber per metre (D) Gauss

(17)   The direction of induced emf or current is found by use of:-

     (A) Faraday's Law   (B) Right Hand Rule (C) Ampere;s Law   (D) Lenz's Law