PHYSICS   PAPER-II   (NEW 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)   Relative permitivity for air is:-

(A) 1.06   (B) 1.006   (C) 1.0006   (D) 1.6

(2)   Selenium is a:-

(A) Insulator   (B) Photoconductor   (C) Conductor   (D) First insulator then Conductor

(3)   The potential difference between the head and tail of an electric ecl is:-

(A) 600 volts   (B) 700 volts   (C) 800 volts   (D) 900 volts

(4)   A current flowing towards the reader is denoted by:-

(A) Cross   (B) A bracket   (C) A dot   (D) Positive sign

(5)   The unit of magnetic flux is:-

(A) Tesla   (B) Weber   (C) Weber m^{-2} (D) Tesla m^{2}

(6)   The Lenz's Law fulfils:-   (A) Law of Conservation of energy   (B) Law of Conservation of Charge

(C) Law of Conservation of Momentum   (D) Kirchhoff's Law

(7)   The devices in the circuit that consume electrical energy are known as:-

(A) Dissipators   (B) Generators   (C) Load   (D) Motors

(8)   The waveform of alternating voltage is a:-

(A) Cotangent Curve (B) Cosine Curve   (C) Tangent Curve   (D) Sine Curve

(9)   Phase difference between V and I of an A.C through resistor is:-

(A) Zero degree   (B) 90° (C) 180° (D) 270°

(10)   The critical temperature of Aluminum is:-

(A) 3.72 K   (B) 1.18 K   (C) 7.2 K   (D) 8.2 K

(11)   Potential difference across depletion region in case of Silicon:-

(A) 0.6 V   (B) 0.7 V   (C) 0.8 V   (D) 0.9 V

(12)   The size of base in a transistor is:-

(A) $10^{-9}m$ (B) $10^{-7}m$ (C) $10^{-8}m$ (D) $10^{-6}m$

(13)   When Platinum is heated, it becomes orange at:-

(A) $500^{o}C$ (B) $900^{o}C$ (C) $1100^{o}C$ (D) $1300^{o}C$

(14)   For an electron, the rest mass energy is:-

(A) 0.411 MeV   (B) 0.511 MeV   (C) 0.611 MeV   (D) 0.711 MeV

(15)   Photons emitted in inner shell transition are:-   (A) Continuous $X-$rays

(B) Discontinuous $X-$rays   (C) Characteristic $X-$rays   (D) Energetic $X-$rays

(16)   Half life of U − 238 is:-

(A) 2.5×10^{9} years   (B) 3.5×10^{9} years   (C) 4.5×10^{9} years   (D) 5.5×10^{9} years

(17)   The particles equal in mass or greater than protons are called:-

(A) Baryons   (B) Hadrons   (C) Fermions   (D) Mesons