

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	When some dielectric is inserted between the plates of a capacitor then capacitance : (A) Increased (B) Decreased (C) Zero (D) Infinity
2	Coulomb per volt is called : (A) Ampere (B) Joule (C) Henry (D) Farad
3	Kirchhoff's first rule is a manifestation of law of conservation of : (A) Mass (B) Energy (C) Charge (D) Kinetic energy
4	Work done on a charged particle moving in uniform magnetic field is : (A) Maximum (B) Zero (C) Minimum (D) Negative
5	Output wave form of sweep or time base generator is : (A) Saw tooth wave (B) Digital wave (C) Sinusoidal wave (D) Square wave
6	Energy stored in the inductor is in the form of : (A) Electrical energy (B) Magnetic energy (C) Kinetic energy (D) Chemical energy
7	The principle of an electric generator is based upon : (A) Ampere's law (B) Faraday's law (C) Coulomb's law (D) Kirchhoff's law
8	The device which allows only flow of A.C. through it is : (A) Capacitor (B) Inductor (C) Battery (D) Thermistor
9	S.I unit of impedance is : (A) Henry (B) Hertz (C) Ampere (D) Ohm
10	Very weak magnetic field produced by brain can be detected by : (A) Compass (B) Metallic needle (C) Squid (D) Liquid
11	If $R_1 = 10K\Omega$ and $R_2 = 100K\Omega$ then gain of inverting amplifier is : (A) - 11 (B) - 10 (C) 10 (D) 11
12	Automatic functioning of street light can be done by the use of : (A) Inductor (B) Capacitor (C) Comparator (D) Thermistor
13	When platinum wire is heated. It changes to cherry red at temperature : (A) 500 °C (B) 900 °C (C) 1100 °C (D) 1300 °C
14	The rest mass energy of an electron positron pair is : (A) 0.51 Mev (B) 1.02 Mev (C) 1.2 Mev (D) 1.00 Mev
15	The value of Rydberg constant is : (A) $1.0974 \times 10^7 m^{-1}$ (B) $6.02 \times 10^{-34} m^{-1}$ (C) $3 \times 10^8 m^{-1}$ (D) $1.6 \times 10^{19} m^{-1}$
16	The half life of uranium -239 is : (A) 1620 years (B) 3.8 days (C) 2.5 days (D) 23.5 minutes
17	Binding energy per nucleon is maximum for : (A) Helium (B) Iron (C) Radium (D) Polonium