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 quantity $-\dfrac{\Delta V}{\Delta r}$ is called :
	(A) Electric potential (B) Electric energy (C) Potential energy (D) Potential gradient
2	If the potential difference across two plates of capacitor is doubled, the energy in it will be :
	(A) Two times (B) Eight times (C) Four times (D) Remains same
3	Kirchhoff's second rule is a way of stating conservation of :
	(A) Mass (B) Charge (C) Energy (D) Momentum
4	The brightness of spot on CRO screen is controlled by :
	(A) Plates (B) Cathode (C) Anode (D) Grid
5	The e/m of neutron is :
	(A) Less than electron (B) Zero (C) Greater than electron (D) The same as electron
6	The energy stored in inductor is :
	(A) $\dfrac{1}{2}LI^2$ (B) $\dfrac{1}{2}LI$ (C) $\dfrac{1}{2}L^2I$ (D) $\dfrac{1}{2}L^2I^2$
7	The unit of self inductance is :
	(A) Weber (B) Tesla (C) Henry (D) Farad
8	At high frequency the value of reactance of capacitor will be :
	(A) Small (B) Zero (C) Large (D) Infinite
9	When 10 V are applied to an A.C. circuit, the current flowing in it 100 mA, its impedance is :
	(A) 10 Ohm (B) 100 Ohm (C) 1000 Ohm (D) 1 Ohm
10	The critical temperature of mercury is :
	(A) 1.18 K (B) 4.2 K (C) 3.72 K (D) 7.2 K
11	The current gain β of the transistor is given by :
	(A) $\beta = \dfrac{I_B}{I_C}$ (B) $\beta = I_B + I_C$ (C) $\beta = I_B - I_C$ (D) $\beta = \dfrac{I_C}{I_B}$
12	The input resistance of an operational amplifier is :
	(A) Zero (B) Low (C) High (D) Equal to output resistance
13	The value of Plank's constant h is :
	(A) $6.63 \times 10^{-34} Js$ (B) $6.63 \times 10^{-34} J/s$ (C) $6.63 \times 10^{-34} Js^2$ (D) $6.63 \times 10^{-34} J/s^2$
14	Albert Einstein was awarded Noble Prize in Physics in :
	(A) 1905 (B) 1911 (C) 1918 (D) 1921
15	Radius of first Bohr orbit of hydrogen atom is :
	(A) 0.053 nm (B) 0.053 mm (C) 0.053 μm (D) 0.053 m
16	Gamma rays emitted from radioactive element have speed :
	(A) $1 \times 10^7 ms^{-1}$ (B) $1 \times 10^8 ms^{-1}$ (C) $3 \times 10^8 ms^{-1}$ (D) $4 \times 10^{19} ms^{-1}$
17	The dead time of G.M. counter is :
	(A) $10^{-3} s$ (B) $10^{-4} s$ (C) $10^{-6} s$ (D) $10^{-8} s$