Physics	Group-II	Paper-II
Time: 15 Minutes	(Objective Type)	Max. Marks: 12

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- **Power of hair dryer:**
  (a) 5000 watts
  (b) 1500 watts
  (c) 1000 watts √
  (d) 800 watts

2- **The brain of any computer system is:**
  (a) Monitor
  (b) Memory
  (c) C.P.U √
  (d) Control unit

3- **Speed of light in glass:**
  (a) 2.0×10^8 m/s √
  (b) 3.0×10^8 m/s
  (c) 2.0×10^6 m/s
  (d) 3.0×10^6 m/s

4- **Boolean expression of AND operation:**
  (a) $X = A.B$ √
  (b) $X = A + B$
  (c) $X = \bar{A}$
  (d) $X = \overline{A.B}$

5- **Half-life of isotope of cobalt $_{27}^{60}$Co:**
  (a) 30 years √
  (b) 20 years
  (c) 15 years
  (d) 10 years

6- **The formula for the time period of a simple pendulum:**
  (a) $T = 2\pi \sqrt{\dfrac{g}{l}}$
  (b) $T = 2\pi \sqrt{\dfrac{l}{g}}$ √
  (c) $T = 2\pi \sqrt{\dfrac{m}{k}}$
  (d) $T = 2\pi \sqrt{\dfrac{k}{m}}$

7- Specific resistance of iron:

(a) 9.8×10^{-8} Ωm √

(b) 100×10^{-8} Ωm

(c) 10.6×10^{-8} Ωm

(d) 5.25×10^{-8} Ωm

8- Speed of sound in steel at 25ºC:

(a) 3880 m/s   (b) 5950 m/s

(c) 6040 m/s   (d) 5960 m/s √

9- The direction of induced e.m.f in a circuit is in accordance with conservation of:

(a) Mass   (b) Charge

(c) Momentum   (d) Energy √

10- Capacitance is defined as:

(a) VC   (b) $\frac{Q}{V}$ √

(c) QV   (d) $\frac{V}{Q}$

11- Index of refraction of ice:

(a) 1.00   (b) 1.33

(c) 1.31 √   (d) 1.36

12- The process by which electrons are emitted by a hot metal surface is known as:

(a) Boiling   (b) Evaporation

(c) Conduction   (d) Thermionic emission √