

Inter (Part-II) 2022

Physics	Group-II	PAPER:
Time: 20 Minutes	(OBJECTIVE TYPE)	Marks: 1

Note: Four possible answers A, B, C and D to each question are given. The choice which you think 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 for that question.

1-1- $\frac{E}{B}$ has the unit of:

- (a) meter (b) ms^{-1} ✓
(c) ms^{-2} (d) s^{-2}

2- If V_0 is peak value of A.C. voltage, then mean square value of voltage is:

- (a) $\frac{V_0}{\sqrt{2}}$ ✓ (b) V_0^2
(c) $\frac{1}{2} V_0^2$ (d) V

3- A black body is both an ideal absorber and ideal:

- (a) Reflector (b) Radiator ✓
(c) Conductor (d) Insulator

4- Energy given out per nucleon per fission of heavy element like uranium is:

- (a) 200 MeV ✓ (b) 208 MeV
(c) 5 MeV (d) 0.9 MeV

5- Electric flux through a closed surface enclosing a charge depends on:

- (a) Medium ✓ (b) Size
(c) Shape (d) Location of charge

6-

- (a) High
(b) Low
(c) Variable
(d) Zero

7-

- Thermodynamic
(a) Heat
(c) Surface

8-

When
resistance

- (a) Measure
(c) 100

9-

Two quantities

- (a) Measure
(c) Length

10-

Lenz's law
conservation

- (a) Linear
(b) Angular

11-

- (c) Energy
(d) Charge

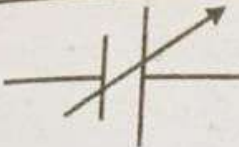
Unit of

- (a) Force
(c) Velocity

12-

If the
passing

- (a) 100
(c) 40

6-  is symbol of:

- (a) High tension battery
- (b) Low tension battery
- (c) Variable voltage battery ✓
- (d) Zero resistance battery

7- **Thermo-couples produce electric energy by:**

- (a) Heat ✓
- (b) Chemical energy
- (c) Sunlight
- (d) Mechanical energy

8- **When PN junction is conducting, then its resistance is of the order of:**

- (a) Mega Ohm
- (b) Kilo Ohm
- (c) 100 Ohm
- (d) Few Ohms ✓

9- **Two quark combination forms:**

- (a) Mesons ✓
- (b) Baryons
- (c) Leptons
- (d) No composite particle

10- **Lenz's law is also a statement of law of conservation of:**

- (a) Linear momentum
- (b) Angular momentum
- (c) Energy ✓
- (d) Charge

11- **Unit of electric intensity is same as:**

- (a) Force
- (b) Potential gradient ✓
- (c) Viscosity
- (d) Magnetic field

12- **If the frequency of A.C is 40 Hz, then current passing through filament bulb get brilliance:**

- (a) 100 times
- (b) 80 times ✓
- (c) 40 times
- (d) 50 times

- 13- A metal meter rod is moving at the speed of 0.5 ms^{-1} in the direction parallel to a 0.5 T magnetic field, emf will be:
- (a) 0.25 V (b) 0.5 V
(c) Zero ✓ (d) 0.125 V
- 14- In cubical crystal, all the sides meet at:
- (a) Acute angle (b) Abtuse angle
(c) Right angle ✓ (d) 45°
- 15- Work done by a magnetic force of 5 N when a charge is displaced 2 m is:
- (a) Non-zero (b) Zero ✓
(c) 10 J (d) 5 J
- 16- The observations on objects moving very fast, approaching the speed of light, are well explained by:
- (a) Quantum theory
(b) Newton's law
(c) Special Theory of Relativity ✓
(d) Kepler's law
- 17- Planck's constant has the unit of:
- (a) Linear momentum
(b) Angular momentum ✓
(c) Torque
(d) Force