

Inter (Part-II) 2018

Physics	Group-II	PAPER: II
Time: 20 Minutes	(OBJECTIVE TYPE)	Marks: 17

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 dimension of Planck's constant is same as that of:

- (a) Energy (b) Power
(c) Acceleration (d) Angular momentum ✓

2- High frequency radio wave is called as:

- (a) Fluctuate wave (b) Carrier wave ✓
(c) Matter wave (d) Mechanical wave

3- The value of e/m is smallest for:

- (a) Proton ✓ (b) Electron
(c) β -particle (d) Positron

4- The Boolean expression of NAND gate is:

- (a) $X = A.B$ (b) $X = \bar{A}$
(c) $X = \overline{A.B}$ ✓ (d) $X = A + B$

5- The impedance Z can be expressed as:

- (a) $Z = \frac{V_{rms}}{I_{rms}}$ ✓ (b) $Z = \frac{I_{rms}}{V_{rms}}$
(c) $Z = I + V$ (d) $Z = I - V$

6- The unit of electric intensity other than NC^{-1} is :

- (a) $\frac{V}{A}$ (b) $\frac{V}{m}$ ✓
(c) $\frac{V}{C}$ (d) $\frac{N}{V}$

- 7- The most useful tracer isotopes for the treatment of thyroid glands is:
(a) Cobalt-60 (b) Carbon-14
(c) Iodine-131 ✓ (d) Strontium-90
- 8- When motor is just started, back emf is almost:
(a) Maximum (b) Zero ✓
(c) Minimum (d) Infinite
- 9- The photon with energy greater than 1.02 MeV can interact with matter as:
(a) Photoelectric effect
(b) Compton effect
(c) Pair production ✓
(d) Annihilation of matter
- 10- The electric field created by positive point charge is:
(a) Radially inward (b) Zero
(c) Circular (d) Radially outward ✓
- 11- Substances which break just after the elastic limit is reached is called as:
(a) Ductile substances
(b) Hard substances
(c) Brittle substances ✓
(d) Soft substances
- 12- Resistance tolerance for gold colour is:
(a) 50% (b) 30%
(c) 20% (d) 5% ✓
- 13- In electron transition from power to higher orbit atom cannot emit:
(a) γ -rays ✓ (b) Ultraviolet rays
(c) Visible light (d) Infrared
- 14- Automatic functioning of street light can be done by the use of:
(a) Inductor (b) Capacitor
(c) Comparator ✓ (d) Thermistor

- 15- Nuclear fission chain reaction is controlled by using:
- (a) Steel rods
 - (b) Graphite rods
 - (c) Cadmium rods ✓
 - (d) Platinum rods
- 16- Henry is S.I unit of:
- (a) Current
 - (b) Resistance
 - (c) Flux
 - (d) Self-induction ✓
- 17- The S.I unit of magnetic induction is:
- (a) Weber
 - (b) Tesla ✓
 - (c) Gauss
 - (d) Newton

