



Roll No. _____ to be filled in by the candidate.

Inter. (Part-II)-A-2022

(For all Sessions)

Paper Code	8	4	7	7
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Physics (Objective Type)

Time: 20 Minutes

Group-I

Marks:17

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank.

1. The maximum energy of photo-electron depends upon _____.
(A) frequency (B) intensity (C) power (D) illumination
2. Compton shift in wavelength is zero when scattering angle of photon is _____.
(A) 30° (B) 60° (C) 0° (D) 90°
3. In population inversion, atoms can reside in metastable state for _____.
(A) 10^{-10} sec (B) 10^{-3} sec (C) 10^{-8} sec (D) 10^{-12} sec
4. The percentage of original quantity of radioactive material left after five half-lives is nearly _____.
(A) 6% (B) 5% (C) 10% (D) 3%
5. Which of the following is used as moderator in nuclear reactor?
(A) heavy water (B) boron (C) cadmium (D) aluminum
6. If the distance between charges is halved and each charge is also doubled, then the force between two charges becomes _____ times.
(A) two (B) sixteen (C) eight (D) four
7. The force between two charges is 36 N and if the dielectric constant 3.6 value is inserted, then force reduces to _____.
(A) zero (B) 72 N (C) 25 N (D) 10 N
8. A thermistor with positive temperature coefficient is heated then its resistance will _____.
(A) decrease (B) increase (C) not be affected (D) become half
9. The magnetic force on a neutron in the magnetic field of 10 T is _____.
(A) zero (B) 1.6×10^{-18} N (C) 100 N (D) 1.6×10^{-19} N
10. A charge particle cannot be accelerated in _____ field.
(A) electric (B) gravitational (C) magnetic (D) scalar
11. The energy stored in the inductor becomes four times if _____.
(A) self-inductance is doubled (B) current is doubled
(C) both inductance and current are doubled (D) current is halved
12. Which type of energy is stored in inductor?
(A) electric energy (B) magnetic energy (C) potential energy (D) gravitational energy
13. An A.C voltmeter has rms value 220 V, its peak value is _____.
(A) 300 V (B) 210 V (C) zero (D) 311.12 V
14. For higher frequency, the inductive reactance will be _____.
(A) high (B) low (C) zero (D) infinite
15. At 0 K, semiconductor is _____.
(A) conductor (B) insulator
(C) perfect insulator (D) perfect diamagnetic and paramagnetic
16. A PN junction cannot be used as _____.
(A) amplifier (B) capacitor (C) rectifier (D) light emitting diode
17. The portion of the transistor with greater concentration is _____.
(A) base (B) collector (C) emitter (D) insulator