Objective
Paper Code
8472

Intermediate Part Second
PHYSICS (Objective) **GROUP - II**
Time: 20 Minutes   Marks: 17

Q.No.1 You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill the relevant circle in front of that question number on computerized answer sheet. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero marks in that question. Attempt as many questions as given in objective type question paper and leave other circles blank.

S.#	Questions	A	B	C	D
1	A particle carrying a charge of 2e falls through a potential difference of 10V. The energy acquired by it is:	2eV	5eV	10eV	20eV
2	In a capacitor energy is stored in:	Electric field	Magnetic field	Gravitational field	Nuclear field
3	The charge carriers in electrolyte are:	Free electrons	Positive and negative ions	Free electrons and ions	Electrons and holes
4	Output waveform of sweep or time base generator is:	Saw tooth wave	Sinusoidal wave	Square wave	Digital wave
5	An alpha particle of charge 2e enters a uniform magnetic field of 0.1T with velocity 10ms⁻¹ perpendicularly, the magnetic force acting on it will be:	1.6×10^{-19} N	3.2×10^{-19} N	6.4×10^{-19} N	Zero
6	Lenz's law is in accordance with the law of conservation of:	Charge	Mass	Momentum	Energy
7	Eddy currents are setup in a direction:	Parallel to flux	Antiparallel to flux	Perpendicular to flux	At an angle 45° to the flux
8	The unit of impedance is:	Ohm	Farad	Volt	(Ohm)⁻¹
9	The power factor in a series resonance circuit at resonance is:	0	1	−1	Infinity
10	The units of modulus of elasticity are the same as those of:	Stress	Strain	Power	Work done
11	In case of non-inverting operational amplifier, if $R_1 = \dfrac{R_2}{2}$, then:	$V_{out} = 2\,V_{in}$	$V_{in} = 2\,V_{out}$	$V_{out} = 3\,V_{in}$	$V_{in} = 3\,V_{out}$
12	$X = A \cdot \bar{B} + \bar{A} \cdot B$ is the mathematical mutation for:	NOR gate	NAND gate	XOR gate	XNOR gate
13	The slope of the maximum K.E of photoelectrons versus light frequency graph represents:	Momentum	Planck's constant	Maximum wavelength	Work function
14	The minimum energy required for pair production is:	0.51 MeV	1.51 MeV	1.02 MeV	0.051 MeV
15	The radius of second Bohr radius for hydrogen atom is:	0.053 nm	0.212 nm	0.106 nm	0.848 nm
16	The dead time for G.M counter is:	10^{-3}s	10^{-4}s	10^{-5}s	10^{-8}s
17	Unit of radioactivity is curie (Ci). Which is equal to _____ disintegration per second.	3.74×10^9	3.7×10^{10}	3.64×10^9	4.5×10^9

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