Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	A piece of fuse wire melts when a current of 15 ampere flows through it.With this current, if it dissipates 22.5 W. the resistance of fuse wire will be	A. Zero B. 10 Ω C. 1 Ω D. 0.10 Ω
2	Quantity that remains unchanged in a transformer is	A. Voltage B. Current C. Frequency D. None of these
3	The direction of induced current is such that it opposes the very cause that has produced it This is the law of	A. Lenz B. Faraday C. Kirchoff D. Fleming
4	A particle moving in a magnetic field has increase in its velocity then its radius of the circle	A. Decreases B. Increases C. Remains the same D. Becomes half
5	A cable breaks if stretched by more than 2 mm it is cut into two equal parts how much either part can be stretched without breaking?	A. 0.25 m B. 0.5 m C. 1 mm D. 2 mm
6	A 50-volt battery is connected across 10-ohm resistor.The current is 4.5 A.The internal resistance of the battery is	A. Zero B. 0.5 Ω C. 1.1 Ω D. 5.0 Ω
7	In an AC circuit a resistance of R ohm i connected in series with an inductance L if phase angle between voltage and current be 45^{o} the value of inductive reactance will be	A. R/4 B. R/2 C. R
8	If 2.2 kilowatt power is transmitted through a 10 ohm line at 22000 volt, the power loss in he form of heat will be	A. 0.1 watt B. 1 watt C. 10 watt D. 100 watt
9	The structure of solids is investigated by using	A. Cosmic Rays B. X-rays C. Intra red Radiation D. y-rays
10	Choose the correct statement	A. Both an ammeter and voltmeter should have small resistance B. Both an ammeter and a voltmeter should have large resistance C. An ammeter should have large resistance and a voltmeter should have small resistance D. An ammeter should have small resistance and a voltmeter should have large resistance
11	A 220 V, 50 Hz, AC source is connected to an inductance of 0.2.H and a resistance of 20 ohm in series What is the current in the circuit?	A. 10 A B. 5 A C. 33.3 A D. 3.33 A
12	The average binding energy of a nucleon inside an atomic nucleus is about	A. 8 MeV B. 8 eV C. 8 Joules D. 8 ergs
13	The peak voltage in a 200 volt A.C supply is nearly	A. 220 B. 253 C. 311
14	The velocity of falling raindrops attains limited value because of	A. Up thrust of air B. Vlscous force exerted by air C. Surface tension effect D. Air currents atmosphere

15	A particle is moving in a uniform magnetic field then	A. Its momentum changes but total energy remains the same B. Both momentum and total energy remains the same C. Both changes D. Total energy change but momentum remains
16	When a hydrogen atom is bombarded the atom is excited to the n = 4 state of hydrogen atom.The energy released when the atom falls from n = 4 state to the ground state is	A. 1.275 eV B. 12.75 eV C. 5 eV D. 8 eV
17	Band spectrum in produced by	A. H B. He C. H₂ D. Na
18	A bullet is short from a rifle. As a result the rifle recoils, The kinetic energy of rifle as compared to that of bullet is	A. Less B. Greater C. Equal D. Cannot be concluded
19	Copper and germanium are cooled to 70 K from room temperature then	A. Resistance of copper increases while that of germanium decreases B. Resistance of copper decreases while that of germanium increases C. Resistance of both decreases D. Resistance of both increases
20	Mechanical waves on the surface of a liquid are	A. Transverse B. Longitudinal C. Torsional D. Both transverse and longitudinal