

ECAT Pre General Science Physics Online Test

Sr	Questions	Answers Choice
1	Electrons are	A. positive charged B. negatively charged C. massless D. neutral
2	In reverse-biased p-n junction, the reverse current is due to flow of:	A. Minority charge carriers B. Majority charge carriers C. Free electrons from p to n-region D. Holes from n to p-region E. all are true except (B)
3	The motional e.m.f depends upon the	A. Length of a conductor B. Strength of a magnet C. Speed of the conductor D. All of the above
4	Two sound waves of slightly different frequencies propagating in the same direction produce beats due to	A. Interference B. Diffraction C. Polarization D. Refraction
5	Which of the following forces is responsible for SHM	A. Applied force B. Restoring force C. Fractional force D. Elastic force
6	When a large number of atoms are brought close to one another to form a solid, each energy level of an isolated atom splits into sub-levels, called	A. energy bands B. energy shells C. states D. all of them
7	Kirchhoff's first rule is also called:	A. Loop rule B. Thumb rule C. Point rule D. Right hand rule E. None of these
8	Surface density of charge is defined as	A. Charge per unit volume B. Charge per unit length C. Charge per unit area D. Charge per unit mass
9	The missing mass which is converted to energy in the formation of nucleus, is called	A. packing fraction B. mass defect C. binding energy D. none of these
10	The charge per unit time through any cross-section of a conductor is called	A. capacitance B. electric power C. current D. potential difference
11	When the body is moves against the force of friction on a horizontal plane, the work done by the body is:	A. Positive B. Negative C. Zero D. None of these
12	The photon of radio-waves has energy of about	A. 1 Me V B. 1 Ke v C. 10 ⁻¹⁰ e v D. 10 ¹⁰ e v
13	A toy car moves around a circular track of radius 0.3 m at the rate of 120 rev/min. The speed V of the car is:	A. 38 m/sec B. 3.8 m/sec C. 0.6 m/sec D. None of these
14	The energy is found from Einstein's mass energy relation is called	A. binding energy of electron B. binding energy of proton C. binding energy of neutron D. binding energy of nucleus
15	The frequency of free vibrations is known as	A. free frequency B. forced frequency C. natural frequency

		D. un-natural frequency
16	0.0001210 has significant figures.	A. Four B. Three C. Seven D. Eight
17	The value of the input resistance of OP-AMP is of the order of	A. few ohms B. few hundred ohms C. several kilo ohms D. several maga ohms
18	A ball is dropped from a height of 4.2 meters. To what height will take it rise if there is no loss of KE after rebounding?	A. 4.2 m B. 8.4 m C. 12.6 m D. none of these
19	If yellow light emitted by sodium lamp in Young's double slit experiment is replaced by blue light of the same intensity	A. Fringe width will decrease B. Fringe width will increase C. Fringe width will remain unchanged D. Fringe will become less intense
20	Which of the following diodes can operate in the reverse biased condition	A. photo diode B. light emitting diode C. photo voltaic cell D. none of these