ECAT Physics Online Test

Sr	Questions	Answers Choice
1	A body is moving with constant velocity of 10 m/sec in the north east direction. Then its acceleration will be:	A. 10 m/sec2 B. 20 m/sec2 C. 30 m/sec2 D. Zero
2	The waves moving from a sitar to a listener in air are	A. Longitudinal progressive B. Longitudinal stationary C. Transverse progressive D. Transverse stationary
3	Alfa particles are	A. hydrogen nuclei B. helium nuclei C. electrons D. photons
4	Substances that flow easily have	A. large coefficient of viscosity B. small coefficient of viscosity C. either of them D. none of them
5	In magnet-coil experiment, emf can be produced by	A. Keeping the coil stationary and moving the magnet B. Keeping the magnet stationary and moving C. Relative motion of the loop and magnet D. Any one of above E. All above
6	The doped semi-conductor materials are known as	A. intrinsic semi-conductor B. extrinsic semi-conductor C. either of them D. none of them
7	When a dielectric material is introduced between the plates of a charged condenser the electric field between the plates	A. Decreases B. Increases C. No change D. May increase or decresase
8	In RLC series circuit, resonance occurs when	A. X_{L > Xc} B. X_{L < Xc} C. X_{L = Xc} D. None of these
9	Physicist George Simon ohm was a	A. German physical B. French physicist C. Chinese physicist D. Russian physicist
10	Which one of the following wave motions is transverse:	A. Wave motion produced in water when a piece of stone is thrown into it B. Pulling of weight hanging vertically with a spiral spring C. Both of these D. None of these
11	Pressure applied at any point of gas at rest is transmitted equally to all parts of the gas. This is the statement of:	A. Newton's second law B. Pascal's law C. Carnot theorem D. Second law of thermodynamics
12	An electron is accelerated through a potential difference of 50v. its de-Brogile wavelength is	A. 1.66 x 10⁻²⁹m B. 1.74 x 10⁻¹⁰cm C. 17.4 x 10⁻⁶m D. 1.74 x 10⁻¹⁰m
13	The solids are classified as:	A. Metals B. Crystalline C. Amorphous D. Polymeric E. All except (A)
14	The Stephen-Boltzmann law for the black body radiation is given by	A. E = T² B. E = -T²

		C. E = T⁴ D. E = -T⁴
15	The electric flux through any surface depends upon:	A. Intensity of electric field<o:p></o:p> B. Area of the surface<o:p></o:p> C. Angle between intensity and area<o:p></o:p> D. All of these<o:p></o:p> E. None of these<o:p></o:p>
16	Electromagnetic -radiation means:	A. Photons B. protons C. Electrons D. Mesons E. None of these
17	The sum of the magnitude of two forces acting at a point is 18 and the magnitude of their resultant is 12. If the resultant is at 90° with the force of the smaller magnitude, then their magnitudes are	A. 3, 15 B. 4, 14 C. 5, 13 D. 6, 12
18	In case of metallic conductors, the charge carriers are	A. Protons B. Electrons C. Antiprotons D. Positrons E. Both A and B
19	When two objects are rubbed together, their internal energy	A. remains same B. decreases C. remains the same then decreases D. increases
20	Body which falls freely under gravity provides good example of motion under:	A. Uniform acceleration B. Non-uniform acceleration C. Uniform velocity D. None of these