ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The waves which propagate out in the space due to oscillations of electric and magnetic fields are called:	A. Mechanical waves B. Electromagnetic waves C. Matter waves D. All of them
2	1 amu is equal to	A. 1.66×10^{-24} kg B. 1.66×10^{-19} kg C. 1.66×10^{-34} kg D. 1.66×10^{-27} kg
3	The volume of given mass of a gas will be doubled at atmosphere pressure if the temperature of the gas is changed from 150°C to	A. 300 °C B. 573 °C C. 600 °C D. 743 °C
4	The torque per unit twist of coil is called	A. proportionality constant B. gravitational constant C. boltzman constant D. coupling constant
5	The liquid which conduct current is known as	A. heating effect B. chemical energy C. electrolyte D. ohm's law
6	The unit of intensity of electric field is	A. newton/coluomb B. jule/coluomb C. volt x metre D. newton/metre
7	magnetic field is a:	A. Vector quantity B. Scalar quantity C. Scalar as well as scalar quantity D. Any of (A) or (B) E. Neither (A) nor (B)
8	One moving a charge of 20 coulombs by 2 cm, 2 J of work is done, then the potential difference between the points is	A. 0.1 V B. 8 V C. 2 V D. 0.5 V
		A. Same B. Different

9	Certain charge +q is placed at the center of a sphere. At each of the sphere, The directions of electric intensity and vector area are:	C. Opposite to each other D. At 60° with each other E. Both (B) and (C)
10	The force which opposes the applied force producing the displacement in the spring is called	A. restoring force B. periodic force C. centripetal force D. resistive force
11	The figure 1.007276μ shows the mass of an:	A. Atom B. Positron C. Electron D. Neutron E. Proton
12	When relatively simple molecules are chemically combined into massive molecules, the reaction is called:	A. Fission reaction B. Fusion reaction C. Polymerization D. Any of these E. None of these
13	Smaller the damping, the resonance will be	A. more flat B. more sharp C. both of them D. none of them
14	The charge carriers in gases are	A. electrons B. ions C. protons D. ions and electrons
15	Through which character we can distinguish the light waves from sound waves	A. Interference B. Refraction C. Polarization D. Reflection
16	Which one of the following is dimensionless.	A. Acceleration B. Velocity C. Density D. Angle
17	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
18	Two water pipes of diameters 4 cm and 8 cm are connected with a supply line. The velocity of flow of water in the pipe 4 cm diameter is	A. 1/4 times B. 4 times C. Twice D. 1/2 of 8 cm diameter pipe
19	A car moves for half of its time at 80 km/h and rest half of time at 40 km/h, The total distance covered is 60 km. What is the average speed of the car?	A. 60 km/hr B. 80 km/hr C. 120 km/hr D. 180 km/hr
20	Which of the following is/are example/s if mechanical waves i.e. waves generated in _____:	A. Rope B. Coil of spring C. Water D. All of them