ECAT Physics Online Test

Sr	Questions	Answers Choice
1	A diatomic gas molecule has	A. translational energy B. rotaional energy C. vibrational energy D. all of them
2	Slope of velocity-time graph represents:	A. Acceleration B. Speed C. Torque D. Work
3	Most OP-AMP operates with	A. <u>+</u> 6 V supply B. <u>+</u> 10 V supply C. <u>+</u> 12 V supply D. <u>+</u> 24 V supply
4	Which of the following is the longitudinal waves?	A. Sound waves B. Waves on plucked string C. Water waves D. Light waves
5	Rate of decay is actually described by.	A. Half line B. Decay constant C. Mean life D. Total life E. None of these
6	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
7	Acceleration produced in a body by a force varies	A. inversely as the applied force B. directly as the applied force C. directly as the mass of the body D. none of them
8	Photocell is a device which converts	A. chemical energy into electrical energy B. electrical energy into light energy C. heat energy into electrical energy D. light energy into electrical energy
9	The minimum resistance that can be obtained by connecting 5 resistance of 1/4Ωeach is	A. 4/5Ω B. 5/4Ω C. 20Ω D. 0.05 Ω
10	In his experiment on nuclear reactions, Rutherford bombardedα particles on:	A. Nitrogen B. Hydrogen C. Lead D. Oxygen E. Krypton
11	The motion of a body in a straight line is the motion in	A. one dimension B. two dimension C. three dimension D. four dimension
12	A resonance curve for RLC series circuit is a plot of frequency versus	A. Voltage B. Current C. Impedance

		C. Impedance D. Reactance
13	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
14	The passage of current is accompanied by a magnetic field in the surrounding space:	A. Always accompanied<o:p></o:p> B. Sometimes accompanied<o:p></o:p> C. Never accompanied<o:p></o:p> D. Any of above <o:p></o:p> E. None of these<o:p></o:p>
15	The total charge of any nucleus is given as	A. Ze² B. Z²e C. Z/e D. Ze
16	The ideal gas law is	A. P = nRT B. V = nRT C. PV =RT D. PV =nRT
17	The path (or trajectory) described by a projectile is	A. a parabola B. a hyperbola C. a circle D. a straight line
18	A reversible cycle is the one in which	A. some of the changes are reversible B. all of the changes are reversible C. all of the changes are irreversible D. none of them
19	Amount of heat required to raise the temperature of a body through 1 K is called its	A. Specific heat B. Water equivalent C. Thermal capacity D. Entropy
20	Ultra-violet rays differ from X-rays in that they	A. Cannot be diffracted B. Cannot be polarized C. Have a lower frequency D. Are deviated when they pass through a magnetic field