ECAT Pre General Science Physics Online Test

Sr	Questions	Answers Choice
1	Electrostatics is the branch of physics which deals with the study of electro charges:	A. At rest<o:p></o:p> B. At rest under the action of electric forces<o:p></o:p> C. In motion under the action of electric forces<o:p></o:p> D. In motion<o:p></o:p> E. At rest under the action of nuclear forces<o:p></o:p>
2	Laser is a beam of:	A. Visible light B. Infra red light C. Ultra violet light D. Violet light only E. yellow light only
3	A signal is amplified at the output without any change of phase, if it is applied at the	A. inverting input B. non-inverting input C. at any of the input D. none of these
4	Semi-conductor elements have atoms with	A. 2 valence electrons B. 3 valence electrons C. 4 valence electrons D. 5 valence electrons
5	A lift is moving up with acceleration equal to 1/5 of that due to gravity. The apparent weight of a 60 kg man standing in lift is	A. 60 kg wt B. 72 kg wt C. 48 kg wt D. Zero
6	The absolute temperature for an ideal gas is	A. directly proportional to the rotational K.E of gas molecules B. directly proportional to the vibrational K.E of gas molecules C. directly proportional to the average translational K.E.of gas molecules D. directly proportional to the P.E. of gas molecules
7	The unit of viscosity is SI system is:	A. Kg⁻¹m sec⁻¹ B. Kgm⁻¹ sec⁻¹ C. Kg⁻¹m⁻¹ sec D. None of these
8	If the velocity of the body decreases non-uniformly then the slope of the velocity-time graph will have	A. different values B. same values C. zero valves

		D. constant valves
9	The acceleration of body executing SHM is directly proportional to	A. Applied force B. Amplitude C. Displacement D. Frictional force
10	An electric charge at rest is	A. Only an electric field B. Only a magnetic field C. Both electric and magnetic fields D. None of the above
11	A photon is considered to have	A. Momentum B. Energy C. Wavelength D. All of the above
12	Progressive waves of frequency 300 Hz are superimposed in produced a system of stationary waves in which adjacent nodes are 1.5 m apart. What is the speed of the progressive waves?	A. 100 ms⁻¹ B. 200 ms⁻¹ C. 450 ms⁻¹ D. 900 ms⁻¹
13	When a stress changes the shape, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one of them
14	Torque is also called:	A. Momentum B. Linear inertia C. Moment of a force D. Mass
15	When a platinum wire is heated, it appears orange red at	A. 500°C B. 900°C C. 1100°C D. 1300°C
16	When a body is vibrating, the displacement from mean position:	A. Increases with time B. Decreases with time C. Changes with time D. None of these
17	Acceleration of body executing SHM is always directed towards	A. Extreme position B. Mean position C. Along the direction of motion D. None
18	The linear momentum of the body is defined as	A. p=ma B. p=1/2ma C. p=mv D. p=1/2mv
19	Two forces of 10N and 8N are applied simultaneously to a body. The maximum value of their resultant is:	A. 20 N B. -2 N C. 18 N D. 36 N
20	Root out of the conventional source of energy:	A. Energy from biomass B. Hydroelectric energy C. Geothermal energy D. None of these