ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The SI unit of magnetic flux is.	A. weber B. Nm⁻¹A⁻¹ C. tesla D. gauss
2	Coulomb's force between two point charges depends upon	A. Magnitude of charges B. Distance between them C. Medium in which they are located D. All of the above
3	Newton's first law is also called:	A. Law of torque B. Law of force C. Law of inertia D. None of these
4	If the ends of a wire are connected to a battery an electric field E will be set up at:	A. The ends of the wire only<o:p></o:p> B. Mid points of the wire only<o:p></o:p> C. Every point within the wire<o:p></o:p> D. At nodes only<o:p></o:p> E. Both (B) and (D)<o:p></o:p>
5	A ball is dropped from a certain height and another ball is projected horizontally from the same point. Which of the following statement is correct?	A. Both hit the ground at the same velocty B. Both hit the ground at the same speed C. The change of velocity during the path for both balls is the same D. The change of speed during the path for both balls is the same
6	Electron volt is the unit of.	A. Potential difference B. Energy C. Resistance D. Capacitance
7	The velocity of falling raindrop attains limited value because of	A. Up trust of air B. Viscous force exerted by air C. Surface tension effect D. Air currents atmosphere
8	The analysis of the distribution of wavelengths of the radiation emitted from a hot body set the foundation of new mechanics, known as	A. classical mechanics B. Newtonian mechanics C. quantum mechanics D. statistical mechanics
9	Which of the following phenomenon proves the particle nature of light	A. interference B. diffraction C. photoelectric effect D. none of these
10	Triple point of water is	A. 273.16°F B. 372.16K C. 273.16°F D. 273.16

		D. 273.16
11	If you are moving at relativistic speed between two points that are a fixed distance apart, then the distance between the two points appers	A. larger B. shorter C. equal D. none of these
12	The special theory of relativity is based on:	A. Four postulates B. Three postulates C. Two postulates D. One postulate E. None of these
13	When the bob of simple pendulum is at extreme position, its K.E. will be	A. maximum B. minimum C. zero D. all of them
14	The expression of Hook's law is	A. F=ma B. F=kx C. F= -kx D. -kx=ma
15	The valence band of an atom in a solid	A. is always empty B. may or may not be empty C. can never be empty D. none of them
16	Two electric bulbs of 200 W and 100 W have same voltage. If $R_1$and R_2be their resistance respectively then	A. R₁= 2R₂ B. R₂= 2R₁ C. R₂=_{ }4R₁ D. R₁= 4R₂
17	if the field is directed along the normal to the area, then flux is:	A. Maximum<o:p></o:p> B. Equal to zero<o:p></o:p> C. Equal to BA<o:p></o:p> D. Minimum<o:p></o:p> E. Both (A) and (C)<o:p></o:p>
18	A point charge Q is placed at the mid-point of a line joining two charges. 4q and q. if the net force on charge q is zero. then Q must be equal to	A. -q B. +q C. -2q D. +4q
19	Rutherford performed an experiment on nuclear reactions in:	A. 1718 A.D B. 1818 A.D C. 1918 A.D D. 2001 A.D. E. 1701 A.D.
20	A potential barrier of 0.7V exists across p-n junction made from:	A. Germanium B. Silicon C. Arsenic D. Gallium E. Indium