

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	Slope of velocity-time graph represents:	<p>A. Acceleration</p> <p>B. Speed</p> <p>C. Torque</p> <p>D. Work</p>
2	Which of the following statements for an object in equilibrium is not true?	<p>A. The object must be at rest</p> <p>B. The object can be at rest</p> <p>C. The object is moving at constant speed</p> <p>D. The acceleration of the object is zero</p>
3	The bicycle pump provides a good example of	<p>A. first law of thermodynamics</p> <p>B. second law of thermodynamics</p> <p>C. third law of thermodynamics</p> <p>D. none of them</p>
4	If 2.2 kilowatt power is transmitted through 1 10 ohm line at 22000 volt, the power loss in the form of heat will be	<p>A. 0.1 watt</p> <p>B. 1 watt</p> <p>C. 10 watt</p> <p>D. 100 watt</p>
5	When body moves with increasing acceleration, its velocity time graph is a	<p>A. straight line</p> <p>B. horizontal straight line</p> <p>C. vertical straight line</p> <p>D. curve</p>
6	Body which falls freely under gravity provides good example of motion under:	<p>A. Uniform acceleration</p> <p>B. Non-uniform acceleration</p> <p>C. Uniform velocity</p> <p>D. None of these</p>
7	With the increase of temperature viscosity	<p>A. Increase</p> <p>B. Decrease</p> <p>C. Remains same</p> <p>D. Doubles</p>
8	The work done by the system on its environment is considered as	<p>A. positive</p> <p>B. negative</p> <p>C. zero</p> <p>D. any one of them</p>
9	When the conductor moved across a magnetic field:	<p>A. Emf induced is similar to that of a battery</p> <p>B. Emf induced gives rise to induced current</p> <p>C. An emf induced across its ends</p> <p>D. All are correct</p> <p>E. None of these</p>

10	In a transistor, collector current is controlled by	A. Collector voltage B. Base current C. Collector resistance D. All of the above
11	Dimensions of velocity are	A. [L] B. [T] C. [LT ⁻¹] D. [LT ⁻²]
12	Rate of flow can be expressed in	A. litre/sec B. litre-sec C. sec/litre D. sec/litre-m
13	With the propagation of a longitudinal wave through a material medium, the quantities transmitted in the propagation direction are	A. Energy, momentum and mass B. Energy C. Energy and mass D. Energy and linear momentum
14	The diameter of an atom is of the order	A. 10 ⁻¹²⁵ m B. 10 ⁻¹¹ m C. 10 ⁻¹⁰ m D. 10 ⁻⁹ m
15	The interior of a hollow charged metal sphere is a region which:	A. <p>Contain some magnitude of electric field</p> <p>ls full of electric field lines</p> <p>ls field-free region</p> <p>Either (A) or (B)</p> <p>None of these</p>
16	Which of the following is not thermo dynamical function?	A. Enthalpy B. Work done C. Gibb's energy D. Internal energy
17	When the p-n junction is forward biased its resistance is of the order of	A. few mega ohms B. few kilo ohms C. few ohms D. few milli ohms
18	When either L or C is increased, the resonant frequency of the RLC series circuit	A. Increases B. Decreases C. Remains the same D. Becomes zero

19	The unit of induced emf is:	B. Nm/As C. Joule coul ⁻¹ D. Both A and C E. All of these
20	Bernoulli's equation is the fundamental equation in fluid dynamics, which relates pressure to fluid	A. speed B. height C. none of them D. both of them