

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	A relationship between Gauss of magnetic induction and Tesla(T) is given by	<p>A. $G = 10^{-3}T$</p> <p>B. $G = 10^{-2}T$</p> <p>C. $G = 10^{-4}T$</p> <p>D. $G = 10^{-1}T$</p>
2	When the magnitude of two component vectors are equal to that of their resultant, then the angle between the components is:	<p>A. 60°</p> <p>B. 90°</p> <p>C. 120°</p> <p>D. 150°</p>
3	The instrument used to gather information from the far side of the universe is	<p>A. Compound microscope</p> <p>B. Radio telescope</p> <p>C. Astronomical Telescope</p> <p>D. Simple microscope</p>
4	1 gm-cm^3 is equal to:	<p>A. 10^3 kg-m^3</p> <p>B. 10^{-3} kg-m^3</p> <p>C. 1 kg-m^3</p> <p>D. 10^6 kg-m^3</p>
5	When a horse pulls a cart, the force that makes the horse run forward is the force exerted by	<p>A. The horse on the ground</p> <p>B. The horse on the cart</p> <p>C. The ground on the horse</p> <p>D. The ground on the cart</p>
6	'K' is the proportionality constant of force experienced by conductor. What is the value of 'K' in SI units?	<p>A. 0</p> <p>B. 1</p> <p>C. 0.5</p> <p>D. -1</p>
7	If time period of a pendulum is doubled by increasing its length, then its frequency will	<p>A. Also be doubled</p> <p>B. Become half</p> <p>C. Become one fourth</p> <p>D. Becomes four times</p>
8	The heat required to raise the temperature of one mole of the substance through 1 K is called	<p>A. heat capacity</p> <p>B. specific heat capacity</p> <p>C. molar specific heat</p> <p>D. all of them</p>

9	A particle having the mass of electron and charge of a proton is called a	A. photon B. positron C. antiproton D. antineutrino
10	A boat of mass 40 kg is at rest, A dog of mass 4 kg moves in the boat with a velocity of 10 m/s. What is the velocity of boat?	A. 4 m/s B. 2 m/s C. 8 m/s D. 1 m/s
11	Blood is an	A. Compressible fluid B. incompressible fluid C. hard D. none of them
12	If two waves of amplitude 'a' produce a resultant wave of amplitude a, then the phase difference between them will be	A. 60° B. 90° C. 120° D. 180°
13	If rope of lift breaks suddenly. The tension exerted by the surface of lift is (a=Acceleration of lift)	A. mg B. $m(g+a)$ C. $m(g-a)$ D. 0
14	The material in the form of wire or rod or plate which leads the current into or out of the electrolyte is known as	A. voltmeters B. resistance C. electrode D. current
15	Which one of the following wave motions is transverse:	A. Wave motion produced in water when a piece of stone is thrown into it B. Pulling of weight hanging vertically with a spiral spring C. Both of these D. None of these
16	If the distance of separation between two charges is increased, the electrical potential energy of the system will	A. Increase B. Decrease C. May increase or decrease D. Remain the same
17	The voltage increases linearly with	A. time B. velocity C. acceleration D. torque
18	Eddy current is produced when:	A. A metal is kept in varying magnetic field B. A metal is kept in steady magnetic field C. A circular coil is placed in a steady magnetic field D. A current is passed through a circular coil
19	The motion of molecules in gases is:	A. Orderly B. Random C. Circular D. All of these
20	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above