

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The force exerted on a conductor of length L , carrying current I when placed in a magnetic field B is given by	A. $F=IB/L$ B. $F= L \times B/I$ C. $F = IL \times B$ D. $F = IL \cdot B$
2	A tight wire is clamped at two points 2.0 m apart. It is plucked near one end. Which are the three longest wavelengths present on the vibrating wire.	A. 2.0 m, 1m, 0.67 m B. 4.0 m, 2.0 m, 1m C. 4.0 m, 2.0 m, 1.33 m D. 1m, 0.5 m, 0.33 m
3	The restoring force always directed towards the	A. extreme position B. mean position C. both of them D. none of them
4	Units of impedance are	A. Henry B. Ohms C. moh D. Watt
5	Blomass includes:	A. Crop residue B. Natural vegetation C. Animal dung D. All of these
6	When a body moves with a constant speed in a circle:	A. No work is done on it B. No acceleration is produced in the body C. Velocity remains constant D. None of these
7	The analysis of fluid motion becomes simplified by using	A. law of conservation B. law of conservation of energy C. both of them D. none of them
8	A current flowing in an electrical component increase linearly from 0 to 5 A over 5 second s.The total charge flowing through the component over this duration is.	A. 5 scoulombs B. 12.5 coulombs C. 10 coulombs D. 25 coulombs
9	When a conductor moved with its length parallel to the lines of magnetic fled:	A. An emf is induced across its ends B. Emf induced is similar to that of a battery C. Emf passes through the conductor D. Both A and B E. None of these
10	The vibratory motion of a body whose magnitude of acceleration is directly proportional to the magnitude of its displacement and is always directed towards the equilibrium position is called	A. rotatory motion B. motion under gravity C. angular motion D. simple harmonic motion
11	A meter wire carrying a current of 2A is at right angle to the uniform magnetic field of 0.5 Weber/m ² The force on the wire is	A. 5N B. 4N C. 1.5N D. 6N
12	Lead, copper and wrought iron are examples of	A. brittle substances B. ductile substances C. plastic substances D. elastic substances
13	At 0° K which of the following properties of a gas will be zero?	A. Kinetic energy B. Potential energy C. Vibrational energy D. Density
14	The unit of decay constant is:	A. Second B. Metre C. Hour D. Year E. Second ⁻¹

15	Physicist George Simon ohm was a	A. German physical B. French physicist C. Chinese physicist D. Russian physicist
16	An alpha particle has a charge of	A. $+2e$ B. $-2e$ C. $-e$ D. $+3e$
17	Which of the following quantity for particle executing SHM is non-zero at mean position	A. Force B. Acceleration C. Velocity D. Displacement
18	The basic circuit element in A.C. circuits are:	A. Resistor and capacitor B. Resistor and Inductor C. Capacitor only D. Both (B) and (C) E. None of these
19	Which one of the following is an example of resonance	A. swing B. tuning a radio C. microwave oven D. all of them
20	A coil of constant area is placed in a constant magnetic field. An include current is produced in the coil when:	A. The coil is destroyed B. The coil is Rotated C. The coil is neither destroyed nor rotated D. Both (A) and (B) E. None of these