

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Significant figures in 0.0010 are:	A. Four B. Three C. Two D. One
2	Hertz is unit of:	A. Time period B. Displacement C. Amplitude D. Frequency
3	In free space, the speed of electromagnetic waves is	A. $3 \times 10^{8} \text{ ms}^{-1}$ B. $3 \times 10^{6} \text{ ms}^{-1}$ C. $4 \times 10^{7} \text{ ms}^{-1}$ D. $3 \times 10^{9} \text{ ms}^{-1}$
4	Consider two spheres A and B of radii r_a and r_b both concentric with point charge Q, if $r_a > r_b$ then the total flux passing normally through the sphere A and B is related as	A. Flux through A is greater B. Flux through both sphere is equal C. Flux through a may be greater or less than Q depending on radius D. Flux through sphere B is greater
5	Radioactivity is	A. self disruptive activity B. spontaneous activity C. exhibited by all elements under proper conditions D. both 'a' and 'b'
6	A toy car moves around a circular track of radius 0.3 m at the rate of 120 rev/min. The speed V of the car is:	A. 38 m/sec B. 3.8 m/sec C. 0.6 m/sec D. None of these
7	The product of cross-sectional area of the pipe and the fluid speed at any point along the pipe is	A. very high B. very low C. constant D. zero
8	In a semi-conductor material, current flows due to	A. positive charge B. negative charge C. both of them D. none of them
9	Which of the following should remain constant if no torque acts upon a body.	A. Linear constant B. Momentum C. Angular momentum D. Charge
10	Melting point of ice	A. Increases with increasing pressure B. Decreases with increasing pressure C. Is independent of pressure D. Is proportional to pressure
11	The change of magnetic flux through a circuit will produce	A. Magnetic Field B. Electric Field C. emf D. a.c
12	The waves produced in a microwave oven have frequency	A. 2450 Hz B. 2450 K Hz C. 2450 M Hz D. 2450 G Hz
13	Due to relative motion of observer and the frame of reference of events, time always:	A. Dilates itself B. Contracts itself C. Stretches itself D. Both (A) and (C) E. None of these
		A. High pressure and low temperature B. High pressure and high

14	Thermistors are prepared under	temperature C. Low pressure and low temperature D. Low pressure and high temperature E. None of these
15	A mixture of two gases at constant temperature contains molecules of two kinds. The first kind of mass m_1 and rms speed c_1 and the second molecule has mass m_2 and rms speed c_2 , the ratio c_1/c_2 is.	A. m_1/m_2 B. $[m_1/m_2]^{1/2}$ C. m_2/m_1 D. $[m_2/m_1]^{1/2}$
16	The number of countries who manage the largest satellite system is:	A. 3 B. 24 C. 126 D. 200
17	It is possible to recognize a person by hearing his voice even if he is hidden behind a solid wall. This is due to the fact that his voice	A. Has a definite pitch B. Has a definite quality C. Has a definite capacity D. Can penetrate the wall
18	Which one of the following is the unit of electric field intensity	A. JC^{-1} B. Vm^{-1} C. Cm^{-1} D. CJ^{-1}
19	Resonance occurs when one of the natural frequencies of vibration of the forced or driven harmonic oscillator	A. greater than the frequency of applied force B. equal to the frequency of applied force C. less than the frequency of applied force D. all of them
20	A p-n junction is formed when a crystal of silicon is grown in such a way that its one half is doped with trivalent impurity and the other half with a impurity from	A. 2nd group B. fourth group C. fifth group D. sixth group