

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	A point on the rim of a wheel moves 0.2 m where the wheel turns through an angle is 14.3 degrees. The radius of the wheel is:	A. 0.05 m B. 0.08 m C. 0.8 m D. 0.008 m
2	Thermocouple is an arrangement of two different metals	A. To convert heat energy in to electrical energy B. To produce more heat C. To convert heat energy into chemical energy D. To convert electric energy in to heat energy
3	You have 20 inductors available each of 15H. You need an inductor of 1H in a circuit. You achieve it by combination.	A. 15 inductor in parallel B. 20 inductor in series C. 20 inductor in parallel D. 15 inductor in series
4	Einstein's theory about gravity is better than Newton's because it gave explanation of:	A. Inverse square law B. Bending of light C. Both A and B D. None of above
5	If N is the total number of molecules and V is the volume of the container, then the expression for the pressure of gas is	A. $P = \frac{1}{3} \frac{N}{V} m \overline{v^2}$ B. $P = \frac{2}{3} \frac{N}{V} m \overline{v^2}$ C. $P = \frac{2}{3} \frac{N}{V} m \overline{v^2}$ D. $P = \frac{2}{3} \frac{N}{V} m \overline{v^2}$
6	In a soft iron, domains are	A. easily oriented along external field and do not return to original random positions B. easily oriented along external field and readily returns to originally random position C. do not oriented along external field and also do not returns to originally random position D. none of them
7	The average of A.C. current and voltage over a complete cycle is	A. Maximum B. zero C. Neither zero nor maximum D. None of these
8	While deriving the equation for pressure of a gas we consider the	A. rotational motion of molecules B. vibrational motion of molecules C. linear motion of molecules D. all of them
9	The principle of superposition states that	A. The total displacement due to several waves is the sum of the displacement due to those waves acting individually B. Two stationary waves superimpose to give two progressive waves C. A diffraction pattern consists of many interference patterns superimposed on one another D. Two progressive waves superimpose to give a stationary wave
10	Swimming is based on the principle of	A. Newton's 1st law B. Newton's 2nd law C. Newton's 3rd law D. All
11	By placing a dielectric in between the charges, the electrostatic force between them	A. Is always reduced B. Is always increased C. Is not affected D. Is increased one million times E. None of these
12	One radian is:	A. Greater than one degree B. Less than one degree

		C. Equal to degree D. none of these
13	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
14	Light waves are:	A. Transverse wave B. Longitudinal wave C. Compressional wave D. None of them
15	If the mass of the simple pendulum becomes double, its time period	A. increase B. decreases C. remains constant D. none of them
16	On the exhaust stroke, the outlet valves opens. The residual gases are expelled and piston moves	A. outwards B. inwards C. in either way D. none of these
17	A traveling wave has a shape of:	A. Square wave B. Sine wave C. Parabola D. hyperbola
18	Truth of kinetic energy is confirmed by:	A. Diffusion of gases B. Brownian motion C. Both A and B D. None of these
19	The restoring force is _____ and opposite to the applied force within _____,:	A. Equal, elastic limit B. Different, the walls of the laboratory C. Different, elastic limit D. None of these
20	Resistor is a device which convert electric energy to	A. Heat energy B. Chemical energy C. Elastic energy D. All of the above