

ECAT Pre General Science Physics Online Test

Sr	Questions	Answers Choice
1	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
2	Suppose the water flows out from a pipe at 3 kg s^{-1} and its velocity changes from 5 m s^{-1} to zero on striking the wall, then the force exerted by water on wall will be	A. 5 N B. 10 N C. 15 N D. 20 N
3	One newton is a force that produces an acceleration of 0.5 m/sec^2 in a body of mass:	A. 2 Kg B. 3 Kg C. 4 Kg D. 8 Kg
4	For two resistance wires joined in parallel, the resultant resistance is $6/5\text{ ohm}$. When one of the resistance wire breaks, the effective resistance becomes 2 ohm . The resistance of the broken wire is	A. $3/5\text{ ohm}$ B. 2 ohm C. $6/5\text{ ohm}$ D. 3 ohm
5	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
6	The potential difference across the conductors should be maintained constant by connecting the ends of wire to the terminal of a device called a source of	A. power B. current C. resistance D. temperature
7	Energy stored in the spring of a watch is called	A. Potential energy B. Kinetic energy C. Nuclear energy D. Elastic potential
8	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
9	An aircraft is moving with a velocity of 300 ms^{-1} . If all the forces acting on it are balanced, then	A. It still moves with the same velocity B. It will be just floating at the same point in space C. It will fall down instantaneously D. It will lose its velocity gradually
10	0.1 kg mass will be equivalent to the energy	A. $9 \times 10^{15}\text{ J}$ B. $5 \times 10^8\text{ J}$ C. $6 \times 10^{16}\text{ J}$ D. $9 \times 10^{-16}\text{ J}$
11	There are some whose resistivity becomes zero below a certain temperature, called	A. absolute zero B. 0°C C. critical temperature D. lower fixed point
12	The artillery shells travel along parabolic paths under the influence of	A. magnetic field B. electric field C. electromagnetic field D. gravitational field
13	If a material object moves with the speed of light 'C' its mass becomes	A. Equal to its rest mass B. Four times of its rest mass C. Double of its rest mass D. Infinite
14	The solids are classified as:	A. Metals B. Crystalline C. Amorphous D. Polymeric E. All except (A)

15	If the waves produced in a microwave oven are of wave-length 12 cm, then their frequency will be:	<p>A. 2500 MHz B. 0.25 MHz C. 2500 KHz D. None of these</p>
16	The amount of coal used since 1945 up till now as compared to that used in the whole of history before that is	<p>A. Much more B. Very small C. No amount at all D. None of these</p>
17	In the equilibrium state, the potential difference between two ends of the conductor moving across a magnetic field is called:	<p>A. Both A and C B. Induced emf C. Both A and B D. Motion emf E. Electrostatic emf</p>
18	Which one of the following wave motions is transverse:	<p>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</p>
19	SHM is type of _____ motion	<p>A. Vibratory B. Linear C. Circular D. None</p>
20	In the case of an incompressible fluid in stead flow the net rate of flow of mass entering one end of the tube of flow is equal to the net rate of flow of mass leaving the other end. This equation is called	<p>A. Quadratic equation B. Equation of discontinuity C. Equation of continuity D. None of the above</p>