

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Satellites are held in orbits around Earth by its:	A. Gravitational field B. Magnetic field C. Own orbital motion D. Own spin motion
2	The waveform of alternating voltage is a:	A. Square B. Rectangular C. Saw-tooth D. Sinusoidal E. None of these
3	When a stress changes length, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one of them
4	_____ plays the same role during angular motion as played by the mass in linear motion	A. Torque B. Angular Momentum C. Moment of a force D. Moment of inertia
5	U-238 present in the natural uranium is about:	A. 59% B. 0.007% C. 99% D. 39% E. 19%
6	All trigonometric functions (sine, cosine, tangent etc) are positive in:	A. 1st quadrant B. 2nd quadrant C. 3rd quadrant D. 4th quadrant
7	Chock consumes externally small	A. Charge B. Current C. Power D. Potential
8	Some charge is being given to a conductor. Then its potential	A. Is maximum at surface B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum somewhere between surface and centre
9	Average KE of a gas molecule has:	A. Direct relation with absolute temperature and inverse relation with pressure B. Direction relation with both absolute temperature and pressure C. Inverse relation with both absolute temperature and pressure D. None of these
10	A cold soft drink is kept on the balance. When the cap is opened, then the weight	A. Increases B. Decreases C. First increases, then decreases D. Remains same
11	Which of the following phenomenon proves the particle nature of light	A. interference B. diffraction C. photoelectric effect D. none of these
12	A body is moving with constant velocity of 10 m/sec in the north-east direction. Then its acceleration will be:	A. 10 m/sec^2 B. 20 m/sec^2 C. 30 m/sec^2 D. Zero
13	Resistance of a conductor is increased, the currant will	A. Decrease B. Increase C. Remain the same D. None of these
14	When a mass 'm' is pulled slowly, the spring stretches by an amount x_0 , then the average force would be	A. $F = Kx > 0$ B. $F = 1/2Kx > 0$ C. $F = 2Kx > 0$ D. $F = Kx < 0$

15 If the velocity time graph is a straight line parallel to the time-axis, then it means:

A. The body is moving with uniform velocity
 B. The body is moving with uniform acceleration
 C. The body is at rest
 D. None of these

16 When two objects are rubbed together, their internal energy

A. remains same
 B. decreases
 C. remains the same then decreases
 D. increases

17 The highest efficiency of a heat engine whose low temperature is 17°C and the high temperature is 200°C is

A. 70%
 B. 100%
 C. 35%
 D. 38%

18 When a constant potential difference is applied across the conductor, the drift velocity of electrons:

A. Increases
 B. Decreases
 C. Remains the constant
 D. Either of these
 E. None of these

19 The efficiency of petrol engine is usually not more than 25% to 30% because of

A. friction
 B. heat losses
 C. both of them
 D. none of them

20 The SI unit of current is

A. watt
 B. coulomb
 C. volt
 D. ampere