

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Photons must have energy equal to	A. ev B. En C. hf D. None of these
2	In order to make a voltmeter, high resistance is connected with galvanometer, in	A. perpendicular B. may be parallel or perpendicular C. series D. none of these
3	Stars twinkle due to	A. The fact that they do not emit light continuously B. The refractive index of earth's atmosphere fluctuates C. The Star's atmosphere absorbs its light intermittently D. None of these
4	When a silicon crystal is doped with a pentavalent element, such an extrinsic semiconductor is called	A. p-type semi-conductor B. n-type semi-conductor C. either of them D. none of them
5	Current is measured in	A. volts B. watt C. ohm D. ampere
6	In YDS experiment, fringe spacing means the distance between two consecutive fringes	A. Bright B. Dark C. Any of A or B D. None of these
7	The information from far side of the universe are gathered by	A. Radio telescope B. Microscope C. Telescope D. Spectro scpe
8	The dimensions of viscosity are:	A. $M^{2/L}T^{-2}$ B. $M^{1/L}L^{1/T}T^{-1}$ C. $M^{-1}L^{1/T}T^{-1}$ D. $ML^{-1}T^{-1}$
9	The critical temperature of mercury is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
10	The square of 0.4 is:	A. Greater than 0.4 B. Smaller than 0.4 C. Equal to 0.4 D. None of them
11	The conductivity of a superconductor is	A. Infinite B. Very large C. Very small D. Zero
12	The space around the earth in which its gravitational force acts on a body is called	A. Electric Field B. Gravitational field C. Magnetic field D. Conservative field
13	Which one of the following is dimensionless:	A. Acceleration B. Velocity C. Density D. Angle
14	Which of the following is an example of SHM(in ideal situations)	A. Motion of simple pendulum B. Motion of horizontal spring man system

C. Motion of violin string
D. All of these

15 The percentage of available heat energy converted into work by a petrol engine is roughly

A. 35 %
B. 40 %
C. 35 to 40 %
D. 25 %

16 A sphere of mass m and velocity $2V$ moving in the x direction collides with a sphere of mass $2m$ and velocity v moving in the x direction. If the collision is perfectly elastic, which of the following statements is correct

A. The two spheres stick together after impact
B. The total kinetic energy before the impact is $3mv^2$
C. The total momentum before impact is $4mv$
D. Both B and C

17 Electrostatics is the branch of physics which deals with the study of electro charges:

A. At rest<o:p></o:p>
B. At rest under the action of electric forces<o:p></o:p>
C. In motion under the action of electric forces<o:p></o:p>
D. In motion<o:p></o:p>
E. At rest under the action of nuclear forces<o:p></o:p>

18 If a given spring of spring constant k is cut into two identical segments, the spring constant of each segment is:

A. $k/2$
B. $2k$
C. $4k$
D. None of these

19 Bernoulli's equation is based upon law of conversation

A. Mass
B. Momentum
C. Energy
D. None of these

20 Charge on neutron is

A. $1.6 \times 10^{-19} C$
B. zero
C. $-1.6 \times 10^{-19} C$
D. $1.2 \times 10^{-19} C$