

## Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The analysis of the distribution of wavelengths of the radiation emitted from a hot body set the foundation of new mechanics, known as	A. classical mechanics B. Newtonian mechanics <b>C. quantum mechanics</b> D. statistical mechanics
2	The value of the Stephen's constant for black body radiations is given by	A. $5.6 \times 10^{-8} \text{ Wm}^{-2} \text{ K}^{-4}$ <b>B. <math>5.67 \times 10^{-8} \text{ Wm}^{-2} \text{ K}^{-4}</math></b> C. $2.9 \times 10^{-3} \text{ mK}$ D. $2.9 \times 10^{-3} \text{ mK}$
3	Rate of change of momentum is called	A. Impulse <b>B. Force</b> C. Torque D. Momentum
4	If 2.2 kilowatt power is transmitted through 1 10 ohm line at 22000 volt, the power loss in the form of heat will be	<b>A. 0.1 watt</b> B. 1 watt C. 10 watt D. 100 watt
5	A vehicle of mass 120 kg is moving with a uniform velocity of 108 km/h. The force required to stop the vehicle in 10s is	A. $120 \times 10.8 \text{ N}$ B. 180 N C. 720 N <b>D. 360 N</b>
6	Light appears to travel in straight line because	A. It is not absorbed by the atmosphere B. It is refracted by the atmosphere <b>C. Its wavelength is very small</b> D. Its velocity is very large
7	A body walks to his school at a distance of 6 km with a speed of 2.5 km/h and walks back with a constant speed of 5 km/h. His average speed for round trip expressed in km/h is	<b>A. 24/13</b> B. $10/3$ C. 3 D. 4.8
8	Work done along a closed path in a gravitational field is:	A. Maximum B. Minimum <b>C. Zero</b> D. Unity
9	In order to produce pair production, a photon must have a energy	A. 0.511 Me v B. 0.256 Me v <b>C. 1.02 Me v</b> D. 0.956 Me v
10	Rocket engines lift a rocket from the earth surface, because hot gas with high velocity	A. Push against the air <b>B. React against the rocket and push it up</b> C. Heat up the air which lifts the rocket D. Push against the earth
11	A 10 F capacitor is charged to a potential difference of 50 V and is connected to another uncharged capacitor in parallel. Now the common potential difference becomes 20 volt. The capacitance of second capacitor is	A. $10 \mu\text{F}$ B. $20 \mu\text{F}$ C. $30 \mu\text{F}$ D. $15 \mu\text{F}$

12	Tick the conservation force:	A. Tension in a string B. Air resistance string C. Elastic spring force D. Frictional force
13	Which one is not produced by sound waves in air?	A. Polarization B. Diffraction C. Refraction D. Reflection
14	An emf is set up in a conductor when it:	A. Is kept in a magnetic field B. Is kept in an electric field C. Moves across a magnetic field D. Both A and B E. None of these
15	A capacitor of capacity $1\mu F$ is charged to 1 KV. The energy stored in J	A. 5 B. 0.5 C. 0.005 D. 50
16	Hydrogen atom with only one proton in its nucleus, and one electron in its orbit is called	A. deuteron B. deuterium C. protium D. tritium
17	Recent studies of ferromagnetism have shown that there exists in ferromagnetic substances small regions called	A. tiny regions B. domains C. vectors D. none of them
18	The force acting on a charge moving in a magnetic field	A. is perpendicular to the both magnetic field and direction of motion B. is proportional to the magnetic of charges C. vanishes when the motion is directly opposite to the direction of field D. all of the above
19	Time period of a simple pendulum depends upon the	A. length of the pendulum B. acceleration due to gravity C. none of them D. both of them
20	Generally a temperature scale is established by using certain physical properties of a material which varies	A. nonlinearly with temperature B. linearly with temperature C. either of them D. none of them