

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	Acceleration produced in a body by the force varies	A. inversely as the applied force B. directly as the applied force C. directly as the mass of the body D. none of them
2	Shock absorber of the car is an example of	A. resonance B. forced oscillations C. interference D. damped oscillations
3	Pressure applied at any point of gas at rest is transmitted equally to all parts of the gas. This is the statement of:	A. Newton's second law B. Pascal's law C. Carnot theorem D. Second law of thermodynamics
4	Peak value of alternative current is:	A. one of its instantaneous value B. Equal to its RMS value C. The same as its peak-to-peak value D. Both (B) and (C) E. None of these
5	The induced current in the loop can be increased by:	A. Using a stronger magnetic field B. Moving the loop faster C. Replacing the loop by a coil of many turns D. All above E. Both (A) and (B)
6	Smaller the damping, greater will be the	A. frequency B. wavelength C. amplitude D. none of them
7	How much time, the α -particle more massive than an electron	A. 600 B. 7000 C. 5000 D. 15000
8	In a normal healthy person the value of systolic pressure is	A. 75 torr B. 80 torr C. 120 torr D. all of them
9	The penetration power of β -particle is	A. zero B. less than α -particle C. equal to α -particle D. greater than α-particle
10	In reverse-biased p-n junction, the reverse current is due to flow of:	A. Minority charge carriers B. Majority charge carriers C. Free electrons from p to n-region D. Holes from n to p-region E. all are true except (B)
11	Field lines are closer to each other in the region where the field is:	A. Stronger B. Weaker C. Much weaker D. Stronger

		<p>size: 12.0pt; line-height: 107%; font-family: &quot;Times New Roman&quot;, &quot;serif&quot;">Absent<o:p></o:p></p></p> <p>E. <p class="MsoNormal">None of these<o:p></o:p></p></p>
12	The unit of induced emf is:	<p>A. Volt</p> <p>B. Nm/As</p> <p>C. Joule coul<sup>-1</sup></p> <p>D. Both A and C</p> <p>E. All of these</p>
13	A typical rocket consumes about	<p>A. 100 kg s<sup>-1</sup>of fuel</p> <p>B. 1000 kg s<sup>-1</sup>of fuel</p> <p>C. 10000 kg s<sup>-1</sup>of fuel</p> <p>D. 100000 kg s<sup>-1</sup>of fuel</p>
14	Example of progressive wave is	<p>A. transverse waves</p> <p>B. longitudinal waves</p> <p>C. both of them</p> <p>D. none of them</p>
15	In the formula $B = \mu_0 n i$, the symbol n denotes:	<p>A. <p class="MsoNormal" style="text-align: justify">Total number of turns of solenoid<o:p></o:p></p></p> <p>B. <p class="MsoNormal" style="text-align: justify">Number of turns per unit length<o:p></o:p></p></p> <p>C. <p class="MsoNormal" style="text-align: justify">Number of turns per unit volume<o:p></o:p></p></p> <p>D. <p class="MsoNormal" style="text-align: justify">Numbers of turns per unit area<o:p></o:p></p></p> <p>E. <p class="MsoNormal" style="text-align: justify">Number of moles<o:p></o:p></p></p>
16	If the slope of the velocity-time graph increases at constant rate with time, then the body is said to have	<p>A. uniform deceleration</p> <p>B. uniform negative acceleration</p> <p>C. average acceleration</p> <p>D. uniform positive acceleration</p>
17	The value of threshold frequency for different metals is	<p>A. different</p> <p>B. same</p> <p>C. may be different or may be same</p> <p>D. none of these</p>
18	The direction of lines of force depends upon the direction of	<p>A. voltage</p> <p>B. current</p> <p>C. charges</p> <p>D. none of these</p>
19	The induced emf in a coil is proportional to:	<p>A. Magnetic flux through a coil</p> <p>B. Rate of change of magnetic flux through the coil</p> <p>C. Area of the coil</p> <p>D. Product of magnetic flux and area of the coil</p>
20	The statement "the electric force of repulsion or attraction between two point charges is directly proportional to the product of the charges and inversely proportional to square of the distance between them" refer to	<p>A. Coulomb's law</p> <p>B. Gauss's law</p> <p>C. Biot-Sarwat law</p> <p>D. Ampere's law</p>