

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

Sr	Questions	Answers Choice
1	When a platinum wire is heated, it appears orange red at	A. 500 <span style="color: red; font-size: small;">°C</span> B. 900 <span style="color: red; font-size: small;">°C</span> C. 1100 <span style="color: red; font-size: small;">°C</span> D. 1300 <span style="color: red; font-size: small;">°C</span>
2	In the theory of dimensional analysis, heat may be properly represented by:	A. $ML^2T^{-2}$ B. $MT^{-2}$ C. $ML^{-1}T^{-1}$ D. None of these
3	Whenever a covalent bond breaks, it creates:	A. An electron B. A hole C. An electron-hole pair D. A positron E. All of these
4	Consider two spheres A and B of radii $r_a$ and $r_b$ both concentric with point charge Q, if $r_a > r_b$ then the total flux passing normally through the sphere A and B is related as	A. Flux through A is greater B. Flux through both sphere is equal C. Flux through a may be greater or less than Q depending on radius D. Flux through sphere B is greater
5	A metal rod of length 1m is moving at a speed of $1 \text{ ms}^{-1}$ in a direction making angle of $30^\circ$ with 0.5 T magnetic field. The emf produced in the rod is:	A. 0.25 N B. 0.25 V C. 2.5 V D. 2.5 N E. 25 V
6	Which one of the following phenomenon cannot be explained on the bases of Huygen's theory	A. Refraction B. Reflection C. Diffraction D. Formation of spectrum
7	The molecules or ions in a crystalline solids are	A. static B. not static C. randomly moving D. all of them
8	Energy required by an electron revolving in certain orbit to jump to an excited state is called:	A. Ionization energy B. Ionization potential C. Excitation energy D. Excitation potential E. None of these
9	While deriving the equation for pressure of a gas we consider the	A. rotational motion of molecules B. vibrational motion of molecules C. linear motion of molecules D. all of them
10	The emission of radiations take place in elements, having charge number greater than	A. 109 B. 82 C. 69 D. 52
11	At high altitude the blood oozes out of the nose and ear because	A. The blood pressure increase at high altitudes B. The percentage of oxygen in the air increase C. The atmospheric pressure decrease there D. The density of blood decrease at high altitudes
12	Absolute temperature can be calculated by	A. Means squares velocity B. Motion of the molecule C. Both A and B D. None of these

13	If the formula $PV = nRT$ , $n$ denotes:	<p>A. Number of molecules per unit volume</p> <p>B. Number of moles</p> <p>C. Number of molecules</p> <p>D. None of these</p>
14	A mass of a liquid of density is mixed with an equal mass of another liquid of density 3. The density of the liquid mixture is.	<p>A. 1</p> <p>B. <math>3/2</math></p> <p>C. 2</p> <p>D. 4</p>
15	The only significant motion possessed by the mono-atomic gas represented is:	<p>A. Translatory</p> <p>B. Rotatory</p> <p>C. Vibratory</p> <p>D. None of these</p>
16	If a body reaches a speed equal to the speed of light, then its mass will become	<p>A. zero</p> <p>B. very small</p> <p>C. infinity</p> <p>D. none of these</p>
17	Two point charge $+3\mu\text{C}$ and $+8\mu\text{C}$ repel each other with a force of 40 N. If a charge of $-5\mu\text{C}$ is added to each of them, then the force between them will become	<p>A. -10 N</p> <p>B. +10 N</p> <p>C. +20 N</p> <p>D. -20 N</p>
18	Peak value of alternative current is:	<p>A. one of its Instantaneous value</p> <p>B. Equal to its RMS value</p> <p>C. The same as its peak-to-peak value</p> <p>D. Both (B) and (C)</p> <p>E. None of these</p>
19	During the projectile motion, the horizontal component of velocity	<p>A. changes with time</p> <p>B. remains constant</p> <p>C. becomes zero</p> <p>D. decreases with time</p>
20	Neutron was discovered by	<p>A. Curie</p> <p>B. Roentgen</p> <p>C. Chadwick</p> <p>D. Rutherford</p>