

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

Sr	Questions	Answers Choice
1	Tick the series which lie/s in. the infra-red region.	A. Pfund series B. Brackett series C. Paschen series D. All of these E. None of these
2	A charged particle moving at right angle to the magnetic field will experience	A. minimum force B. maximum force C. zero D. moderate force
3	The number of "Earth Stations" which transmit signals to satellites and receive signals fro them are	A. 3 B. 24 C. 126 D. 200
4	The volume of universal gas constant R is:	A. 8.314 J/K mole K B. 8314 J/K mole K C. 8.314 J/mole K D. None of these
5	Bernoulli's equation is the fundamental equation in fluid dynamics, which relates pressure to fluid	A. speed B. height C. none of them D. both of them
6	The body will move with terminal velocity when it acquires	A. minimum speed B. zero speed C. maximum speed D. none of them
7	In wilson cloud chamber, the air becomes saturated with:	A. Alcohol vapours B. Water C. Helium gas D. Nitrogen gas E. None of these
8	If N is the total number of molecules and V is the volume of the container, then the expression for the pressure of gas is	A. $P = \frac{P}{V} \cdot \frac{1}{2} m v^2$ B. $P = 2N \cdot \frac{1}{2} m v^2$ C. $P = \frac{2}{3} N \cdot \frac{1}{2} m v^2$ D. $P = \frac{2}{3} N \cdot m v^2$
9	An atom in which there is a resultant magnetic field, behaves like a tiny magnet and is called as	A. magnetic B. magnetic dipole C. magnetic monopole D. none of them
10	Electric flux is:	A. <span style="font-family: serif; font-size: 12pt;">Cross product of two vector</span> B. <span style="font-family: serif; font-size: 12pt;">Dot product of two vectors</span> C. <span style="font-family: serif; font-size: 12pt;">A vector quantity</span> D. <span style="font-family: serif; font-size: 12pt;">A scalar quantity</span> E. Both (B) and (D)

11	The internal energy of a system does not depend upon the	A. initial state of the system B. final state of the system C. path D. none of them
12	Most practical application of electricity involve	A. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:&quot;Times New Roman&quot;, &quot;serif&quot;">Charges at the rest<o:p></o:p></span></p> B. <p class="MsoNormal" style="text-align:justify"><span style="font-size: 12pt; line-height: 107%; font-family: &quot;Times New Roman&quot;, serif;">Charges in the motion<b><o:p></o:p></b></span></p> C. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:&quot;Times New Roman&quot;, &quot;serif&quot;">Electrons at rest<o:p></o:p></span></p> D. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:&quot;Times New Roman&quot;, &quot;serif&quot;">Atoms in motion<o:p></o:p></span></p> E. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:&quot;Times New Roman&quot;, &quot;serif&quot;">Molecules in motion<o:p></o:p></span></p>
13	Certain light of wavelength 600 nm is used to view an object under the microscope. If the aperture of its objective is 1.22 cm, then the limiting angle of resolution will be:	A. $6 \times 10^{-5} \text{ rad}$ B. $7 \times 10^{-5} \text{ rad}$ C. $8 \times 10^{-5} \text{ rad}$ D. None of these
14	Which one of the following is an example of resonance	A. swing B. tuning a radio C. microwave oven D. all of them
15	Energy is stored in the choke coil in the form of	A. Heat B. Magnetic energy C. Electric energy D. Electro-magnetic energy
16	In the phenomenon of hysteresis	A. magnetism leads the magnetising current B. magnetism lags behind the magnetising current C. meganetism goes along the magnetising current D. none of them
17	If two bulbs one of 60 W and other of 100 W are connected in parallel, then which one of the following will flow more?	A. 60 W bulb B. 100 W bulb C. Both equally D. None of these
18	For an atom having atomic number Z and atomic weight A, the number of electron in an atoms	A. A - Z B. A + Z C. Z D. A
19	$F = I(L \times B)$ is a	A. vector B. scalar C. unit vector D. none of these
20	When electrons in the transmitting antenna vibrate 94000 time per second, they produce radiowaves having frequency	A. 9.4 kHz B. 940 kHz C. 94 kHz D. None of these