

## ECAT Pre General Science MCQ's Test For Physics Full Book

Sr	Questions	Answers Choice
1	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>
2	$\beta$ -particles are easily deflected by collisions than heavy	<p>A. <math>\alpha</math>-particles</p> <p>B. <math>\beta</math>-particles</p> <p>C. <math>\gamma</math>-particles</p> <p>D. none of these</p>
3	When there is no relative motion between the magnet and coil, the galvanometer indicates:	<p>A. No current in circuit</p> <p>B. An increasing current</p> <p>C. A decreasing current</p> <p>D. Either B or C</p>
4	The natural frequency of a pendulum which is vibrating freely, depends upon its	<p>A. mass</p> <p>B. length</p> <p>C. material</p> <p>D. all of them</p>
5	The whole structure obtained by the repetition of unit cells is called:	<p>A. Crystal lattice</p> <p>B. Amorphous solid</p> <p>C. Polymeric solid</p> <p>D. Polyesterne</p> <p>E. None of these</p>
6	In reverse-biased p-n junction, the reverse current is due to flow of:	<p>A. Minority charge carriers</p> <p>B. Majority charge carriers</p> <p>C. Free electrons from p to n-region</p> <p>D. Holes from n to p-region</p> <p>E. all are true except (B)</p>
7	An electric field is generated along the wire when:	<p>A. <math>\langle p \text{ class="MsoNormal" style="text-align: justify;"&gt;\langle span \text{ style="font-size: 12.0pt; line-height: 107%; font-family: \"Times New Roman\", \"serif\" \rangle \text{Its resistance is very high} \langle o:p \rangle \langle /o:p \rangle \langle /span \rangle \langle /p \rangle</math></p> <p>B. <math>\langle p \text{ class="MsoNormal" style="text-align: justify;"&gt;\langle span \text{ style="font-size: 12.0pt; line-height: 107%; font-family: \"Times New Roman\", \"serif\" \rangle \text{A constant potential is maintained across the wire} \langle o:p \rangle \langle /o:p \rangle \langle /span \rangle \langle /p \rangle</math></p> <p>C. <math>\langle p \text{ class="MsoNormal" style="text-align: justify;"&gt;\langle span \text{ style="font-size: 12.0pt; line-height: 107%; font-family: \"Times New Roman\", \"serif\" \rangle \text{Net current through the wire is zero} \langle o:p \rangle \langle /o:p \rangle \langle /span \rangle \langle /p \rangle</math></p> <p>D. <math>\langle p \text{ class="MsoNormal" style="text-align: justify;"&gt;\langle span \text{ style="font-size: 12pt; line-height: 107%; font-family: \"Times New Roman\", \"serif\" \rangle \text{A constant potential difference is maintained across the wire} \langle b \rangle \langle o:p \rangle \langle /o:p \rangle \langle /b \rangle \langle /span \rangle \langle /p \rangle</math></p> <p>E. <math>\langle p \text{ class="MsoNormal" style="text-align: justify;"&gt;\langle span \text{ style="font-size: 12.0pt; line-height: 107%; font-family: \"Times New Roman\", \"serif\" \rangle \text{Either (A) or (D)} \langle o:p \rangle \langle /o:p \rangle \langle /span \rangle \langle /p \rangle</math></p>
		A. acceptor

8	When a silicon crystal is doped with a pentavalent element, then the atom of the pentavalent element is known as	B. donor C. either of them D. none of them
9	Specific resistance of a wire depends upon	A. Length B. Cross-section area C. Mass D. None
10	When the temperature of source and sink of a heat engine become equal entropy change will be	A. Zero B. Max C. Min D. -ve
11	Computer chips are made from:	A. Iron B. Silicon C. Helium D. Stontium E. Aluminium
12	If both the inputs given to a gate are 1 such that the output is 0, then it is:	A. AND gate B. NOR gate C. OR gate D. NOT gate E. Both (A) and (C)
13	Data transmitted along glass-fiber cables is in the form of pulses of monochromatic red light each of duration 2.5 ns. Which of the following is the best estimate of the number of wavelengths in each pulse?	A. $10^3$ B. $10^6$ C. $10^9$ D. $10^{12}$
14	The output voltage of half wave rectification is in the form of	A. a smooth curve B. a smooth wave C. pulses D. all of the above
15	The force experienced by an electron projected in a magnetic field B with a velocity V is given by	A. $F=e(V \times B)$ B. $F= -e(V \times B)$ C. $F= e(B \times V)$ D. Both a and c
16	Referring to the above figure, the binding energy per nucleon increases upto mass number equal to:	A. 50 B. 100 C. 150 D. 200 E. 250
17	During the projectile motion, the horizontal component of velocity	A. changes with time B. remains constant C. becomes zero D. decreases with time
18	Most OP-AMP operates with	A. $\pm 6$ V supply B. $\pm 10$ V supply C. $\pm 12$ V supply D. $\pm 24$ V supply
19	As the light shines on the metal surface, the electrons are ejected	A. slowly B. instantaneously C. either of these D. none of these
20	Electric field strength is defined as	A. Work done on unit charge B. Force exerted on unit charge C. Distance covered by unit charge D. Power exerted by unit charge E. None of these