

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	An electric field is generated along the wire when:	<p>A. $\lt p \ class="MsoNormal" \ style="text-align: justify;" \>\lt span \ style="font-size: 12.0pt; line-height: 107%; font-family: \"Times New Roman\", \&quot;serif\&quot;" \>\lt /span \>\lt /p \>$Its resistance is very high</p> <p>B. $\lt p \ class="MsoNormal" \ style="text-align: justify;" \>\lt span \ style="font-size: 12.0pt; line-height: 107%; font-family: \"Times New Roman\", \&quot;serif\&quot;" \>\lt /span \>\lt /p \>$A constant potential is maintained across the wire</p> <p>C. $\lt p \ class="MsoNormal" \ style="text-align: justify;" \>\lt span \ style="font-size: 12.0pt; line-height: 107%; font-family: \"Times New Roman\", \&quot;serif\&quot;" \>\lt /span \>\lt /p \>$Net current through the wire is zero</p> <p>D. $\lt p \ class="MsoNormal" \ style="text-align: justify;" \>\lt span \ style="font-size: 12pt; line-height: 107%; font-family: \&quot;Times New Roman\&quot;, serif;" \>\lt /span \>\lt /p \>$A constant potential difference is maintained across the wire</p> <p>E. $\lt p \ class="MsoNormal" \ style="text-align: justify;" \>\lt span \ style="font-size: 12.0pt; line-height: 107%; font-family: \"Times New Roman\", \&quot;serif\&quot;" \>\lt /span \>\lt /p \>$Either (A) or (D)</p>
2	If the length of a simple pendulum is 0.25 m its time period would be	<p>A. 1.0 s</p> <p>B. 2.0 s</p> <p>C. 3.0 s</p> <p>D. 4.0 s</p>
3	The motion in a plane is the motion in	<p>A. one dimension</p> <p>B. two dimension</p> <p>C. three dimension</p> <p>D. four dimension</p>
4	Due to relative motion of observer and the frame of reference of events, time always:	<p>A. Dilates itself</p> <p>B. Contracts itself</p> <p>C. Stretches itself</p> <p>D. Both (A) and (C)</p> <p>E. None of these</p>
5	Work done along a closed path in a gravitational force is:	<p>A. maximum</p> <p>B. Minimum</p> <p>C. Zero</p> <p>D. Unity</p>
6	At 0° K which of the following properties of a gas will be zero?	<p>A. Kinetic energy</p> <p>B. Potential energy</p> <p>C. Vibrational energy</p> <p>D. Density</p>
7	Work has the dimension as that of:	<p>A. Torque</p> <p>B. Angular momentum</p> <p>C. Linear momentum</p> <p>D. Power</p>
8	Which of the following is most suitable as the core of transformer	<p>A. Soft iron</p> <p>B. Alinco</p> <p>C. Steel</p> <p>D. None of these</p>
9	A thermistor with negative temperature co-efficient is placed in a furnace. When temperature of furnace increases the resistance?	<p>A. Decrease</p> <p>B. Remain unchanged</p> <p>C. Increase</p> <p>D. None of above</p>
10	The power dissipation in a pure inductive or capacitance circuit is	<p>A. maximum</p> <p>B. positive</p> <p>C. zero</p> <p>D. none</p>

11	the current is pass through the straight wire. The magnetic field established around it has its lines of force:	<p align="justify">Circular and endless</p> <p>B. Oval in shape and endless</p> <p>C. Straight</p> <p>D. Parabolic</p> <p>E. All are true</p>
12	The straight current carrying conductor experiences maximum force in a uniform magnetic field when it is placed	<p>A. parallel to the field</p> <p>B. Perpendicular to the field</p> <p>C. At an angle of 45 to the field</p> <p>D. None of the above</p>
13	The energy of photon 'E' is proported to	<p>A. The magnetic field H</p> <p>B. The electric field E</p> <p>C. Both the electric and magnetic field H and E</p> <p>D. Frequency</p>
14	Alternating current is produced by a voltage source which polarity:	<p>A. Remains the same</p> <p>B. Reverse after period T</p> <p>C. Keeps on reversing with time</p> <p>D. Reverse after every time interval T/2</p> <p>E. Both (C) and (D)</p>
15	Bernoulli's equation is based upon law of conversation	<p>A. Mass</p> <p>B. Momentum</p> <p>C. Energy</p> <p>D. None of these</p>
16	Which of the following phenomenon proves the particle nature of light	<p>A. interference</p> <p>B. diffraction</p> <p>C. photoelectric effect</p> <p>D. none of these</p>
17	A digital system deals with quantities or variables which have	<p>A. only one state</p> <p>B. only two discrete states</p> <p>C. three discrete states</p> <p>D. four discrete states</p>
18	The string of a simple pendulum should be:	<p>A. Heavy</p> <p>B. Extensible</p> <p>C. In-extensible</p> <p>D. None of these</p>
19	Work done is lowering the bucket into the well is:	<p>A. Zero</p> <p>B. Positive</p> <p>C. Negative</p> <p>D. None of these</p>
20	Angular velocity is a:	<p>A. Scalar quantity</p> <p>B. Vector quantity</p> <p>C. Complex quantity</p> <p>D. None of these</p>