

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

Sr	Questions	Answers Choice
1	A field is uniform and much stronger:	<p>A. <span style="font-size: 12pt;">Inside a long solenoid</span></p> <p>B. <span style="font-size: 12.0pt;">Outside a long solenoid</span></p> <p>C. <span style="font-size: 12.0pt;">At the end of a long solenoid</span></p> <p>D. <span style="font-size: 12.0pt;">At the central point of long solenoid</span></p> <p>E. <span style="font-size: 12.0pt;">None of these</span></p>
2	The magnitude of resultant of three vectors is 3. Its x-component is one, y-component is two, then its z-component is:	<p>A. 0</p> <p>B. 1</p> <p style="color: green;">C. 2</p> <p>D. 3</p>
3	The rain drop falling from the sky reach the ground with	<p>A. Constant terminal velocity</p> <p style="color: green;">B. Constant gravitational acceleration</p> <p>C. Variable acceleration</p> <p>D. acceleration greater than g</p>
4	A ball is dropped downwards After 1 second another ball is dropped downwards from the same point. What is the distance between them after 3 seconds	<p style="color: green;">A. 25 m</p> <p>B. 20 m</p> <p>C. 50 m</p> <p>D. 9.8 m</p>
5	If the displacement of a body executing S.H.M is plotted against time, then the curve is known as	<p>A. frequency of S.H.M</p> <p>B. period of S.H.M</p> <p style="color: green;">C. wave form</p> <p>D. none of them</p>
6	A current of 1.6 A is passed through a solution of $\text{CuSO}_4$ . How many $\text{Cu}^{2+}$ ions are liberated in one minute?	<p style="color: green;">A. <math>3 \times 10^{20}</math></p> <p>B. <math>3 \times 10^{10}</math></p> <p>C. <math>6 \times 10^{20}</math></p> <p>D. <math>6 \times 10^{10}</math></p>
7	In the theory of dimensional analysis, heat may be properly represented by:	<p style="color: green;">A. <math>ML^2T^{-2}</math></p> <p>B. <math>MT^{-2}</math></p> <p>C. <math>ML^{-1}T^{-1}</math></p> <p>D. None of these</p>
8	A mass spectrograph sort out	<p>A. molecules</p> <p>B. atoms</p> <p>C. elements</p> <p style="color: green;">D. isotopes</p>
9	Strength of magnetic field is measured in SI units, in:	<p>A. N</p> <p style="color: green;">B. N/Am</p> <p>C. Am/N</p> <p>D. Nm/A</p> <p>E. None of these</p>
10	A point on the rim of a wheel moves 0.2 m when the wheel turns through an angle of 14.3 degrees. The radius of the wheel is	<p>A. 0.05 m</p> <p>B. 0.08 cm</p> <p style="color: green;">C. 0.8 m</p> <p>D. 0.008 m</p>

11	The location and speed anywhere on earth can now be determined using relativistic effects by NAVISTAR to an accuracy of	A. 2 cm/s B. 20 cm/s C. 200 cm/s D. 2000 cm/s
12	By CAT scans, we can detect the density difference of the order of:	A. 1% B. 20% C. 30% D. 50% E. 70%
13	Work has a dimension as that of:	A. Torque B. Angular momentum C. Linear momentum D. Power
14	Energy gas behaves like an ideal gas at	A. High temperature and low pressure B. Low temperature and high pressure C. Both A and B D. None
15	The un-steady streamline flow is called	A. laminar flow B. turbulent flow C. both of them D. none of them
16	If a given spring of spring constant $k$ is cut into two identical segments, the spring constant of each segment is:	A. $k/2$ B. $2k$ C. $4k$ D. None of these
17	If the velocity time graph is a straight line parallel to time-axis, then it means that:	A. The body is moving with uniform velocity B. The body is moving with uniform acceleration C. The body is at rest D. None of above
18	The example/s of non-electrical energy to electrical is/are:	A. <p>Chemical energy</p> B. <p>Mechanical energy</p> C. <p>Heat energy</p> D. Both (A) and (B) E. All of these
19	In rotational motion, analogue of force $F$ is called:	A. Couple B. Torque C. Mass D. Moment of inertia
20	The closed loop gain of the non-inverting amplifier is given by	A. $G = R_2/R_1$ B. $G = -R_2/R_1$ C. $G = 1 + R_2/R_1$ D. $G = 1 + R_2/R_1$