

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

Sr	Questions	Answers Choice
1	The pressure will change in the pipe, as the fluid moves through that pipe of varying	A. cross-section B. height C. none of them D. both of them
2	A curie represents a very strong source of	A. $\alpha$ -particle B. $\beta$ -particle C. $\gamma$ -particle D. none of these
3	The ratio of velocity of sound in air at 4 atm pressure and that at 1 atm pressure would be	A. 1 : 2 B. 4 : 1 C. 1 : 4 D. 2 : 1
4	Ohm is the unit of	A. current B. capacitance C. energy D. resistance
5	Which one of the following elasticities is possessed by fluids:	A. Young's elastic modulus (length) B. Bulk elastic modulus (volume) C. Modulus of rigidity (shape) D. None of these
6	In a transistor, the central region is called	A. collector B. emitter C. base D. none of them
7	The path (or trajectory) described by a projectile is	A. a parabola B. a hyperbola C. a circle D. a straight line
8	A typical rocket ejects the burnt gases at speeds over	A. 400 ms <sup>-1</sup> B. 40000m s <sup>-1</sup> C. 40000 ms <sup>-1</sup> D. 60000 ms <sup>-1</sup>
9	The magnitude of induced emf depends upon the:	A. Rate of decrease of magnetic field B. Rate of change of magnetic field C. Rate of increase of magnetic flux D. Constancy of magnetic field E. None of these
10	U-238 present in the natural uranium is about:	A. 59% B. 0.007% C. 99% D. 39% E. 19%
11	One electron volt is equal to	A. 1.6 x 10 <sup>19</sup> eV B. 6.25 x 10 <sup>18</sup> eV C. 1.6 x 10 <sup>18</sup> eV D. 6.25 x 10 <sup>19</sup> eV
12	Monochromatic light means waves of:	A. Same frequency B. Same colour C. Same wavelength D. All of them
13	The force exerted on a conductor of length L, carrying current I when placed in a magnetic field B is given by	A. F=IB/L B. F= L x B/I C. F = IL x B D. F = IL . B
		A. The object must be at rest B. The object can be at rest

14	Which of the following statements for an object in equilibrium is not true?	<p>C. The object is moving at constant speed</p> <p>D. The acceleration of the object is zero</p>
15	If two waves of length 50 cm and 51 cm produced 12 beats per second, the velocity of sound is	<p>A. 360 m/s</p> <p>B. 306 m/s</p> <p>C. 331 m/s</p> <p>D. 340 ms</p>
16	The current that flows through the coil of a motor causes:	<p>A. <span style="font-size: 12pt; line-height: 107%; font-family: Times New Roman, serif;">its shaft to revolve</span></p> <p>B. <span style="font-size: 12pt; line-height: 107%; font-family: Times New Roman, serif;">brushes to rotate</span></p> <p>C. <span style="font-size: 12pt; line-height: 107%; font-family: Times New Roman, serif;">Motor to move</span></p> <p>D. <span style="font-size: 12pt; line-height: 107%; font-family: Times New Roman, serif;">its shafts to rotate</span></p> <p>E. <span style="font-size: 12pt; line-height: 107%; font-family: Times New Roman, serif;">None of these</span></p>
17	The work done by the system on its environment is considered as	<p>A. positive</p> <p>B. negative</p> <p>C. zero</p> <p>D. any one of them</p>
18	For the working of a heat engine, there must be	<p>A. a source of heat at high temperature</p> <p>B. a sink at low temperature</p> <p>C. both of them</p> <p>D. none of them</p>
19	The SI unit of spring constant is identical with that of	<p>A. Force</p> <p>B. Surface tension</p> <p>C. Pressure</p> <p>D. Loudness</p>
20	The total charge of any nucleus is given as	<p>A. <math>Ze^{2}</math></p> <p>B. <math>Z^{2}e</math></p> <p>C. <math>Ze</math></p> <p>D. <math>Ze</math></p>