

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The value of electrical constant of proportionality k is	<p>A. <math>9 \times 10^9 \text{ Nm}^2 \text{ C}^{-2}</math></p> <p>B. <math>9 \times 10^{-9} \text{ Nm}^2 \text{ C}^{-2}</math></p> <p>C. <math>9 \times 10^{10} \text{ Nm}^2 \text{ C}^2</math></p> <p>D. <math>9.85 \times 10^{-12} \text{ N} \text{ C}^{-2}</math></p>
2	Structure of the nucleus was explained by	<p>A. J.J Thomson</p> <p>B. Bohr</p> <p>C. Millikan</p> <p>D. Rutherford</p>
3	A body moving with an acceleration of $5 \text{ m/sec}^2$ started with velocity of $10 \text{ m/sec}$ . What will be the distance traversed in 10 seconds?	<p>A. 150 m</p> <p>B. 250 m</p> <p>C. 350 m</p> <p>D. 400 m</p>
4	Origin of the electric and the gravitational forces	<p>A. Was known in 1911 A.D.</p> <p>B. Was known in 1811 A.D.</p> <p>C. Was known in 1711 A.D.</p> <p>D. is still unknown</p> <p>E. Was known in 1611 A.D.</p>
5	When the bob of simple pendulum is at extreme position, its K.E. will be	<p>A. maximum</p> <p>B. minimum</p> <p>C. zero</p> <p>D. all of them</p>
6	The portion of the water above its mean level forms a:	<p>A. Crest</p> <p>B. Trough</p> <p>C. Both A and B</p> <p>D. None of these</p>
7	The magnitude of chemical Effects depends upon:	<p>A. <span style="font-size: 12pt; line-height: 107%; font-family: 'Times New Roman', serif;">Nature of liquid</span></p> <p>B. <span style="font-size: 12pt; line-height: 107%; font-family: 'Times New Roman', serif;">Quantity of Electricity passed through the liquid</span></p> <p>C. <span style="font-size: 12pt; line-height: 107%; font-family: 'Times New Roman', serif;">Color of the liquid</span></p> <p>D. <span style="font-size: 12pt; line-height: 107%; font-family: 'Times New Roman', serif;">Both (A) and (C)</span></p> <p>E. <span style="font-size: 12pt; line-height: 107%; font-family: 'Times New Roman', serif;">Both (A) and (B)</span></p>
8	A body is moving with constant velocity of $10 \text{ m/sec}$ in the north east direction. Then its acceleration will be:	<p>A. <math>10 \text{ m/sec}^2</math></p> <p>B. <math>20 \text{ m/sec}^2</math></p> <p>C. <math>30 \text{ m/sec}^2</math></p> <p>D. Zero</p>
9	Heat required to raise the temperature of one mole of a gas through 1 K at constant pressure is called	<p>A. heat capacity</p> <p>B. specific heat capacity</p> <p>C. specific heat at constant volume</p> <p>D. specific heat at constant pressure</p>
10	A diode which can turn its current ON and OFF in nono seconds is called:	<p>A. LED</p> <p>B. Photodiode</p> <p>C. An ordinary diode.</p>

		D. Both (A) and (B) E. Both (B) and (C)
11	The product of cross-sectional area of the pipe and the fluid speed at any point along the pipe is	A. very high B. very low C. constant D. zero
12	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
13	To designate the voltage as low or 0 by a logic gate, the specified minimum value is:	A. 0.2 volt B. 0.8 volt C. 0 volt D. 2.0 volt E. 5.0 volt
14	The penetration power of $\beta$ -particle is	A. zero B. less than $\alpha$ -particle C. equal to $\alpha$ -particle D. greater than $\alpha$ -particle
15	Electric flux is:	A. Cross product of two vector B. Dot product of two vectors C. A vector quantity D. A scalar quantity E. Both (B) and (D)
16	In Bernoulli's theorem the relation between velocity and pressure is	A. Inverse B. Direct C. None of the above D. Both a and b
17	When a silicon crystal is doped with a pentavalent element, such an extrinsic semi-conductor is called	A. p-type semi-conductor B. n-type semi-conductor C. either of them D. none of them
18	Nucleus of a hydrogen atom may contain:	A. One neutron only B. Two protons and one neutron C. Two protons and two neutrons D. Any of above E. One proton only
19	The permeability of free space is measured in:	A. Wb/Am B. Wb A/m C. Am/Wb D. m/Web A E. None of these
20	Curie is a unit of	A. reluctance B. resistivity C. binding energy D. radioactivity