

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The phenomenon of generation of induced emf is called:	A. Electrostatic induced B. Magnetic induced C. Electromagnetic induced D. Electric induced E. Both A and C
2	In a moving coil galvanometer, the deflecting couple depends upon	A. area of the coil B. number of turns of coil C. value of magnetic field D. all of the above
3	When there is no relative motion between the magnet and coil, the galvanometer indicated	A. No current in the circuit B. An increasing current C. A decreasing current D. A constant current E. Either B or C
4	Radioactivity	A. is exhibited more by semiconductors in general B. in exhibited more by the element when they are coupled C. with other radioactive elements by a covalent bond D. is an atomic property of radioactive elements
5	The force which maintain the strict long-range order between atoms of a crystalline solid is the:	A. Nuclear force B. Cohesive force C. Adhesive force D. Coulomb force E. None of these
6	Hydrogen atom with only one proton in its nucleus, and one electron in its orbit is called	A. deuteron B. detarium C. protium D. tritium
7	The linear momentum of the body is defined as	A. $p=ma$ B. $p=1/2ma$ C. $p=mv$ D. $p=1/2mv$
8	The SI unit of electric field intensity is	A. $CN^{-1}$ B. $NC^{-1}$ or $Vm^{-1}$ C. $JC^{-1}$ D. $AV^{-1}$
9	Instead of moving the coil towards a magnet, the magnet is moved towards the coil with the same speed. The galvanometer shows current	A. Of same magnitude in the same direction B. Of different magnitude in the same direction C. Of same magnitude but in opposite direction D. Of different magnitude in the opposite direction E. None of these
10	transverse wave motion is possible in:	A. Air B. A mixture of $NH_3$ and $O_2$ C. Strings D. All of these
11	When there is no relative motion between the magnet and coil, the galvanometer indicates:	A. No current in circuit B. An increasing current C. A decreasing current D. Either B or C
12	Victor de-Broglie received the Nobel prize in physics in	A. 1925 B. 1929 C. 1932 D. 1935

A. Electrons

B. 1929

13	Static electricity is produced by the transfer of	<p>size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif""&gt;Protons</p> <p>C. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"'>One fluid</span></p> <p>D. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"'>Two fluids</span></p> <p>E. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"'>None of these</span></p>
14	The capacitance of a parallel plate capacitor depends upon	<p>A. Area of the plates</p> <p>B. Separation between the plates</p> <p>C. Medium between the plates</p> <p>D. All of the above</p>
15	Absolute temperature can be calculated by	<p>A. Means squares velocity</p> <p>B. Motion of the molecule</p> <p>C. Both A and B</p> <p>D. None of these</p>
16	When the speed of a body in a fluid increases then the drag force	<p>A. decreases</p> <p>B. becomes zero</p> <p>C. increases</p> <p>D. non of them</p>
17	For making cooking utensils, which of the following pairs of properties is most suited?	<p>A. Low specific heat and high conductivity</p> <p>B. Low specific heat and low conductivity</p> <p>C. High specific heat and high conductivity</p> <p>D. High specific heat and low conductivity</p>
18	A body is moving with constant velocity of 10 m/sec in the north-east direction. Then its acceleration will be:	<p>A. 10 m/sec<sup>2</sup></p> <p>B. 20 m/sec<sup>2</sup></p> <p>C. 30 m/sec<sup>2</sup></p> <p>D. Zero</p>
19	The number of field lines passing through unit area held perpendicular to the field lines represent:	<p>A. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"'>Flux in that region</span></p> <p>B. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"'>Intensity of the field</span></p> <p>C. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"'>Charge</span></p> <p>D. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"'>Area of the region</span></p> <p>E. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"'>None of these</span></p>
20	In above figures, tell which set of graphs shows that a body is moving with uniform velocity:	<p>A. (i) and (ii)</p> <p>B. (ii) and (iii)</p> <p>C. (iii) and (iv)</p>