

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The displacement coincides with the path of the motion when a body moves is a	<p>A. curved line  <b>B. straight line</b>            C. may be curved or straight            D. none of them</p>
2	An eV is unit of:	<p>A. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"; mso-fareast-font-family: "Times New Roman"; mso-fareast-theme-font: minor-fareast;'>Potential</span>            B. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"; mso-fareast-font-family: "Times New Roman"; mso-fareast-theme-font: minor-fareast;'>Energy</span>            C. <span style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", "serif"; mso-fareast-font-family: "Times New Roman"; mso-fareast-theme-font: minor-fareast;'>Work</span>            D. <span style="font-size: 12pt;">Power</span>  <b>E. Both (B) and (C)</b></p>
3	Surface tension of water is reduced by adding	<p>A. Detergents            B. Camphor            C. Plastic  <b>D. Both A and B</b></p>
4	Within each domain, the magnetic field of all the spinning electrons are	<p><b>A. parallel</b>            B. antiparallel            C. perpendicular            D. all of them</p>
5	$10^6$ electrons are moving through a wire per second, the current developed is	<p>A. <math>1.6 \times 10^{-19}</math>            B. 1 A  <b>C. <math>1.6 \times 10^{-15}</math> A</b>            D. <math>10^6</math></p>
6	In free space, the speed of electromagnetic waves is	<p><b>A. <math>3 \times 10^8</math> ms<sup>-1</sup></b>            B. <math>3 \times 10^6</math> ms<sup>-1</sup>            C. <math>4 \times 10^7</math> ms<sup>-1</sup>            D. <math>3 \times 10^9</math> ms<sup>-1</sup></p>
7	Mass of proton is	<p><b>A. <math>1.67 \times 10^{-27}</math> kg</b>            B. <math>1.67 \times 10^{-31}</math> kg            C. <math>1.66 \times 10^{-34}</math> kg            D. <math>1.67 \times 10^{-17}</math> kg</p>
8	A 120 m long train is moving in a direction with speed 20 m/s. A train B moving with 30 m/s in the opposite direction and 130 m long crosses the first train in a time	<p>A. 6 s            B. 36 s            C. 38 s  <b>D. None of these</b></p>

9	A signal appears after amplification, at the output terminal with a phase shift of $180^\circ$ , if it is applied at	A. inverting input B. non-inverting input C. any one of the input terminal D. none of them
10	The current sensitivity of the galvanometer is	A. C/BAN B. BAN/C C. CAN/B D. CBNA
11	The half life of radioactive substances depends upon	A. amount of substance B. energy of substance C. state of substance D. temperature of substance
12	When charged particle is projected perpendicular to a uniform magnetic field its trajectory is	A. circular B. elliptical C. cycloid D. straight line
13	The intensity of emitted energy (with wavelength) radiated from a black body at different temperatures was initially measured by:	A. Lummer B. Planck C. Pringsheim D. Both (A) and (B) E. Both (A) and (C)
14	The time interval during which the Voltage source changes its polarity once is known as:	A. Time period T B. Half the time period C. Quarter the time period D. Two third of the time period E. None of these
15	Two metal rods A and B have their initial lengths in the ratio 2 : 3 and coefficients of linear expansion in the ratio 4 : 3. When they are heated through same temperature difference the ratio of their linear expansion is	A. 1 : 2 B. 2 : 3 C. 3 : 4 D. 8 : 9
16	Glycerin has viscosity _____ the viscosity of water:	A. More than B. Equal to C. Less than D. None of these
17	Smaller the damping, greater will be the	A. frequency B. wavelength C. amplitude D. none of them
18	Structure of the nucleus was explained by	A. J.J Thomson B. Bohr C. Millikan D. Rutherford
19	Crystal of germanium or silicon in its pure form at absolute zero acts as:	A. A conductor B. A semiconductor C. an insulator D. Both (A) and (C) E. Both (A) and (B)
20	The magnetic force exerted on an electron moving with velocity 'v' at right angle to the magnetic field is given by	A. $F=eVB$ B. $F=e\sup{2}/\sup{V/B}$ C. $F=e/VB$ D. $F=B\sup{2}/\sup{ev}$