

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	If a 40 watt light bulb burns for 2 hours. how much heat is generated	A. 288 x 10 <sup>3</sup> J B. 288 x 10 <sup>8</sup> J C. 288 x 10 <sup>5</sup> J D. 288 x 10 <sup>5</sup> J D. 288 x 10 <sup>5</sup> J
2	Root out of the conventional source of energy:	A. Energy from biomass B. Hydroelectric energy C. Geothermal energy D. None of these
3	The energy required to charge a capacitor of $5 {\mu}\text{F}$ by connecting D.C. source of 20 KV is	A. 10 KJ B. 5 KJ C. 2 KJ D. 1 KJ
4	The photon of radio-waves has energy of about	A. 1 Me V B. 1 Ke v C. 10 <sup>-10</sup> e v D. 10 <sup>10</sup> e v
5	The velocity gained by the fluid in falling through the distance $(h_1 - h_2)$ under the action of gravity is equal to the speed of the	A. orifices B. efflux C. fluid D. none of them
6	Bernoulli's equation is based upon law of conversation	A. Mass B. Momentum C. Energy D. None of these
7	The magnetic field outside the solenoid due to current is	A. strong B. zero C. weak D. uniform
8	The concept of entropy was introduced into the study of thermodynamics in	A. 1856 B. 1865 C. 1656 D. 1685
9	The force applied on unit area to produce any change in the shape, volume or length of a body is known as	A. strain B. elasticity C. stretching D. stress
10	The temperature at which the speed of sound becomes double as was at 27°C is	A. 273 <span style="color: rgb(84, 84, 84) font-family: arial, sans-serif; font-size: small;">°C</span> B. 0 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span> C. 927 <span style="color: rgb(84, 84, 84) font-family: arial, sans-serif; font-size: small;">°C</span> D. 1027 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span> D. 1027 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°C</span>
11	A succession of events which bring the system back to its initial condition is called	A. reversible process B. irreversible process C. a cycle D. none of them
12	The average of A.C. current and voltage over a complete cycle is	A. Maximum B. zero C. Neither zero nor maximum D. None of these
13	A device which converts Electrical energy into mechanical energy is called as	A. Transformer B. Generator C. Motor D. All of these
		A. To fall vertically down B. To fall at an angle going from west to

14	A man sitting in a bus travelling in a direction from west to east with a speed of 40 km/h observes that the rain drops are falling vertically down. To the another man standing on ground the rain will appear	east C. To fall at an angle going from east to west D. The information given is insufficient to decide the direction of rain
15	In the formula $B=\mu_n nl$ , the symbol $n$ denotes:	A. <span style='font-size:12.0pt; line-height:107%; font-family:" Times New Roman"," serif"'>Total number of turns of solenoid<o:p></o:p></span> B. <span style='font-size: 12pt; line-height: 107%; font-family: " Times New Roman", serif;'>Number of turns per unit length<b><o:p></o:p></b> C. <span style='font-size: 12pt; line-height: 107%; font-family: " Times New Roman", serif.'>Number of turns per unit length<b><o:p></o:p> C. <span style='font-size:12.0pt; line-height:107%; font-family:" Times New Roman" " serif" '>Number of turns per unit volume<o:p> D. <span style='font-size:12.0pt; line-height:107%; font-family:" Times New Roman" " serif" '>Numbers of turns per unit area<o:p> E. <span style='font-size:12.0pt; line-height:107%; font-family:" Times New Roman" " serif" '>Number of moles<o:p> C:  Poles</o:p></span></o:p></span></o:p></span></b></span></span>
16	A digital system deals with quantities which has discrete values:	A. Two in number B. One in number C. Three in number D. Four in number E. None of these
17	By placing a dielectric in between the charges, the electrostatic force between them	A. Is always reduced B. Is always increased C. Is not affected D. Is increased one million times E. None of these
18	Electromagnetic -radiation means:	A. Photons B. protons C. Electrons D. Mesons E. None of these
19	Biomass includes:	A. Crop residue     B. Natural vegetation     C. Animal dung     D. All of these
20	When either L or C is increased, the resonant frequency of the RLC series circuit	A. Increases B. Decreases C. Remains the same