

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	Examples of polymeric substances are:	<p>A. Plastic            B. Synthetic rubbers            C. Zirconia            D. All of these            E. Both (A) and (B)</p>
2	Energy gas behaves like an ideal gas at	<p>A. High temperature and low pressure            B. Low temperature and high pressure            C. Both A and B            D. None</p>
3	The instrument which detects the instant at which external pressure becomes equal to the systolic pressure is	<p>A. stethoscope            B. thermometer            C. manometer            D. barometer</p>
4	The pattern of NaCl particles have a shape which is :	<p>A. Cubic            B. Body centred cubic            C. Simple cubic            D. face centred            E. Both (A) and (C)</p>
5	Liquids and gasses have	<p>A. zero viscosity            B. non-zero viscosity            C. very large viscosity            D. very small viscosity</p>
6	Resistance of a conductor depends upon	<p>A. the quantity of current passing through it            B. the voltage applied between its end            C. its dimensions, physical state and nature of its material            D. all of the above</p>
7	In the formula $B = \mu_0 n I$ , the symbol $n$ denotes:	<p>A. <p style="font-size: 12pt; margin: 0;">Total number of turns of solenoid</p></p> <p>B. <p style="font-size: 12pt; margin: 0;"><b>Number of turns per unit length</b></p></p> <p>C. <p style="font-size: 12pt; margin: 0;">Number of turns per unit volume</p></p> <p>D. <p style="font-size: 12pt; margin: 0;">Numbers of turns per unit area</p></p> <p>E. <p style="font-size: 12pt; margin: 0;">Number of moles</p></p>
8	transverse wave motion is possible in:	<p>A. Air            B. A mixture of <math>NH_3</math> and <math>O_2</math>            C. Strings            D. All of these</p>
		<p>A. Collisions of free electrons with one another</p>

9	Cause of heat production in a current carrying conductor is	<p>amount</p> <p>B. High drift speed of free electrons</p> <p>C. Collisions of free electrons with atoms or ions of conductor</p> <p>D. High resistance value</p>
10	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 action of gravity is equal to the speed of the	<p>A. orifices</p> <p>B. efflux</p> <p>C. fluid</p> <p>D. none of them</p>
11	Of the following, the option _____ reminds of longitudinal waves.	<p>A. Sound waves</p> <p>B. Heat waves</p> <p>C. Electromagnetic waves</p> <p>D. Light waves</p>
12	In the reverse process, the working substance passes through the same stages as in the direct process and	<p>A. thermal effects at each stage are exactly reversed</p> <p>B. mechanical effects at each stage are exactly reversed</p> <p>C. thermal and mechanical effects at each stage remain the same</p> <p>D. thermal and mechanical effects at each stage are exactly reversed</p>
13	Which one of the following causes production of heat when current is set up in a wire?	<p>A. Fall of electrons from higher orbits to lower orbits</p> <p>B. Inter-atomic collisions</p> <p>C. Inter-electron collisions</p> <p>D. Collisions of conduction electron with atoms</p>
14	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>
15	Adiabatic change occurs when the gas	<p>A. expands</p> <p>B. compressed</p> <p>C. expands or compressed</p> <p>D. expands or compressed rapidly</p>
16	When platinum wire is heated, then at the temperature of 500 °C, it becomes:	<p>A. Yellow</p> <p>B. Orange red</p> <p>C. Dull red</p> <p>D. White</p> <p>E. Cherry red</p>
17	Electric intensity at a place due to a charged conductor is a	<p>A. Scalar quantity</p> <p>B. Vector quantity</p> <p>C. Semi vector and semi scalar</p> <p>D. Dimensionless quantity</p> <p>E. Both A and D are true</p>
18	A mass difference of 0.0012 u is equivalent to and energy of:	<p>A. 0.5 Me V</p> <p>B. 1.13 MeV</p> <p>C. 5.13 MeV</p> <p>D. 1.13 keV</p> <p>E. 1.13 eV</p>
19	If 2.2 kilowatt power is transmitted through a 10 ohm line at 22000 volt, the power loss in the form of heat will be	<p>A. 0.1 watt</p> <p>B. 1 watt</p> <p>C. 10 watt</p> <p>D. 100 watt</p>
20	Maric Curie and Pieree Curie discovered two new radioactive elements, which are called	<p>A. polonium uranium</p> <p>B. uranium and radium</p> <p>C. polonium and radium</p> <p>D. none of these</p>