

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The crystalline structure of NaCl is	A. rectangular B. hexagonal C. tetrahedral D. cubical
2	When the waveform of one voltage is increasing and that of second is decreasing and vice versa, then phase difference between these voltage is	A. 90° B. 75° C. 0° D. 180°
3	For production of beats the two sources must have	A. Different frequencies and same amplitude B. Different frequencies C. Different frequencies, same amplitude and same phase D. Different frequencies and same phase
4	Marie curie and Pierre curie discovered:	A. Uranium B. Polonium C. Radium D. Both (A) and (C) E. Plutonium
5	In half wave rectification	A. both halves of the input voltage is used B. only one half of the input voltage is used C. either of these D. none of these
6	In the equilibrium state, the potential difference between two ends of the conductor moving across a magnetic field is called:	A. Motion emf B. Electrostatic emf C. Induced emf D. Both A and B E. Both A and C
7	When platinum wire is heated, then at the temperature of 500°C , it becomes:	A. Yellow B. Orange red C. Dull red D. White E. Cherry red
8	The value of the plank's constant 'h' is given by	A. $1.6 \times 10^{-19}\text{J}$ B. $1.67 \times 10^{-27}\text{Kg}$ C. $6.63 \times 10^{34}\text{Js}$ D. $6.63 \times 10^{-34}\text{Js}$
9	Which one of the following elasticizes is possessed by fluids:	A. Young's elastic modulus (length) B. Bulk elastic modulus (volume) C. Modulus of rigidity (shape) D. None of these
10	Root out of the conventional source of energy:	A. Energy from biomass B. Hydroelectric energy C. Geothermal energy D. None of these
11	The terminal velocity of water droplet of radius $1 \times 10^{-4}\text{m}$ and desity 1000 kg m^{-3} descending through air of viscosity $19 \times 10^{-6} \text{ kg. m}^{-1} \text{ s}^{-1}$ is	A. 2.5 ms^{-1} B. 3.2 ms^{-1} C. 4.3 ms^{-1} D. 1.1 ms^{-1}
12	The velocity of sound is greatest in	A. Water B. Air C. Vacuum D. Metal

13	An object thrown upward with an initial velocity at certain angle with the horizontal and moving freely under the action of gravity is called	A. a rocket B. an aeroplane C. a projectile D. a ballon
14	When sound waves travel from air to water which of these remains constant?	A. Velocity B. Frequency C. Wavelength D. All the above
15	If an amount of heat enters the system it could	A. decrease the internal energy B. not change the internal energy C. increase the internal energy D. none of them
16	The induced current in the loop can be increased by:	A. Using a strong magnetic field B. Moving the loop faster C. Replacing the loop by a coil of many turns D. All of above E. None of these
17	The nature of radiations emitted by a hot body depends upon its:	A. Metarial B. Temperature C. colour D. Volume E. Length
18	The free electrons in metals:	A. <p class="MsoNormal" style="text-align:justify">Are in random motion and their speed depends upon temperature</p> B. <p class="MsoNormal" style="text-align:justify">Move in particular direction</p> C. <p class="MsoNormal" style="text-align:justify">Move with speed of light</p> D. <p class="MsoNormal" style="text-align:justify">Move such that their speed does not depend on their temperature</p> E. <p class="MsoNormal" style="text-align:justify">None of these</p>
19	In RC series circuit the time during which the capacitor acquires 0.63 times the equilibrium charge is called	A. Time constant B. Decay constant C. None of these D. All of above
20	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