

ECAT Physics Online Test

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Sr	Questions	Answers Choice
1	Velocity of a body changes if	A. direction of the body changes B. speed of the body changes C. neither speed nor direction changes D. either speed or direction changes
2	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
3	The relation between the charge Q of a parallel plate capacitor and the P.D between its plates is	A. Q=V/C B. Q=C/V C. Q=1/2CV D. Q=CV
4	The charged nucleus of an atom itself spins its magnetic field	A. equal to the field produced by orbital electrons B. greater than the field produced by orbital electrons C. much weaker than the field produced by orbital electrons D. none of these
5	The rate of decay of radioactive substance	A. is constant B. decrease exponentially with time C. varies inversely as time D. decreases linearly with time
6	In a transistor, the central region is called	A. collector B. emitter C. base D. none of them
7	Chock consumes externally small	A. Charge B. Current C. Power D. Potential
8	Acceleration in a body is always produced in the directin of:	A. Velocity B. Weight C. Force D. Botha B and C
9	The nucleus/nuclei of hydrogen is/are:	A. Proton B. Deuteron C. Triton D. All of these E. None of these
10	SI unit of current describes the flow of charge at the rate of	A. One ampere per second B. One coulomb per second C. One electron per second D. 6.25 x 10 ¹⁸ electrons per second E. Both B and D
11	The equation of continuity is	A. A ₁ A _{2 = V} ₁ V ₂ B. A _{1/} _V _{1 =} A _{2/} C. _V _{1 =} A _{2/} U. _V C. _V _{1/} A _{1 =} V ₂ U. _V U. _V U. _V U. A ₁ U. Sub>1 U. Sub>1 U. Sub>1 U. Sub>2 U. Sub
12	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

13	The highest value reached by the voltage or current:	A. In quarter cycle is called Instantaneous value B. In half cycle is called peak-to-peak value C. In one cycle is called peak value D. In half cycle is called Instantaneous value E. None of these
14	A current of 1.6 A is passed through a solution of CuSO _{4. How many Cu²⁺ions are liberated in one minute?}	A. 3 x 10 ²⁰ B. 3 x 10 ¹⁰ C. 6 x 10 ²⁰ D. 6 x 10 ¹⁰
15	A ball is dropped from a height of 4.2 meters. To what height will take it rise if there is no loss of KE after rebounding?	A. 4.2 m B. 8.4 m C. 12.6 m D. none of these
16	The entire wave form of sinusoidal voltage is actually a set of all the:	A. Positive maximum value + V _o and negative maximum value -V _o B. Posiotive maximum value +V _o and zero C. Zero and negative maximum value - V _o D. Any of these E. None of these
17	On a cold morning a metal surface will fell colder to touch than a wooden surface, because	A. Metal has high specific heat B. Metal has high thermal conductivity C. Metal has low specific heat D. Metal has low thermal conductivity
18	As the current flows through the wire	A. It generates heat in the wire B. It produces sound in the wire C. Resistance of the wire decrease D. Voltage across the ends is the increase E. None of these
19	If A represents linear momentum and c, the velocity of light, then unit of pc in international system of units is:	A. Newton B. Joule C. Joule-Sec D. Joule-s ⁻¹ E. Watt
20	The waves which propagate out in space due to oscillation of electric and magnetic fields are known as	A. e.m. waves B. mechanical waves C. sound waves D. water waves