

## ECAT Pre General Science Physics Chapter 12 Electrostatics Online Test

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Sr	Questions	Answers Choice
1	One electron volt is equal to	A. 1.6 x 1019eV B. 6.25 x 1018 eV C. 1.6 x 1018 eV D. 6.25 x 1019eV
2	The conductivity of a superconductor is	A. Infinite B. Very large C. Very small D. Zero
3	The electric field due to an infinite long thin wire at a distance R varies as	A. 1/R B. 1/R <sup>2</sup> C. R D. R <sup>2</sup>
4	If an electron of charge 'e' is accelerated through a potential difference V., it will acquire energy	A. Ve B. V/e C. e/V D. 2Ve
5	When three identical bulbs of 60 watt, 200 volt rating are connected in series to a 200 volt supply, the power drawn by them will be	A. 180 watt B. 10 watt C. 20 watt D. 60 watt
6	The nature of capacity of electrostatic capacitor depends on	A. Shape B. Size C. Thickness of plates D. Area
7	A cube of metal is given a positive charge Q. For the above system, which of the following statements is true?	A. Electric potential at the surface of the cube is zero B. Electric potential within the cube is zero C. Electric filed is normal to the surface of the cube D. Electric filed varies within the cube
8	A parallel plate capacitor is first charged and then a dielectric slab is introduced between the plates. The quantity that remains unchanged is	A. Charge Q B. Potential V C. Capacity D. Energy U
9	Battery is charged in motor cars, which is based on	A. Chemical effect B. Magnetic effect C. Electric effect D. None
10	Two electric bulbs of 200 W and 100 W have same voltage. If $R_1$ and $R_2$ be their resistance respectively then	A. R <sub>1</sub> = 2R <sub>2</sub> B. R <sub>2</sub> = 2R <sub>1</sub> C. R <sub>2 </sub> = <sub> </sub> 4R <sub>1</sub> D. R <sub>1</sub> = 4R <sub>2</sub>
11	Which of the following does not obey ohm's law?	A. Copper B. Al C. Diode D. None
12	Electric flux is defined by the relation	A. E.A. B. E x A C. E/A D. none of these
13	The ohm's is defined as	A. 1 ampere / 1 volts B. 1 coulomb / 1 volt C. 1 volt / 1 ampere D. 1 volt / 1 coulomb
14	A uniform resistance wire of Length L and diameter d has a resistance R. Another wire of same material has length, 4L and diameter 2d, the resistance will be	A. 2 R B. R C. R/2 D. R/4

15	Ohm is the unit of	A. current B. capacitance C. energy D. resistance
16	The capacity of a parallel plat capacitor depends on the	A. Type to metal used     B. Thickness of plates     C. Potential applied across the plates     D. Separation between the plates
17	A car battery has e.m.f 12 volt and internal resistance $5 \times 10^{-2}$ ohm. If it draws 60 ampere current, the terminal voltage of the battery will be	A. 5 volt B. 3 volt C. 15 volt D. 9 volt
18	The minimum charge on any object can not be less than	A. 1.6 x 10 <sup>-19</sup> C B. 3.2 x 10 <sup>-19</sup> C C. 1.0 C D. 4.8 x 10 <sup>-19</sup> C
19	Electric potential of earth is taken to be zero because the earth is good	A. Semiconductor B. Conductor C. Insulator D. Dielectric
20	Three resistors of resistance R each are combined in various ways. Which of the following cannot be obtained?	A. $3R < span style="color: rgb(34, 34, 34); font-family: " Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);">\Omega < b>0. 0 < span > 0 B. 0 < span > 0 C. 0 < sp$