

ECAT Pre General Science Physics Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	The unit of resistance is	A. volt B. ampere C. ohm D. coat
2	The speed of randomly moving electrons depends upon	A. pressure B. volume C. temperature D. mass
3	The statement "the electric force of repulsion or attraction between two point charges is directly proportional to the product of the charges and inversely proportional to square of the distance between them" refer to	A. Coulomb's law B. Gauss's law C. Biot-Sarwat law D. Ampere's law
4	What is the current is a 2 x 10^6 ohm resistor having a potential difference of 2 x 10^3 volts?	A. 10 ⁻¹ A B. 10 ⁻² A C. 10 ⁻⁴ A D. 1 mA
5	Physicist George Simon ohm was a	A. German physical B. French physicist C. Chinese physicist D. Russian physicist
6	A heater coil rated at (1000 W - 200 V) is connected to 110 volt line. What will be the power consumed?	A. 200 W B. 302.5 C. 250 W D. 350 W
7	A piece of fuse wire melts when a current of 15 ampere flows through it. With this current. If it dissipates 22.5 W, the resistance of fuse wire will be	A. Zero B. 10 Ω C. 1 Ω D. 0.10 Ω
8	At any point on the right bisector of the line joining two equal and opposite charges	A. At electric field is zero B. The electric potential is zero C. The electric potential decreases with increasing distance from the centre D. The electric field is perpendicular to the line joining the charges
9	An electric dipole is at the centre of a hollow sphere of radius r. The total normal electric flux through the sphere is (here Q is the charge and d is the distance between the two charges of the dipole)	A. Q/4 <i style='box-sizing: border-bocolor: rgb(34, 34, 34); font-family: "Times New Roman"; fon size: 18px; background-color: rgb(255, 255, 248);'>π</i> > B. 2Q/4 <i style='box-sizing: border-box; color: rgb(34, 34, 34); font-fam "Times New Roman"; fon size: 18px; background-color: rgb(255, 255, 248);'>π</i> > C. Q.d. D. Zero
10		A. Only an electric field B. Only a magnetic field

		C. Both electric and magnetic fields D. None of the above
11	Coulomb force, when any material medium is placed between two charges	A. Increases B. Decreases C. Remain unchanged D. None of these
12	Free electrons are	A. tightly bound B. fixed C. loosely bound D. tightly fixed
13	If a 40 watt light bulb burns for 2 hours. how much heat is generated	A. 288 x 10 ³ J B. 288 x 10 ⁸ J C. 288 x 10 ⁵ J D. 288 x 10 ⁵ J
14	A medium of dielectric constant 'K' is introduced between the plates of parallel plate condenser. As a result its capcitance	A. Increase k time B. Decreases k times C. Decreases 1/K times D. Remains unchanged
15	A capacitor of capacity $1 \frac{\mu}{\mu} F$ is charged to 1 KV. The energy stored in J	A. 5 B. 0.5 C. 0.005 D. 50
16	A proton is about 1840 times heavier than an electron. When it is accelerated by a potential difference of 1 KV, its kinetic energy will be	A. 1840 KeV B. 1/1840 KeV C. 1 KeV D. 920 KeV
17	In bringing an electron towards another electron, electrostatic potential energy of system	A. Decreases B. Increases C. Remains uncharged D. Becomes zero
18	In a Milikian's oil drop experiment the charge on an oil drop is calculated to be 6.35×10^{-19} C. The number of excess electrons on the drop is	A. 3.9 B. 4 C. 4.2 D. 6
19	Ohm is the unit of	A. current B. capacitance C. energy D. resistance
20	The dot product of electric field intensity E and vector area A is called	A. Electric potential B. Electric flux C. Electric field D. Magnetic field