

## ECAT Physics Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	Resistor is a device which convert electric energy to	A. Heat energy B. Chemical energy C. Elastic energy D. All of the above
2	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
3	A 100 W, 200 V bulb is connected to a 160 volts supply. The actual power consumption would be	A. 64 W B. 80 W C. 100 W D. 125 W
4	When an electron is accelerated through a P.D. of an one volt, it will acquire energy equal to	A. One joule B. One erg C. One electron volt D. None of these
5	The resistance of 20 cm long wire is 10 $\Omega$ . When the length is changed to 40 cm. The new resistance is	A. 10 <span style='color: rgb(34, 34, 34); font-family: " Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);'><b><math>\Omega</math></b></span> B. 20 <span style='color: rgb(34, 34, 34); font-family: " Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);'><b><math>\Omega</math></b></span> C. 30 <span style='color: rgb(34, 34, 34); font-family: " Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(34, 34, 34); font-family: " Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);'><b><math>\Omega</math></b>D. 40<span> D. 40<span style='color: rgb(34, 34, 34); font-family: " Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);'><b><math>\Omega</math></b></span></span></span>
6	A 10 F capacitor is charged to a potential difference of 50 V and is connected to another uncharged capacitor in parallel. Now the common potential difference becomes 20 volt. The capacitance of second capacitor is	A. 10 <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; text-align: center; background-color: rgb(255, 255, 224);'>µ</span> F B. 20 <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px, text-align: center; background-color: rgb(255, 255, 224);'>µ</span> F C. 30 <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px, text-align: center; background-color: rgb(255, 255, 224);'>µ</span> F D. 15 <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px, text-align: center; background-color: rgb(255, 255, 224);'>µ</span> F
7	If electric and gravitational force on an electron in a uniform electric field will be	A. E=mg/q B. E=q/mg C. E=,g/q D. E=qg/m
8	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

9	The electric flux from a closed surface	A. Is independent of the shape of the surface B. Depends on the charge enclosed by the surface C. Both a and b D. None of the above
10	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
11	A closed surface contains two equal and opposite charges. The net electric flux from the surface will be	A. Negative B. Positive C. Infinite D. Zero
12	If we plot graph between potential difference (V) and current (I) obeying ohm's law, it will give us	A. parabola B. straight line C. hyper bola D. ellipse
13	The SI unit of capacitance is	A. Farad B. Henry C. Ohm D. Volt
14	If two bulbs one of 60 W and other of 100 W are connected in parallel, then which one of the following will flow more?	A. 60 W bulb B. 100 W bulb C. Both equally D. None of these
15	The SI unit of electric field intensity is	A. CN <sup>-1</sup> B. NC <sup>-1</sup> or Vm <sup>-1</sup> C. JC <sup>-1</sup> D. AV <sup>-1</sup>
16	Solar cell converts sunlight directly into	A. potential energy B. thermal energy C. mechanical energy D. electrical energy
17	The electric flux is linked with a surface will be maximum when	A. The surface is held parallel to the electric field B. The surface is held perpendicular to the electric field C. The surface makes an angle of 45 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">° with the electric field</span> D. All of the above
18	The charge per unit time through any cross-section of a conductor is called	A. capacitance B. electric power C. current D. potential difference
19	Resistance of a conductor depends upon	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
20	The SI unit of current is	A. watt B. coulomb C. volt D. ampere