

Physics ECAT Pre Engineering Chapter 12 Electrostatics

Sr	Questions	Answers Choice
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1	The material in the form of wire or rod or plate which leads the current into or cut of the electrolyte is known as	A. voltmeters B. resistance C. electrode D. current
2	A certain charge liberates 0.8 g of oxygen. The same charge will liberate. how many g of silver?	A. 108 g B. 10.8 g C. 0.8 g D. 108/0.8 g
3	If one volt is needed to cause a current of one ampere to flow in a conductor, its resistance is	A. one ohm B. one joule C. one volt D. one ampere
4	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
5	A 60 W bulb operates on 220 V supply. The current flowing through the bulb is	A. 11/3 A B. 3 A C. 3/11 A D. 6
6	An electric charge at rest is	A. Only an electric field B. Only a magnetic field C. Both electric and magnetic fields D. None of the above
7	Resistor is a device which convert electric energy to	A. Heat energy B. Chemical energy C. Elastic energy D. All of the above
8	A hollow insulated conduction sphere is given a positive charge of 10 μ C. What will be the electric field at the centre of the sphere if its radius is 2 meters?	A. Zero B. 5 \/ C m ⁻² C. 20 \/ //span>C m⁻² D. 8\/ //span>C m⁻²
9	Physicist George Simon ohm was a	A. German physical B. French physicist C. Chinese physicist D. Russian physicist
10	A conducting wire is drawn to double its length. Final resistivity of the material will be	A. Double of the original one B. Half of the original one C. One fourth of the original one D. Same as original one
11	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
12	Three resistance 500,500 and 50 ohms are connected in series across 555 volts mains.	A. 0.52 A B. 1 mA

	I ne current flowing through them will be	C. U. / mA D. 1.4 A
13	The energy stored in a charge capacitor	A. 1/2CV ² B. 1/2C ² V C. 1/2C/V ² D. None of these
14	Consider a spherical shell of metal at he centre of which a positive point charge is kept	A. The electric filed is zero outside the shell B. The electric field is zero everywhere C. The electric field is zero in the region inside the shell D. The electric field is non-zero in both regions outside and inside the shell
15	The charge carriers in electrolyte are positive and negative	A. protons B. electrons C. ions D. none of these
16	Which one of the following causes production of heat when current is set up in a wire?	A. Fall of electrons from higher orbits to lower orbits B. Inter-atomic collisions C. Inter-electron collisions D. Collisions of conduction electron with atoms
17	A charge Q is divided into two parts q and Q - q and separated by a distance R. The force of repulsion between them will be maximum when	A. q = Q/4 B. q = Q/2 C. q = ! D. None of these
18	The SI unit of permitivity is	A. Nm ² C ² B. N ⁻¹ m ⁻² C ² C. NmC ² D. Nm ²
19	Question Image	A. 5 <bpuf< b=""> </bpuf<> B. 10 <bpuf< b=""> </bpuf<> C. 3 <bpuf< bp=""> </bpuf<> D. 6 <pre>Span style="color: rgb(34, 34, 34); font-family: "Times New Roman" font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);"><bpuf< p=""> John Style="color: rgb(34, 34, 34); font-family: "Times New Roman" font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);"><bpuf< p=""> Span</bpuf<></bpuf<></pre>
20	Taking the earth to be a spherical conductor of diameter 12.8 x 10 ³ km. Its capacity will be	A. 711 µ F B. 611 µ F C. 811 µ F D. 511 pu F D. 511 pu F

