

ECAT Physics Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	The excess (equal in number) of electrons that must be placed on each of two small spheres spaced 3 cm apart, with force of repulsion between the spheres to be 10 ⁻¹⁹ N, is	A. 25 B. 225 C. 625 D. 1250
2	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
3	The unit of intensity of electric field is	A. newton/coluomb B. jule/coluomb C. volt x metre D. newton/metre
4	The liquid which conduct current is known as	A. heating effect B. chemical energy C. electrolyte D. ohm's law
5	The minimum resistance that can be obtained by connecting 5 resistance of 1/4 Ω each is	A. 4/5 Ω B. 5/4 Ω C. 20 Ω D. 0.05 Ω
6	The electric field due to an infinite long thin wire at a distance R varies as	A. 1/R B. 1/R ² C. R D. R ²
7	Electric potential of earth is taken to be zero because the earth is good	A. Semiconductor B. Conductor C. Insulator D. Dielectric
8	A metal plate of thickness half the separation between the capacitor plates of capacitance C is inserted. The new capacitance is	A. C B. C/2 C. Zero D. 2C
9	The electrode connected with the positive terminal of the current source is called	A. cathode B. anode C. electrolyte D. position
10	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
11	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

A. The surface is held parallel to the electric field B. The surface is held parallel to the electric field B. The surface is held perpendicular to the electric field B. The surface is held perpendicular to the electric field C. The surface is held perpendicular to the electric field C. The surface is held perpendicular to the electric field C. The surface is held perpendicular to the electric field C. The surface is held perpendicular to the electric field C. The surface is held perpendicular to the electric field C. The surface is held perpendicular to the electric field C. The surface is held perpendicular to the electric field C. The surface is held perpendicular to the electric field C. Interest the electric field Electric field C. Interest the electric field E	12	A one microfarad capacitor of a TV is subjected to 4000 V potential difference. The energy stored in capacitor is	A. 8 J B. 16 J C. 4 x 10 ⁻³ J D. 2 x 10 ⁻³ J
through it B. the voltage applied between its end C. Its dimensions, physical state and nature of its material D. all of the above A. length B. mass C. area D. temperature A. Is maximum at surface B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum on the conductor D. Is maximum on the conductor D. Is maximum on the conductor D. Is maximum somewhere between surface and centre A. 1.6 x 10 ^{-19 17 10⁶electrons are moving through a wire per second, the current developed is C. 1.6 x 10^{-19 A. 1.6 x 10^{-19 18 A conducting wire is drawn to double its length. Final resistivity of the material will be D. Same as original one D. Same as original origi}}}	13	The electric flux is linked with a surface will be maximum when	electric field B. The surface is held perpendicular to the electric field C. The surface makes an angle of 45 ° with the electric field
The resistivity of a substance depends upon the 8. mass C. area D. temperature A. Is maximum at surface B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum somewhere between surface and centre 17 10 ⁶ electrons are moving through a wire per second, the current developed is A. 1.6 x 10 A. 1.6 x 10 A. 1.6 x 10 B. 1.A C. 1.6 x 10 C. 1.6 x 10 A. Double of the original one B. Half of the original one C. One fourth of the original one D. Same as original one 19 The energy stored in a charge capacitor Two electric bulbs of 200 W and 100 W have same voltage. If R₁and R₂be their resistance respectively then A. Is maximum at surface B. Is maximum at centre B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre B. Is maximum at centre B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum at centre C. Is remain same throu	14	Resistance of a conductor depends upon	through it B. the voltage applied between its end C. its dimensions, physical state and nature of its material
B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum somewhere between surface and centre 17 10 ⁶ electrons are moving through a wire per second, the current developed is A. 1.6 x 10 A. 1.6 x 10 B. 1 A C. 1.6 x 10 B. 1 A C. 1.6 x 10 Sup>-15 A. Double of the original one B. Half of the original one B. Half of the original one C. One fourth of the original one D. Same as original one D. Same as original one A. 1/2CV ⁻² B. 1/2C ⁻² D. None of these Two electric bulbs of 200 W and 100 W have same voltage. If R1and R2be their resistance respectively then A. R _{1 A. R_{1 A. R_{1 A. R_{1 A. R_{1 A. R_{1 C. R_{2 C. R_{2 Sub>2 C. R_{2 C. R_{1 C. R_{2 C. R_{1 C. R₁}}}}}}}}}}}}</sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub>	15	The resistivity of a substance depends upon the	B. mass C. area
17 10 ⁶ electrons are moving through a wire per second, the current developed is 18 A conducting wire is drawn to double its length. Final resistivity of the material will be 19 The energy stored in a charge capacitor 19 Two electric bulbs of 200 W and 100 W have same voltage. If R ₁ and R ₂ be their resistance respectively then 10 Energy stored is a charge capacitor B. 1 A C. 1.6 x 10 ⁻¹⁵ A. Double of the original one B. Half of the original one C. One fourth of the original one B. Half of the original one C. One fourth of the original one D. Same as original one A. 1/2CV ² B. 1/2C ² D. None of these A. R ₁ = 2R ₂ = 2R ₁ = C. R₂= C. R_{1 Sub>4R_{1 Sub>1 Sub>4R_{1 Sub>1 Sub>4R_{1 Sub>1 Sub>4R_{1 Sub>4R_{4B Sub>4B Sub>4B}}}}}}</sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub>	16	Some charge is being given to a conductor. Then its potential	B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum somewhere between
A conducting wire is drawn to double its length. Final resistivity of the material will be B. Half of the original one C. One fourth of the original one D. Same as original one A. 1/2CV ² B. 1/2C ² C. 1/2C/V ² D. None of these Two electric bulbs of 200 W and 100 W have same voltage. If R ₁ and R ₂ be their resistance respectively then A conducting wire is drawn to double its length. Final resistivity of the material will be B. Half of the original one C. One fourth of the original one D. Same as original one C. One fourth of the original one C.	17	10 ⁶ electrons are moving through a wire per second, the current developed is	B. 1 A C. 1.6 x 10 ⁻¹⁵ A
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Two electric bulbs of 200 W and 100 W have same voltage. If R ₁ and R ₂ be their resistance respectively then Two electric bulbs of 200 W and 100 W have same voltage. If R ₁ and R ₂ be their resistance C. R ₂ = 2R ₁	19	The energy stored in a charge capacitor	B. 1/2C ² V C. 1/2C/V ²
	20	• • -	B. R ₂ = 2R ₁ C. R ₂ = 4R ₁