

MDCAT Physics Chapter 6 Electrostatics Online Test

| Sr | Questions | Answers Choice |
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| 1 | A charge of 2C experiences a force 2000N in a uniform electric field. In this field the potential difference between two points separated by a distance 1cm is | A. 2V B. 10V C. 5V D. 20V |
| 2 | Capacitance of a capacitor does not depend upon | A. Separation between plates B. Thickness of the plates C. Area of the plates D. Medium between the plates |
| 3 | Two point charges repel each other with a force of 4×10^{-4} newton at a distance of meter. Two charges are | A. Both positive B. Alike C. Both Negative D. Unlike |
| 4 | The potential difference between head and tail of an "electric eel" can be upto. | A. 6V B. 60V C. 6000V D. 600V |
| 5 | The relative permittivity of air is | A. 1 B. 3.7 C. 7.8 D. 1.0006 |
| 6 | The relative permittivity of air is | A. 1 B. 3.7 C. 7.8 D. 1.0006 |
| 7 | Area under Q-V graph for a capacitor represents | A. Charged stored B. Energy stored C. Electric field strength D. Potential difference |
| 8 | When a dielectric is inserted between the plates of a capacitor, Which one is true | A. Energy stored increase B. Energy stored decrease C. Capacitance decrease D. All |
| 9 | Two charges of equal magnitudes and at a distance r exert a force F on each other. If the charges are halved and distance between them is doubled, then the new force acting on each charge is: | A. F/8 B. F/4 C. F/16 D. 4F |
| 10 | Charge on a capacitor is 50C. if voltage applied across its plates is 10V then its capacitance: | A. 5F B. 0.02F C. 500F D. 0.2F |
| 11 | An electron is moving towards high potential. Its electrical P.E: | A. Increases B. Remains constant C. Decrease D. May increase may decrease |
| 12 | A body gets positive charge. It means that: | A. It has lost electrons B. It has gained positions C. It has gained protons D. It has gained e^- particles |
| 13 | A parallel plate air capacitor is charged and then isolated. When a dielectric material is inserted between the plates of the capacitor, then which of the following does not change: | A. Electric field between the plates B. Charge on the plates C. Potential difference across the plate D. Energy stored in the capacitor |
| 14 | A charged conductor has charged on its: | A. Outer surface B. Surrounding surface C. Inner surface D. Middle point |
| 15 | A soap bubble is give a negative charge, then its radius: | A. Decrease B. Remains same C. Increases D. ... |

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| | | D. Bubble will disappear |
| 16 | Two point charges +2 coulombs and +6 coulombs repel each other with a force of 12 N if a charge -4 coulomb is given to each of these charges the force will be: | A. 4N repulsive B. 8N repulsive C. 4N attractive D. 8N attractive |
| 17 | If the magnitude of charge on each of two objects is doubled and the distance between them is also doubled then force between them: | A. Doubled B. Quadrupled C. Halved D. Remains same |
| 18 | Which one of the following statements regarding electrostatics is wrong? | A. Charge is conserved B. Charge is quantized C. There is no field near an isolated charge at rest D. A moving charge produces both electric and magnetic fields |
| 19 | An electric field can deflect: | A. X-rays B. Neutrons C. α -particles D. γ -rays |
| 20 | If the distance between the plates of a parallel plates capacitor is increased, its potential will: | A. Remain the same B. Increase C. Decrease D. Decrease exponentially |