

## MDCAT Physics Chapter 9 Electrostatics MCQ's Test

Sr	Questions	Answers Choice
1	An electron is moving towards high potential. Its electrical P.E:	A. Increases B. Remains constant C. Decrease D. May increase may decrease
2	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
3	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
4	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
5	The relative permittivity of air is	A. 1 B. 3.7 C. 7.8 D. 1.0006
6	The coulomb's law is valid for the charges which are:	A. Moving and point charges B. Stationary and point charges C. Moving and non-point charges D. Stationary and large size charges
7	Capacitor stores energy in the form of :	A. Electric field B. Both of these C. Magnetic field D. Gravitational field
8	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
9	A charged conductor has charged on its:	A. Outer surface B. Surrounding surface C. Inner surface D. Middle point
10	The potential difference between head and tail of an "electric eel" can be upto.	A. 6V B. 60V C. 6000V D. 600V
11	The electron in a cathode-ray tube are accelerated from cathode to anode by a potential difference of 2000 V. If this p.d is increased to 8000 V, the electrons will arrive at the anode with:	A. Twice the kinetic energy and four times the velocity B. Four times the kinetic energy and twice the velocity C. Four times the kinetic energy and sixteen times the velocity D. Sixteen times the kinetic energy and four times the velocity
12	Between the plates of a parallel plate condenser there is 1mm thick paper of dielectric constant 4. It is charged at 100 volt. The electric field in volt/meter between the plates of the capacitor is:	A. 100 B. 25000 C. 100000 D. 400000
13	The law, governing the force between electric charges is known as:	A. Ampere's law B. Ohm's law C. Coulomb's law D. Faraday's law
14	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. ...

		D. All
15	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
16	An electric field can deflect:	A. X-rays B. Neutrons C. $\alpha$ -particles D. $\beta$ -rays
17	Two point charges repel each other with a force of $4 \times 10^{-4}$ newton at a distance of meter. Two charges are	A. Both positive B. Alike C. Both Negative D. Unlike
18	A soap bubble is given a negative charge, then its radius:	A. Decrease B. Remains same C. Increases D. Bubble will disappear
19	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
20	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