MDCAT Physics Chapter 9 Electrostatics MCQ's Test

Sr	Questions	Answers Choice
1	A charged conductor has charged on its:	A. Outer surface B. Surrounding surface C. Inner surface D. Middle point
2	Capacitor stores energy in the form of :	A. Electric field B. Both of these C. Magnetic field D. Gravitational field
3	The relative permittivity of air is	A. 1 B. 3.7 C. 7.8 D. 1.0006
4	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
5	Two point charges repel each other with a force of 4×10^{-8} newton at a distanceof meter. Two charges are	A. Both positive B. Alike C. Both Negative D. Unlike
6	An electric field can deflect:	A. X-rays B. Neutrons C. α −particles D. γ −rays
7	Area under Q-V graph for a capacitor represents	A. Charged stored B. Energy stored C. Electric field strength D. Potential difference
8	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
9	The relative permittivity of air is	A. 1 B. 3.7 C. 7.8 D. 1.0006
10	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
11	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
12	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
13	An electron is moving towards high potential. Its electrical P.E:	A. Increases B. Remains constant C. Decrease D. May increase may decrease
14	A soap bubble is give a negative charge, then its radius:	A. Decrease B. Remains same C. Increases D. Bubble will disappear
15	Between the plates of a parallel plate condenser there is 1mm thick paper of dielectric constant 4. Itis 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

16	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
17	The distance between the plates of a charged parallel plate capacitor is 4mm and potential difference is 6 volts. If the distance between the plates is increased to 12mm, then :	A. The potential difference of the capacitor will become 18 volts B. The P.D become 20 volts C. The P.D will remain unchanged D. The charge on condenser will reduce to one third
18	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
19	The electron is 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
20	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 law65y7uhnb