MDCAT Physics Chapter 9 Electrostatics MCQ's Test

Sr	Questions	Answers Choice
1	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
2	An electric field can deflect:	A. X-rays B. Neutrons C. □ −particles D. □ −rays
3	The relative permittivity of air is	A. 1 B. 3.7 C. 7.8 D. 1.0006
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	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
6	A soap bubble is give a negative charge, then its radius:	A. Decrease B. Remains same C. Increases D. Bubble will disappear
7	The relative permittivity of air is	A. 1 B. 3.7 C. 7.8 D. 1.0006
8	Capacitor stores energy in the form of :	A. Electric field B. Both of these C. Magnetic field D. Gravitational field
9	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 □ −particles
10	The electron is a cathode-ray tube are accelerated from cathode to anode by a potential differenceof 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
11	The potential difference between head and tail of an "electric eel" can be upto.	A. 6V B. 60V C. 6000V D. 600V
12	A charge of 2C experiences a force 2000N in a uniform electric field. In this fieldthe potential difference between two points separated by a distance 1cm is	A. 2V B. 10V C. 5V D. 20V
13	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
14	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
15	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
16	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
17	An electron is moving towards high potential. Its electrical P.E:	A. Increases B. Remains constant C. Decrease D. May increase may decrease
18	Two point charges repel each other with a force of 4× □□−□ newton at a distanceof meter. Two charges are	A. Both positive B. Alike C. Both Negative D. Unlike
19	Area under Q-V graph for a capacitor represents	A. Charged stored B. Energy stored C. Electric field strength D. Potential difference
20	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