

DPP Daily Practice Problem <i>Physics</i>	Topic : Electrostatics DPP No. 161	Time : 30 min. Total Marks : 56 Max.
Type of Questions Single choice Objective ('-1' negative marking) Q. 1 to Q. 14		

- Q 1) The unit of charge is
A) volt
B) coulomb
C) ohm
D) ampere
- Q 2) When a negatively charged conductor is connected to earth
A) Electrons flow from the earth to the conductor
B) Electrons flow from the conductor to the earth
C) Protons flow from the conductor to the earth
D) No charge flow occurs
- Q 3) A pendulum bob of mass m carrying a charge q is at rest with its string making an angle θ with the vertical in a uniform horizontal electric field E . The tension in the string is
A) $\frac{qE}{\cos \theta}$
B) $\frac{qE}{\sin \theta}$
C) mg
D) $\frac{mg}{\sin \theta}$
- Q 4) Conductors are materials
A) that allow movement of protons
B) that allow movement of neutrons
C) that allow movement of electrons
D) that allow only random movement of electrons
- Q 5) Ionization of a neutral atom is the
A) only gain of one or more neutrons
B) gain or loss of one or more electrons
C) only gain of one or more electrons
D) only gain of one or more protons
- Q 6) Gravitational force is the smallest between
A) earth and the moon
B) two pens weighing 100gms at a distance of 0.4 m
C) earth and the sun
D) two books of weight 1kg each at a distance of 1 m
- Q 7) Electric charge
A) is a property of neutrons only
B) is a property of particles such as atoms, ions, electrons etc
C) is a property of protons only
D) is a property of electrons only
- Q 8) A soap bubble is given negative charge. Its radius will
A) Increase
B) Decrease
C) Remain unchanged
D) Fluctuate
- Q 9) Which of the following charge is not possible
A) 1.6×10^{-18}
B) 1.6×10^{-19}
C) 1.6×10^{-20}
D) None of these
- Q 10) Five balls numbered 1 to 5 balls suspended using separate threads. Pair (1,2), (2,4) and (4,1) show electrostatic attraction, while pair (2,3) and (4,5) show repulsion. Therefore ball 1 must be
A) Positively charged
B) Negatively charged
C) Neutral
D) Made of metal
- Q 11) If the radius of a solid and hollow copper spheres are same which one can hold greater charge
A) Solid sphere
B) Hollow sphere
C) Both will hold equal charge
D) None of these
- Q 12) Number of electrons in one coulomb of charge will be
A) 5.46×10^{29}
B) 6.25×10^{18}
C) 1.6×10^{19}
D) 9×10^{11}
- Q 13) The current produced in wire when 10^7 electron/sec are flowing in it
A) 1.6×10^{-26} amp
B) 1.6×10^{26} amp
C) 1.6×10^{12} amp
D) 1.6×10^{-12} amp
- Q 14) In 1 gm of a solid, there are 5×10^{21} atoms. If one electron is removed from everyone of 0.01% atoms of the solid, the charge gained by the solid is (given that electronic charge is 1.6×10^{-19} C)
A) + 0.08 C
B) + 0.8 C
C) - 0.08 C
D) + -0.8 C