

Chapter 1 (Physics) Objective Type Daily Practice Problems

1. A conductor has 14.4×10^{-19} C positive charge. The conductor has (charge on electron = 1.6×10^{-19} C)

- (A) 9 electrons in excess
- (B) 27 electrons in short
- (C) 27 electrons in excess
- (D) 9 electrons in short

2. In induction the charge induced in the near surface of a dielectric is

- (A) Equal and dissimilar
- (B) Greater and dissimilar
- (C) Lesser and dissimilar
- (D) Equal and similar

3. If a body has positive charge on it, then it means it has

- (A) Gained some protons
- (B) Lost some protons
- (C) Gained some electrons
- (D) Lost some electrons

4. Sure check for- presence of electric charge is

- (A) Process of induction
- (B) Repulsion between bodies
- (C) Attraction between bodies

(D) Frictional force between bodies

5. If a solid and a hollow conducting sphere have same radius then

- (A) Hollow sphere will hold more maximum charge
- (B) Solid sphere will hold more maximum charge
- (C) Both the spheres will hold same maximum charge
- (D) Both the sphere can't hold charge

6. Which of the following is not the unit of charge?

- (A) farad
- (B) coulomb
- (C) stat coulomb
- (D) faraday

7. When a plastic rod rubbed with wool is brought near the knob of a negatively charged gold leaf electroscope, the gold leaves

- (A) Contract
- (B) Dilate
- (C) Start oscillating
- (D) Collapse completely

8. Which of the following is not true about electric charge?

- (A) Charge on a body is always integral multiple of certain charge known as charge of electron
- (B) Charge is a scalar quantity
- (C) Net charge on an isolated system is always conserved

(D) Charge can be converted into energy and energy can be converted into charge

9. What is the amount of charge possessed by 1 kg of electrons?

(A) 1.76×10^{11} C

(B) 1.76×10^{-9} C

(C) 1.76×10^{-7} C

(D) 1.76×10^{-5} C

10. Which of the following processes involves the principle of electrostatic induction?

(A) Pollination

(B) Chocolate making

(C) Xerox copying

(D) All of these

ANSWER KEYS

1. (D)
2. (C)
3. (D)
4. (B)
5. (C)
6. (A)
7. (B)
8. (D)
9. (A)
10. (D)