Name: _____	**Subject:** Physics	**Class:** 10th	**Time:** 80 minutes	Total Marks:	**40**
Chapter No.	**MJDexpert.com**			Obtained marks	

Note: Please attempt any 11 short questions from Question 2. Also, attempt both parts (a and b) of Question 3. Cutting and removal of any content is strictly prohibited.

Objective-Section

Q. 1 Encircle the correct answer. (9x1=9)

1. An instrument used for detecting charge is:
   (A) Stroboscope (B) Electroscope (C) Spectroscope (D) Microscope
2. The value of KKK in Coulomb's law is:
   (A) 8.99 × 10^9 Nm^2/C^2 (B) 9.00 × 10^9 Nm^2/C^2
3. (C) 1.00 × 10^9 Nm^2/C^2 (D) 1.00 × 10^10 Nm^2/C^2
4. The SI unit of charge is:
   (A) Volt (B) Coulomb (C) Ampere (D) Ohm
5. SI unit of electric intensity is:
   (A) N/C (B) N.m (C) N.A (D) N.C
6. The electric lines of forces were introduced by:
   (A) Newton (B) Einstein (C) Coulomb (D) Faraday
7. A strong _____ field lies in a Faraday cage:
   (A) Electric (B) Magnetic (C) Geometric (D) Gravitational
8. One Volt (1V) is equal to:
   (A) 1 JC (B) 1J (C) 1V (D) 1V/C
9. A capacitor stores:
   (A) Current (B) Voltage (C) Charge (D) Resistance
10. In a mica capacitor, the dielectric is:
    (A) Mica (B) Aluminium (C) Paper (D) Plastic

Subjective-Section

Q.2 Write short answers of any 11 of the following questions: (11x2=22)

1. How is charge produced? Give an example.
2. What is meant by electrostatic induction?
3. What is the function of an electroscope?
4. Define Coulomb's law and write the formula for finding force.
5. What is the difference between electric field and electric intensity?
6. Write two characteristics of electric lines of force.
7. Define electric potential and write its unit.
8. Define the capacitance of a capacitor.
9. Name different types of capacitors.
10. Define mica capacitor and paper capacitor.
11. Write down a brief note on the application of electrostatics in spray painting.
12. What are the hazards of static electricity?

Q.No.3 Long Question: (5+4=9)

a) What is meant by specific resistance (resistivity)? Explain it.
b) Discuss different types of capacitors.