### Multiple Choice Questions (MCQs)  
1. What is the SI unit of electric current?  
 a) Volt   
 b) Ampere   
 c) Ohm   
 d) Coulomb  
  
2. Which of the following is a good conductor of electricity?  
 a) Rubber   
 b) Glass   
 c) Copper   
 d) Wood  
  
3. What is the formula for calculating electric power?  
 a) P = IV   
 b) P = IR   
 c) P = V/R   
 d) P = I^2R  
  
4. Which law states that the current passing through a conductor is directly proportional to the voltage across it?  
 a) Coulomb's Law   
 b) Ohm's Law   
 c) Faraday's Law   
 d) Kirchhoff's Law  
  
5. What is the resistance of a conductor if the potential difference across it is 10V and the current flowing through it is 2A?  
 a) 5 Ohms   
 b) 10 Ohms   
 c) 2 Ohms   
 d) 20 Ohms  
  
### Fill in the Blanks  
1. The unit of electric charge is the \_\_\_\_\_\_\_\_\_\_.  
2. The resistance of a wire depends on its \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_.  
3. In a series circuit, the total resistance is the \_\_\_\_\_\_\_\_\_\_ of the individual resistances.  
4. The device used to measure electric current is called a \_\_\_\_\_\_\_\_\_\_.  
5. The potential difference between two points in a circuit is measured in \_\_\_\_\_\_\_\_\_\_.  
  
### True/False  
1. The resistance of a conductor increases with an increase in temperature. (True/False)  
2. An electric circuit must always be open to allow current to flow. (True/False)  
3. The SI unit of resistance is the ohm. (True/False)  
4. Electric power is the rate at which electrical energy is consumed. (True/False)  
5. A potentiometer is used to measure electric current. (True/False)  
  
### One-word Questions  
1. What is the SI unit of resistance?  
2. Name the instrument used to measure voltage.  
3. Which subatomic particle is primarily responsible for electric current?  
4. What is the term for materials that do not conduct electricity well?  
5. What is the symbol for resistance in a circuit diagram?  
  
### Short Answer Questions  
1. Explain Ohm's Law.  
2. What are the factors affecting the resistance of a conductor?  
3. Describe the difference between series and parallel circuits.  
4. What is the function of a fuse in an electrical circuit?  
5. How do you calculate the total resistance in a parallel circuit?  
  
### Long Answer Questions  
1. Describe the working principle of an electric motor.  
2. Explain the heating effect of electric current with examples.  
3. Discuss the advantages and disadvantages of series and parallel circuits.  
4. Explain the concept of electric power and how it is calculated.  
5. Describe the construction and working of a simple electric circuit with a diagram.