Sure, here is a sample question paper for the Madhya Pradesh School Education Board based on the specified format and constraints for Class-10-Science-Electricity, in English:  
  
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\*\*Madhya Pradesh School Education Board\*\*  
  
\*\*Class 10 Science Examination\*\*  
  
\*\*Subject: Electricity\*\*  
  
\*\*Maximum Marks: 80\*\*  
  
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### Objective Section  
  
#### Multiple Choice Questions (MCQs) [5 Marks]  
  
1. What is the SI unit of electric current?  
 - a) Volt  
 - b) Ohm  
 - c) Ampere  
 - d) Coulomb  
  
2. Which of the following materials is a good conductor of electricity?  
 - a) Rubber  
 - b) Glass  
 - c) Copper  
 - d) Wood  
  
3. Which of the following is the formula for calculating electrical power?  
 - a) P = IV  
 - b) P = IR  
 - c) P = V/R  
 - d) P = I/R  
  
4. What is the resistance of a conductor if the potential difference is 10V and current flowing through it is 2A?  
 - a) 20 Ohms  
 - b) 5 Ohms  
 - c) 2 Ohms  
 - d) 10 Ohms  
  
5. Which type of connection is used in household wiring?  
 - a) Series  
 - b) Parallel  
 - c) Series-Parallel  
 - d) None of the above  
  
### Subjective Section  
  
#### Fill in the Blanks [5 Marks]  
  
1. The device used to measure electric current is called a \_\_\_\_\_\_\_.  
2. Ohm’s Law is represented by the equation V = \_\_\_\_\_\_\_.  
3. \_\_\_\_\_\_\_ is the opposition that a substance offers to the flow of electric current.  
4. The potential difference between two points is measured in \_\_\_\_\_\_\_.  
5. A closed-loop path that electric current follows is known as an \_\_\_\_\_\_\_.  
  
#### True/False Statements [5 Marks]  
  
1. The resistance of a conductor increases with an increase in temperature. (True/False)  
2. In a parallel circuit, voltage across each component is the same. (True/False)  
3. The unit of electrical energy is the watt. (True/False)  
4. A fuse is used to protect circuits from excessive current. (True/False)  
5. Electric current is a scalar quantity. (True/False)  
  
#### One-word Answers [5 Marks]  
  
1. What do you call the flow of electric charge?  
2. Name the scientist who formulated Ohm’s Law.  
3. What is the term for materials that do not allow electricity to pass through them?  
4. What is the standard unit of electric power?  
5. What is the phenomenon of electric current flowing through a conductor without resistance called?  
  
#### Short Answer Questions [25 Marks]  
  
1. Explain the working principle of a simple electric circuit with a diagram. [5 Marks]  
  
2. Describe the factors affecting the resistance of a conductor. [5 Marks]  
  
3. Differentiate between series and parallel circuits with examples. [5 Marks]  
  
4. What is an electric fuse? Explain its function and importance in household circuits. [5 Marks]  
  
5. Describe the relationship between voltage, current, and resistance in an electric circuit. [5 Marks]  
  
#### Long Answer Questions [50 Marks]  
  
1. What are the advantages and disadvantages of connecting electrical devices in series and parallel? Discuss with suitable examples. [10 Marks]  
  
2. Explain the concept of electrical energy and power. How is electrical energy calculated in a circuit? [10 Marks]  
  
3. Discuss the heating effect of electric current. What are its applications and disadvantages? [10 Marks]  
  
4. Explain the construction and working of an electric motor. Include labeled diagrams. [10 Marks]  
  
5. Describe Kirchhoff's laws of electrical circuits. Provide examples to illustrate their applications. [10 Marks]  
  
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This question paper covers various aspects of the Electricity chapter, focusing on both theoretical knowledge and practical understanding, and is structured to test students comprehensively.