

Science - Electricity

VII. Very short answer

Q1. What is the speed of electric current?

Ans. The amount of electric charge passing through a particular point per unit time is electric current.

Q2. What is the SI unit of electrical conductivity?

Ans. The SI unit of electrical conductivity is Siemens/ meter (S/m)

Q3. Name the device used to generate electricity.

Ans. A generator is the device used to generate electricity.

Q4. Define fuse.

Ans. Fuse is a safety device used in an electrical circuit.

Q5. Name some devices that run using heat effect of electric current

Ans. Some devices that run using heat effect of electric current are,

- a. Iron Box
- b. Geyser
- c. Electric kettle

Q6. Name a few insulators.

Ans. Some insulators are,

- a. Plastic
- b. Wood
- c. Rubber
- d. Glass

Q7. What is a battery?

A battery is a device that converts chemical energy into electrical energy.

VIII. Short Answer

Q1. Define an electric current.

Ans.

- The amount of electric charge passing through a particular point per unit time is electric current.
- It is measured in Amperes (A)

Q2. Differentiate parallel and serial circuits.

Ans.

Series circuit: It is a circuit when devices are connected with only one point of contact.

Parallel circuit: It is a circuit in which devices are connected with two points of contact.

Q3. Define electrical conductivity.

Ans.

- Electrical conductivity or specific conductance is the measure of a material's ability to conduct an electric current.
- Its SI Unit is Siemens/ Meter (S/m)

IX. Long Answer

Q1. Explain the construction and working of a Telephone.

Ans.

A telephone helps us talk to people who are far away.

- When we speak into the telephone, our voice makes vibrations.
- These vibrations change into electric signals.
- The signals travel through wires to the other telephone.
- In the other telephone, the signals change back into sound.
- The person on the other side hears our voice clearly.

Q2. Explain the heating effect of electric current.

Ans.

When an electric current passes through a wire, the wire becomes **hot**. This is called the **heating effect of electric current**.

1. The electric current makes the tiny particles in the wire move and collide.
2. These collisions produce **heat**.
3. Devices like **electric iron, heater, toaster, and bulb** work using this effect.

Q3. Explain the construction and working of a dry cell.

Ans.

A **dry cell** is a device that gives **electric energy** to run things like clocks, torches, and toys.

1. A dry cell has a **zinc container** on the outside - it acts as the **negative terminal**.
2. In the center, there is a **carbon rod** - it acts as the **positive terminal**.
3. The space between them is filled with a **paste of chemicals** that helps produce electricity.
4. A small **metal cap** is on top of the carbon rod to connect it to wires.
5. When the dry cell is connected in a circuit, **chemical reactions** inside it produce **electric current** that flows through the wires.

Social - Civics - State Government

V. Answer in one or two sentences

Q1. What are the qualifications to become the Governor of a state?

Ans. Qualifications of the Governor are,

- a. Should be a citizen of India
- b. Should be at least 35 years old
- c. Should have a sound mind
- d. Should not hold any office of profit

Q2. Who are called oppositions?

Ans. Every party other than the majority party forms the opposition.

Q3. Write a note on Lok Adalat.

Lok Adalat is an informal dispute settlement method that is easy, simple and time saving. It is used to resolve civil disputes in India.

Q4. What is a constituency?

Ans. A geographical area of voters that collectively vote and select a member of legislative assembly.

Q5. Who appoints the chief minister and other ministers?

Ans. The Governor appoints the chief minister and other ministers.

VI. Answer the following in detail

Q1. Describe the powers of the Governor.

Ans.

- The Governor appoints the Chief Minister and other ministers.
- The Governor can call, stop, or dissolve the State Legislative Assembly.
- The Governor makes sure that the State Budget is presented in the Assembly every year.
- The Governor can pardon or reduce the punishment of criminals in special cases.

Q2. Who is an MLA?

Ans. An **MLA** means **Member of the Legislative Assembly**.

- An MLA is a person elected by the people of a state.
- MLAs make laws and discuss important issues in the State Legislative Assembly.
- They represent the people of their area, called a constituency.

Q3. What is the role of Chief Minister and other Council of Ministers at the state level?

Ans.

- The Chief Minister (CM) takes care of all the functions of the state.
- The Council of Ministers helps the Chief Minister in running the government.
- They look after different departments like education, health, and transport.
- The Chief Minister and ministers make and implement decisions for the welfare of the people.
- They are responsible to the State Legislative Assembly for their work.

VII. HOTS

Q1. Name some departments of the government.

Ans. Some important departments of the government are:

- Education Department
- Health Department
- Agriculture Department
- Transport Department
- Public Works Department (PWD)
- Police Department

Social - History - Mughal Empire

VI. Give short answer

Q1. Write the circumstance that led to the Battle of Panipat in 1526.

Ans.

- In North India, the Delhi Sultanate had become weak after the rule of the Lodhi dynasty.
- Ibrahim Lodhi, the Sultan of Delhi, was cruel and unpopular among his nobles.
- Many Afghan nobles invited Babur, the ruler of Kabul, to invade India.
- Babur wanted to expand his kingdom and take control of North India.
- These reasons led to the First Battle of Panipat in 1526 between Babur and Ibrahim Lodhi.

Q2. Mention the Humayun recapture the Delhi throne in 1555?

Ans. Humayun recaptured the Delhi throne in 1555 after defeating Sikandar Suri, the ruler of the Suri dynasty.

Q3. Write a note on the Mansabdari system.

Ans.

- The Mansabdari system was introduced by Akbar.
- Under this system, every officer was given a rank called 'Mansab'.
- The rank decided the position, salary, and number of soldiers the officer had to maintain.
- Mansabdars were the king's officials and military commanders.
- This system helped Akbar to organize his army and administration properly.

VII. Answer the following

Q1. Describe the land revenue administration of the Mughals.

Ans.

- The Mughals had a well-organized land revenue system to collect tax from farmers.
- Akbar introduced a new system of tax collection.
- Under this system, the land was measured, and the average produce of ten years was taken to fix the tax.
- Farmers had to pay the tax in cash or kind depending on the crop and region.
- This system helped the Mughal Empire to get a regular income and maintain fairness in tax collection.

Q2. Estimate Akbar as a patron of learning.

Ans.

- Akbar loved knowledge and learning and encouraged education and art in his court.
- He had many scholars, poets, artists, and musicians in his court, known as the Navaratnas (Nine Gems).
- He built a library with thousands of books in Persian, Arabic, Sanskrit, and Greek.
- Akbar also started the translation of Sanskrit books into Persian, like the *Mahabharata* and *Ramayana*.
- He promoted religious discussions and free thinking at a special hall called the Ibadat Khana.

VIII. HOTS

Q1. Shah Jahan's time witnessed the climax of Mughal splendour. Support this statement in comparison with the times of other Mughal rulers.

Ans.

- The reign of Shah Jahan is known as the Golden Age of the Mughal Empire.
- Art and architecture reached their highest point of beauty and perfection during his time.
- He built many grand monuments like the Taj Mahal, Red Fort, and Jama Masjid.
- Compared to other rulers, the Mughal court was richer and more luxurious during his rule.
- Trade, culture, and literature also flourished greatly, showing the splendour and power of the Mughal Empire.