



BCM SCHOOL BASANT AVENUE DUGRI LUDHIANA

Class 8. science

Assignment Answer key

MCQ

Q1. (b) An electric current must flow through the coil.

Q2.(b) It does not provide the same level of detail as a high-powered microscope.

Assertion/Reason

Q3. (d) A is false but R is true.

Q4. (b) Both A and R are true but R is not the correct explanation of A.

Very short answer questions

Q5. A voltaic cell consists of:

Two different metal electrodes (like zinc and copper)

Electrolyte solution

Connecting wire

Electricity is produced by a chemical reaction between the metals and the electrolyte, causing electrons to flow from one electrode to another through the wire.

Q6.A dry cell is called a single-use cell because its chemical reaction cannot be reversed after the chemicals are used up.Rechargeable batteries can be reused because their chemical reactions are reversible by passing electric current through them again.

Q7. Microorganisms like bacteria and fungi can decompose farm waste such as animal dung and plant remains.

Process:Waste is collected in a compost pit or biogas plant.

Microorganisms break down the organic matter.

Microorganisms involved : Bacteria, Fungi, Methanogens (in biogas plants)

Products formed: Compost manure , Biogas (methane gas), Organic fertilizer

This method reduces pollution and provides useful products.

Q8. When the direction of current through the coil is reversed, the poles of the electromagnet also reverse.

North pole becomes south pole.

South pole becomes north pole.

This happens because the magnetic field direction depends on the direction of electric current.

Long answer question

Q9. A) Yeast carries out fermentation and converts sugar into carbon dioxide and alcohol. The carbon dioxide gas forms bubbles in the dough, causing it to rise and become soft and fluffy.

B) Rhizobium bacteria live in the root nodules of legume plants and fix atmospheric nitrogen into usable nitrogen compounds.

Benefits:

Helps plants grow better

Increases soil fertility

Reduces the need for chemical fertilizers

C) Spirulina is called a superfood because it is rich in proteins, vitamins, minerals, and antioxidants. It provides high nutrition and boosts health.

D) High concentration of salt or sugar removes water from microorganisms through osmosis. Due to lack of water, microorganisms cannot survive or grow on such food items.

Case study

Q10. 1. The switch is used to turn the electromagnet ON and OFF by controlling the flow of electric current.

2. When the switch is turned OFF, current stops flowing through the coil, so the electromagnet loses its magnetism. Therefore, the metal pieces fall down.

3. Iron core is used because iron becomes strongly magnetized when electric current flows and loses magnetism quickly when the current is switched OFF. This makes the electromagnet strong and efficient.

4. No, the lifting electromagnet cannot lift plastic because plastic is a non-magnetic material and is not attracted by magnets.