

TEXT BOOK ANSWERS

Objective Type Questions

1. Name the following:

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|-----------------|------------------|-----------------|
| (a) Microscope | (b) Robert Hooke | (c) Cytoplasm |
| (d) Plant cells | (e) Chloroplast | (f) Muscle cell |
| (g) Amoeba | (h) Viruses | (i) Algae |
| (j) Rhizobium | (k) Yeast | |

2. Fill in the following blanks with suitable words:

- | | | |
|------------|-----------------|--------------|
| (a) cell | (b) protoplasm | (c) function |
| (d) organs | (e) unicellular | (f) Algae |

3. State whether the following statements are true or false:

- | | | |
|-----------|-----------|-----------|
| (a) True | (b) False | (c) True |
| (d) False | (e) False | (f) False |

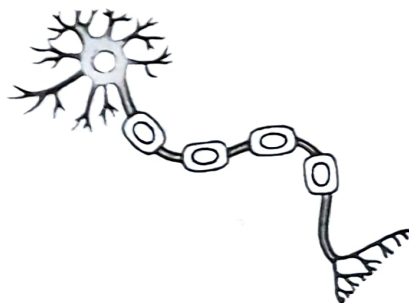
Subjective Type Questions

Short Answer Type Questions

1. A group of organs working together to perform a major function is called an organ system.

Plant Organs	Animal Organs
Leaf	Brain
Roots	Lungs
Stem	Kidney
Flower	Heart

2. (a) Nerve cells are long and have branches so that they can receive messages from different parts of the body and transmit nerve impulses over long distances quickly and efficiently.
- (b)



(a) Nerve cell (or Neuron)

5. (a) The yeast present in the warm sugar solution ferments the sugar and converts it into alcohol and carbon dioxide.
- (b) The lime water in test tube B turns milky. This happens because carbon dioxide produced during fermentation in flask A passes into the lime water and reacts with it to form calcium carbonate, which makes the solution milky.
- (c) If yeast was not added, fermentation would not take place. No carbon dioxide would be produced, and the lime water in test tube B would remain clear.

Multiple Choice Questions (MCQ)

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|------------------------|-----------------------|---------------------|
| 1. (b) mitochondria | 2. (c) cellulose | 3. (d) Robert Hooke |
| 4. (b) protoplasm | 5. (d) B and D | 6. (d) chloroplasts |
| 7. (c) cell wall | 8. (d) nucleus | 9. (a) cat |
| 10. (d) mesophyll cell | 11. (d) ostrich's egg | 12. (b) tissue |
| 13. (b) bacteria | 14. (b) yeast | 15. (c) spirulina |

21st Century Skills

1. Plant cell parts P and Q

- | | |
|-------------------------|--------------------|
| (a) (i) P – Chloroplast | (ii) Q – Cell wall |
| (b) (i) R – Chlorophyll | (ii) S – Cellulose |

Chloroplasts contain chlorophyll and help the plant make food by photosynthesis. The cell wall is made of cellulose and gives shape and support to the plant cell.

2. (a) The general name of organelles X is plastids.
- (b) Organelle X present in the leaves of the tomato plant:
- (i) Name: Chloroplast
 - (ii) Colour: Green
 - (iii) Function: Carries out photosynthesis (prepares food)
- (c) The colour of organelle X present in the ripe fruits of the tomato plant is red (due to chromoplasts).