



# Practice Worksheet on Crop Production and Management and Cell Structure and Function

Generated for Adityaa - Based on resource uploaded by user.

[Generate one yourself at LitGrades](#)

Subject: Science

Date: 1/14/2025

## Long Answer Questions

1. Explain the process of crop production and management, highlighting the key stages involved.
2. Describe the structure and functions of the major components of a plant cell.
3. What is intercropping and what are its advantages?
4. How do improved crop varieties contribute to increased food production?
5. Why is irrigation important for crop production? Describe different irrigation methods.
6. What is the role of fertilizers in crop production? Differentiate between organic and inorganic fertilizers.

7. Discuss various methods of crop protection from pests and diseases.

8. Explain the process of harvesting and post-harvest management of crops.

## Multiple Choice Questions

1. Which organelle is known as the powerhouse of the cell?

- a) Ribosomes
- b) Mitochondria
- c) Lysosomes
- d) Golgi apparatus

2. Which structure provides structural support to a plant cell?

- a) Cellulose
- b) Cell wall
- c) Cell membrane
- d) Cytoplasm

3. What process does mitochondria primarily perform in a cell?

- a) Photosynthesis
- b) Respiration
- c) Transpiration
- d) Excretion

4. Which nutrient is essential for healthy root development in plants?

- a) Nitrogen
- b) Phosphorus
- c) Potassium
- d) Calcium

5. The process by which a seed starts to grow is called?

- a) Seed dormancy
- b) Germination
- c) Photosynthesis
- d) Transpiration

6. Which farming practice helps maintain soil fertility by alternating crops?

- a) Crop rotation
- b) Monoculture
- c) Intercropping
- d) Mixed cropping

7. What is the process of supplying water to crops called?

- a) Weeding
- b) Irrigation
- c) Fertilization
- d) Harvesting

8. Chemicals that kill unwanted plants are known as?

- a) Pesticides
- b) Herbicides
- c) Insecticides
- d) Fungicides

# Answer Key

## Long Answer Questions - Expected Responses

1. Explain the process of crop production and management, highlighting the key stages involved.

Expected Answer: Crop production involves preparing the soil, sowing seeds, irrigating, adding fertilizers, and protecting crops from pests and diseases. Good management ensures maximum yield.

2. Describe the structure and functions of the major components of a plant cell.

Expected Answer: Cell wall provides structural support and protection; cell membrane controls entry and exit of substances; nucleus contains genetic material; chloroplasts conduct photosynthesis; mitochondria generate energy.

3. What is intercropping and what are its advantages?

Expected Answer: Intercropping involves planting different crops together to improve soil health, reduce pest damage, and increase yield.

4. How do improved crop varieties contribute to increased food production?

Expected Answer: Improved crop varieties offer higher yield, disease resistance, and better adaptability to various conditions.

5. Why is irrigation important for crop production? Describe different irrigation methods.

Expected Answer: Irrigation provides water for optimal plant growth, especially during dry periods. Different methods include drip, sprinkler, and flood irrigation.

6. What is the role of fertilizers in crop production? Differentiate between organic and inorganic fertilizers.

Expected Answer: Fertilizers supplement essential nutrients in soil, improving soil fertility and crop yield. Organic fertilizers, like compost, and inorganic fertilizers, like urea, are used.

7. Discuss various methods of crop protection from pests and diseases.

Expected Answer: Protecting crops involves controlling pests and diseases. This can include using pesticides, biological control, or crop rotation techniques.

8. Explain the process of harvesting and post-harvest management of crops.

Expected Answer: Harvesting is the process of collecting mature crops. Post-harvest techniques involve processing, storage, and transportation to market.

## Multiple Choice Questions - Correct Answers

1. Which organelle is known as the powerhouse of the cell?

Correct Answer: Mitochondria

2. Which structure provides structural support to a plant cell?

Correct Answer: Cell wall

3. What process does mitochondria primarily perform in a cell?

Correct Answer: Respiration

4. Which nutrient is essential for healthy root development in plants?

Correct Answer: Phosphorus

5. The process by which a seed starts to grow is called?

Correct Answer: Germination

6. Which farming practice helps maintain soil fertility by alternating crops?

Correct Answer: Crop rotation

7. What is the process of supplying water to crops called?

Correct Answer: Irrigation

8. Chemicals that kill unwanted plants are known as?

Correct Answer: Herbicides