



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION

DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING

QUALIFICATION: MUST BRIDGING PROGRAMME - TVET AGRICULTURE SPECIALISATION	
QUALIFICATION CODE: 04NBTA	LEVEL: 4
COURSE CODE: FOC415	COURSE NAME: FUNDAMENTALS OF CROP PRODUCTION
SESSION: JUNE 2025	PAPER: 1
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Ms. E MATALI
MODERATOR:	Mr. A MERORO

INSTRUCTIONS
<ol style="list-style-type: none">1. The paper has 3 SECTIONS (A, B and C).2. Write clearly and neatly using a black or blue ink pen.3. Each section must start on a new page.4. All written work MUST be done in blue or black ink.

THIS QUESTION PAPER CONSISTS OF 5 PAGES (Including this front page)

SECTION A

QUESTION 1

[10 marks]

Write down the letter corresponding to your choice next to the question number.

1.1. Which nutrient is most essential for root development in crops?

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

(1 Mark)

1.2. What is the best time to apply fertilizer to most crops?

- a) During harvesting
- b) At seed maturity
- c) Before or at planting time
- d) After rainfall

(1 Mark)

1.3. Which method is commonly used to propagate potatoes?

- a) Seeds
- b) Tubers
- c) Stem cuttings
- d) Grafting

(1 Mark)

1.4. Which crop is a leafy vegetable?

- a) Lettuce
- b) Onion
- c) Carrot
- d) Tomato

(1 Mark)

- 1.5. What is the function of mulch in crop production?**
- a) Promote pests
 - b) Increase soil erosion
 - c) Retain soil moisture
 - d) Reduce soil fertility
- (1 Mark)
- 1.6. A well-drained soil is important for crop growth because:**
- a) It retains excess water
 - b) It encourages deep root development
 - c) It keeps the soil dry permanently
 - d) It increases weed growth
- (1 Mark)
- 1.7. Which of the following is a cool-season vegetable crop?**
- a) Watermelon
 - b) Cabbage
 - c) Okra
 - d) Sweet potato
- (1 Mark)
- 1.8. The practice of removing unwanted plants from a crop field is called:**
- a) Tilling
 - b) Harvesting
 - c) Weeding
 - d) Mulching
- (1 Mark)
- 1.9. Crop yield can be defined as:**
- a) The price of the crop
 - b) The quality of the crop
 - c) The amount of crop harvested per unit area
 - d) The time taken to grow the crop
- (1 Mark)

1.10. Which of the following is a climacteric fruit (ripens after harvest)?

- a) Grape
- b) Apple
- c) Pineapple
- d) Strawberry

(1 Marks)

SECTION B (Answer all questions)

QUESTION 2

[40 marks]

2.1. Indicate whether each of the following statements is true or false, and provide a justification for your answer. **[10]**

Each correct mark (✓) for question 1 is equal to 1 mark.

2.1.1. Soil organisms play no role in plant nutrition.

2.1.2. Drip irrigation is more water-efficient than flood irrigation.

2.1.3. QGIS is an open-source software used for soil and crop mapping.

2.1.4. Sandy soils have high water retention.

2.1.5. Agronomic crops include fruits and vegetables.

2.1.6. A soil map is useful for planning irrigation systems.

2.1.7. Namibia's climate does not influence crop selection.

2.1.8. Mulching helps conserve soil moisture.

2.1.9. Soil pH does not affect nutrient availability.

2.1.10. Organic farming promotes biodiversity.

- 2.2. Define soil analysis and explain why it is important for farmers. (6 marks)
- 2.3. Explain two major climatic challenges that affect farming in Namibia. (6 marks)
- 2.4. Discuss how plant nutrition influences crop yield. (6 marks)
- 2.5. Describe the process of sustainable weed control in large-scale farming. (6 marks)
- 2.6. What is the role of GIS technology in agriculture? (6 marks)

SECTION C

QUESTION 3 [50 marks]

- 3.1. Explain the importance of soil mapping and how it helps in crop production planning. (25 Marks)
- 3.2. Discuss the major irrigation systems used in agriculture and evaluate their advantages and disadvantages. (25 Marks)

END OF PAPER [100]