



**ΠΑΜΙΒΙΑ UNIVERSITY**  
**OF SCIENCE AND TECHNOLOGY**

**FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION**

**DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING**

<b>QUALIFICATION: MUST BRIDGING PROGRAMME - TVET AGRICULTURE SPECIALISATION</b>	
<b>QUALIFICATION CODE: 04NBTA</b>	<b>LEVEL: 4</b>
<b>COURSE CODE: FOC411S</b>	<b>COURSE NAME: FUNDAMENTALS OF CROP PRODUCTION</b>
<b>SESSION: JULY 2025</b>	<b>PAPER: 2</b>
<b>DURATION: 3 HOURS</b>	<b>MARKS: 100</b>

<b>SECOND OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER(S)</b>	<b>Ms. E MATALI</b>
<b>MODERATOR:</b>	<b>Mr. A MERORO</b>

<p style="text-align: center;"><b>INSTRUCTIONS</b></p> <ol style="list-style-type: none"><li>1. The paper has <b>3 SECTIONS</b> (A, B and C).</li><li>2. Write clearly and neatly using a black or blue ink pen.</li><li>3. Each section must start on a new page.</li><li>4. All written work <b>MUST</b> be done in blue or black ink.</li></ol>
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**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 of the following is NOT a type of irrigation system used for crop production?**

- a) Drip irrigation
- b) Flood irrigation
- c) Rain-fed irrigation
- d) Genetic irrigation

(1 Mark)

**1.2. In Namibia, which climatic factor has the most significant impact on agricultural production?**

- a) High humidity
- b) Limited rainfall
- c) Abundant snowfall
- d) Stable temperatures year-round

(1 Mark)

**1.3. A soil profile consists of how many main layers (horizons)?**

- a) 2
- b) 4
- c) 3
- d) 5

(1 Mark)

**1.4. What is the main purpose of QGIS software in agriculture?**

- a) Soil chemical analysis
- b) Mapping and analysing soil properties
- c) Irrigation system maintenance
- d) Fertilizer application calculations

(1 Mark)

- 1.5. Which of the following is an example of an agronomic crop?**
- a) Mango
  - b) Wheat
  - c) Tomato
  - d) Banana
- (1 Mark)
- 1.6. What is the main purpose of crop rotation in farming?**
- a) Increase use of fertilizers
  - b) Control pests and diseases
  - c) Promote monoculture
  - d) Reduce harvesting time
- (1 Mark)
- 1.7. Which farming practice helps in conserving soil and water?**
- a) Continuous cropping
  - b) Slash and burn
  - c) Terracing
- (1 Mark)
- 1.8. What is the ideal pH range for most vegetable crops?**
- a) 2.5 – 3.0
  - b) 4.0 – 4.5
  - c) 6.0 – 7.0
  - d) 8.5 – 9.0
- (1 Mark)
- 1.9. What is the function of stomata in plant leaves?**
- a) Absorb nutrients from soil
  - b) Conduct photosynthesis
  - c) Allow gas exchange
  - d) Store water
- (1 Mark)

**1.10. Which of the following is an organic fertilizer?**

- a) Ammonium nitrate
- b) Urea
- c) Compost
- d) Potash

(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. Fruits are classified as horticultural crops.**

**2.1.2. Potatoes grow best in acidic, waterlogged soil.**

**2.1.3. Fertilizer should always be applied on the crop leaves for best results.**

**2.1.4. Leafy vegetables require more nitrogen for healthy growth.**

**2.5. Agronomic crops are mostly grown for fresh market consumption.**

**2.1.6. Carrots are root vegetables and are propagated using seeds.**

**2.1.7. Crop spacing does not affect plant growth or yield.**

**2.1.8. Proper irrigation scheduling helps conserve water and improve yield.**

**2.1.9. Transplanting is a common method used for planting fruit trees.**

**2.1.10. All crops require the same amount of sunlight and water to grow.**

- 2.2. Define commercial and small-scale farming and explain how they differ. (6 Marks)
- 2.3. Explain two advantages and two disadvantages of drip irrigation. (6 Marks)
- 2.4. Discuss the role of soil organisms in maintaining soil fertility. (6 Marks)
- 2.5. Why is sustainable agriculture important in Namibia? Provide three reasons. (6 Marks)
- 2.6. Describe two methods of weed control in agronomic crops. (6 Marks)

## SECTION C

QUESTION 3 [50 marks]

- 3.1. How does climate impact the yield and quality of vegetable crops? Use examples. (25 Marks)
- 3.2. Discuss five challenges and five opportunities in the marketing of horticultural crops in Namibia. (25 Marks)

END OF PAPER [100]