

# EXAMINATIONS COUNCIL OF ESWATINI Eswatini Pre-vocational Certificate of Secondary Education

#### AGRICULTURAL TECHNOLOGY SCHOOL- BASED PROJECT

5920/03

Paper 3 Specimen Paper October/ November 2024-2026

Total Marks: 100 Duration: 7 Months

#### **INSTRUCTIONS TO CANDIDATES:**

- 1. Agricultural Technology Paper 3 is a school-based project that is to be submitted to ECESWA by 31<sup>st</sup> October.
- 2. From the given **Situation** you are to undertake a school-based project which consists of an A4-size **portfolio** and a **product.**
- 3. **Two** situations are given from different Agricultural fields. You must attempt **one** situation from the given **two**.
- 4. The work must be original and submitted by yourself as an individual.
- 5. You are expected to come up with a written proposal by 31st March.
- 6. You are allowed to consult with your teacher on the development of the project who will contribute 5% of the total mark based on the level of guidance.
- 7. The work will be undertaken under supervision within the classroom.
- 8. You are expected to be able to present, explain and reflect on your work.
- 9. You are expected to cooperate with the external Examiner who will be coming at certain interval to assess the development stages of your project.
- 10. You are required to document evidence of the development stages of your project in the portfolio.
- 11. The portfolio should be availed to the external Examiner on demand.
- 12. You are expected to include write-ups for all stages in the portfolio which must be submitted to ECESWA by the 31<sup>st</sup> October.

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|--------------------|--|
| Marks              |  |

This document consists of 4 printed pages.

The **Situations** of the project are described in **Figures 1 and 2** below. Each situation provide a basis for the problem statement of your project. You are expected to develop the problem statement further based on **one** situation.

# **Project specification**

#### **SITUATION 1**

# **Livestock production**

#### **Theme: Goat Production**

You have identified a demand for goat kids to be supplied to farmers who want to start a goat production enterprise. From the situation, breed goats to produce the required kids. The following specifications have been given for the kids:

- (i) health kid
- (ii) strong straight legs
- (iii) coat shiny, smooth, clean, dry
- (iv) no lameness
- (v) good weight (1.36-4.1Kg)
- (vi) weight proportion to size
- (vii) eyes prominent, bright, clear
- (viii) ears pricked position

# Figure 1

#### **SITUATION 2**

## **Crop Production**

## Theme: Dry white maize production

A local milling company has identified you to supply dry white maize. You are to grow maize (SC 719) in a 16 m<sup>2</sup> plot at a spacing of 90 cm between rows and 25 cm between plants which meet the following criteria:

- (i) Free from stalk borer,
- (ii) Free from grain weevil
- (iii) Free from mould
- (iv) Clean white maize
- (v) Dry maize
- (vi) Grains not broken
- (vii) No signs of sprouting

Figure 2

From this Situation you are to complete the stages as described below:

The project consists of three stages as follows:

#### Stage 1- Proposal worth 15 marks

Written presentation (15marks)

You will produce a proposal of between 600-800 words. The proposal will be submitted by 31th March each year. After approval of the proposal by your supervisor, you may continue with the project before submission of your proposal.

The proposal should include:

- Introduction background and purpose of the project
- Problem statement identification of the need (gap) in the market
- Justification why this project?
- Methodology procedure (steps) to follow to achieve the product
- Time frame anticipated completion dates for each stage of product
- Reference list of sources of information

## Stage 2- Developments stages (of product) worth 70 marks

- Preparation/lay-out (10 marks)
- Implementation (50 marks)
- Product realisation (10 marks)

The investigation and development stage shall include details of the specifications and steps of the project development. The four main stages as indicated above are described as follows:

- (a) Research and specification shall include a thorough research of the demand or nutritional importance of the product with relevant data identified and collected. Analysis of the research leading to a justification specification for a marketable product.
- **(b) (i)** Crop production: specification plan shall include the identification/location of the plot/field, size of the plot/field, the projected start and finish of the production. The types of inputs and quantities required, cost implications, management activities to be carried out and their projected implementation dates.
  - (ii) livestock production: specification plan shall include the identification/location of the livestock, number of livestock, the projected start and finish of the production. The types of inputs and quantities required, cost implications, management activities to be carried out and their projected implementation dates.
- **(c)** Implementation which is product development shall include the commencement of the production and the processes of producing the product.
  - (i) Crop production will include soil preparation, planting and management practices.
  - (ii) Livestock production preparation of animal house, selection of livestock and management practices.
- **(d)** Realization which is the final product shall include acquiring the mature product.

# Stage 3 – Evaluation of the product (fit for purpose) worth 10 marks

- Evaluate product against a set standard. (5 marks)
- A write-up of how the product was evaluated against a set standard (fit for purpose) (5 marks)

Evaluation shall include assessment of the product in line with set principles and standards and with reference to the specification. This will include the product size, weight, leaf colour and insect/environmental damage. It will also include justification for not achieving the set damage.

#### **Portfolio**

The portfolio must include sufficient evidence e.g. photographs, diaries, research activities and witness statements to include relevant detail, e.g. crop management inputs such as type of fertiliser and application rate etc; or for goat production type of feed supplements and quantity given etc.

The portfolio must include candidate's name, centre name and candidates number for identification purposes.

#### **Check list**

Documents to be submitted to ECESWA

| Items                       | Date Submitted |
|-----------------------------|----------------|
| Proposal document           |                |
| 2. Portfolio                |                |
| 3. Written-report hard copy |                |

#### **Submission Dates**

Proposal report by 31 March of each calendar year

Portfolio by 31 October of each calendar year

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