Tonga National Form Seven Certificate

AGRICULTURE

2016

QUESTION and ANSWER BOOKLET

Time allowed: Three Hours

INSTRUCTIONS

1. Write your Student Enrolment Number (SEN) on the top right hand corner of this booklet.
2. Answer ALL QUESTIONS. Write your answers in the spaces provided in this booklet.
3. If you need more space for answers, ask the Supervisor for extra paper. Write your SEN on all extra sheets used and clearly number the questions. Attach the extra sheets at the appropriate places in this booklet.

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<th>Pages</th>
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<td>SECTION A PRIMARY PRODUCTION</td>
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Check that this booklet contains pages 2-15 in the correct order and that none of these pages is blank

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION
SECTION A: PRIMARY PRODUCTION

QUESTION ONE

Name ONE (1) Primary Product produced locally for export, and use it to answer the questions that follow. It is advised to read the questions before you select the Primary product to use. Give the name of the country this product is exported to.

Primary Product: ____________________________________________

Country of Import: ___________________________________________

a. Identify the consumer (of the named country of Export) preference for your selected primary product.

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b. Name a local market opportunity available for the reject surplus product.

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c. Explain each of the above named local market opportunities for the surplus product.

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d. Briefly describe the effect of market competition on the price of the named product.

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QUESTION TWO

Kava price had increased lately across Tonga. Use the current situation of Kava in Tonga to answer the questions that follow;

a. Identify the major market control that causes the ever increasing price of kava.
   __________________________________________________________
   __________________________________________________________

b. Explain how the market control as answered above, affects kava production in both export and local market.
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c. Identify how a kava producer can manipulate the kava market.
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d. Describe the importance of bilateral trade agreement on the export of kava.
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SECTION B: SUSTAINABLE PRIMARY PRODUCTION

QUESTION THREE

Name a crop or animal that is grown or raised for local sales or for export, and use it to answer the questions that follow.

Crop or animal Name: ________________________________________________

a. Identify TWO (2) management practices that are used to sustain the production of your named crop/animal.

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b. Describe how the management practices named above, are done, to ensure the production is sustainable.

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c. Describe how your selected product, named above is established.

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QUESTION FOUR

1. Name **ONE** (1) animal primary product you have studied this year, then use it to answer the questions that follow.

   **Name of animal Primary product:** ________________________________

   a. Select **ONE** (1) of the following management techniques as listed below, then explain its advantages in sustaining the production of the named primary product.

   - *Culling*
   - *Stocking Rate*
   - *Use of feed supplement*

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2. Use a primary crop product you have studied, to answer the following questions.

   **Name of crop product:** ______________________________________

   a. There are different methods of controlling weeds, which helps to maintain high production.

      i. Name the dominant weed that is a major problem to the named crop product.

      __________________________________________________________

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ii. Describe one effective method of controlling the named weed, and its status in sustaining production as long term.

3. Describe the advantages of using Integrated Pest Management in controlling the major pest of your named crop product.
**QUESTION FIVE**

Listed below are the Agricultural issues that can have negative and/ or positive impacts on local primary products produced.

Select **ONE** (1) agricultural issue from the list in the box below, then refer to a Primary product (plant or animal) that you have studied this year to answer the questions that follow.

- Organic Husbandry
- Invasive species
- Introduction of new species

**Selected global issue:** ________________________________________________________________

a. Explain the effect of the selected global issue on the primary product you studied. You should mention whether it has positive or negative effect, using specific examples.

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b. Pollution is another global agricultural issue that affects agricultural production. Describe the long term effect of pollution on the primary product you studied.

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SECTION C: PRODUCTION MANAGEMENT

QUESTION SIX:

1. Name any crop or animal you have studied this year, then refer to it in answering the questions that follow:

   Name of Crop or Animal: ________________________________________

   a. Select the TWO (2) most important operations in the production of your selected crop or animal as named above, from site selection to harvesting and storage. Describe the importance of these operations and how this is done effectively to get the demanded attributes of your named product.

      i. _____________________________________________________________
         _____________________________________________________________
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      ii. _____________________________________________________________
        _____________________________________________________________
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   b. Explain how to effectively manipulate one of the selected production operations in a. above to produce better quality product of your selected crop or animal.

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c. Explain a good preparation method for this product to be more attractive in the market.
QUESTION SEVEN

Read the following questions, then name a primary product studied this year, and use it to answer the questions that follow.

Name of primary product: ______________________________

a. Identify the consumers’ preferences for the specific market of your primary product named above.

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b. Explain the importance of cost effectiveness in primary product named in a. above use appropriate figures and unit to illustrate your answer.

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c. The following factors influence the steps in the schedule of operations. Which of the listed factors has the most effect on your selected primary product? Evaluate how this factor influences the steps in schedule of operation.

- Labour Availability
- Capital
- Yield
- Market demand
QUESTION EIGHT

You can refer to your selected primary product in QUESTION SEVEN to answer the following questions.

a. Name a management practice manipulation that can affect the quantity of the primary product.

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b. Describe the concept of profit and yield maximization in your selected primary product.

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c. Explain how production manipulation of the named primary product, can affect the maximization of yield and profit.

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d. List TWO (2) items of the input for your selected product that will be classified in the Variable cost, when recording the production cost.

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SECTION D: POST HARVEST

QUESTION 9

You can refer to the primary product named in QUESTION 7, when answering the following questions.

a. Identify the harvesting method of the named product.

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b. Identify the methods of postharvest treatment, of the selected product.

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c. Explain the criteria for grading of your selected product, based on the target market.

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d. Describe the method of storing the harvested product, to maintain its freshness.

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e. Explain the effect of food safety on the marketing of your named product.

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f. Describe the appropriate method of packing your named product.

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