

| MARKER CODE |  |  |  |  |
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| STUDENT ENROLMENT NUMBER |  |  |  |  |  |  |  |  |  |
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# 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.

| TOPICS                                          | Pages           | Time (mins)     | Total     |
|-------------------------------------------------|-----------------|-----------------|-----------|
| <b>SECTION A PRIMARY PRODUCTION</b>             | 2-3             | 36              | 14        |
| <b>SECTION B SUSTAINABLE PRIMARY PRODUCTION</b> | 4-7             | 54              | 18        |
| <b>SECTION C PRODUCTION MANAGEMENT</b>          | 8-13            | 90              | 26        |
| <b>SECTION D POST HARVEST</b>                   | 14-15           | 31              | 12        |
| <b>TOTAL</b>                                    | <b>15 pages</b> | <b>180 mins</b> | <b>70</b> |

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.

| Skill level 1 |  |
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| 1             |  |
| 0             |  |
| NR            |  |

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

| Skill level 1 |  |
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| 1             |  |
| 0             |  |
| NR            |  |

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

| Skill level 3 |  |
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| 3             |  |
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| 1             |  |
| 0             |  |
| NR            |  |

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

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| 2             |  |
| 1             |  |
| 0             |  |
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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.

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| Skill level 1 |  |
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| 1             |  |
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- b. Explain how the market control as answered above, affects kava production in both export and local market.

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| Skill level 3 |  |
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- c. Identify how a kava producer can manipulate the kava market.

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| Skill level 1 |  |
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| 1             |  |
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- d. Describe the importance of bilateral trade agreement on the export of kava.

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| Skill level 2 |  |
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| 2             |  |
| 1             |  |
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| NR            |  |

## 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.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

| Skill level 1 |  |
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| 1             |  |
| 0             |  |
| NR            |  |

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

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| Skill level 2 |  |
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| 0             |  |
| NR            |  |

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

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| Skill level 2 |  |
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| NR            |  |

| Skill level 1 |  |
|---------------|--|
| 1             |  |
| 0             |  |
| NR            |  |

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

| Skill level 2 |  |
|---------------|--|
| 2             |  |
| 1             |  |
| 0             |  |
| NR            |  |

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

| Skill level 2 |  |
|---------------|--|
| 2             |  |
| 1             |  |
| 0             |  |
| NR            |  |

## 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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| Skill level 3 |  |
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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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| Skill level 2 |  |
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| 1             |  |
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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. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

| Skill level 2 |  |
|---------------|--|
| 2             |  |
| 1             |  |
| 0             |  |
| NR            |  |

ii. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

| Skill level 2 |  |
|---------------|--|
| 2             |  |
| 1             |  |
| 0             |  |
| NR            |  |

- 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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 \_\_\_\_\_  
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| Skill level 3 |  |
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| 3             |  |
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- c. Explain a good preparation method for this product to be more attractive in the market.

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| Skill level 3 |  |
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| NR            |  |

## 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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| Skill level 1 |  |
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| 1             |  |
| 0             |  |
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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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| Skill level 3 |  |
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| 0             |  |
| NR            |  |

- 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***

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| Skill level 4 |  |
|---------------|--|
| 4             |  |
| 3             |  |
| 2             |  |
| 1             |  |
| 0             |  |
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## 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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| Skill level 1 |  |
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| 1             |  |
| 0             |  |
| NR            |  |

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

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| Skill level 2 |  |
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| 2             |  |
| 1             |  |
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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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| Skill level 3 |  |
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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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| Skill level 2 |  |
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| 0             |  |
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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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| Skill level 1 |  |
|---------------|--|
| 1             |  |
| 0             |  |
| NR            |  |

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

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| Skill level 1 |  |
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| 1             |  |
| 0             |  |
| NR            |  |

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

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| Skill level 3 |  |
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| 1             |  |
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- d. Describe the method of storing the harvested product, to maintain its freshness.

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| Skill level 2 |  |
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| 2             |  |
| 1             |  |
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- e. Explain the effect of food safety on the marketing of your named product.

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| Skill level 3 |  |
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- f. Describe the appropriate method of packing your named product.

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| Skill level 2 |  |
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