



**NATIONAL EXAMINATION  
AND SCHOOL INSPECTION  
AUTHORITY**

# T001

**Tuesday, 20/7/2021**  
**08:30 – 11:30 AM**

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**TVET NATIONAL EXAMINATIONS, RTOF LEVEL 5, 2020-2021**

## QUESTIONS and ANSWERS BOOKLET

### OPTION/TRADE: CROP PRODUCTION

**SUBJECT: Food crops and post-harvest handling**

ACADEMIC YEAR: 2020-2021

\*Read carefully the instructions on page (i) 8r (ii)

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# TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

## **INSTRUCTIONS TO CANDIDATES: PART I (Answer Booklet)**

1. A candidate should fill in the actual names and the index number on the cover of this questions and answer booklet on the provided place (Black Box).
2. It is illegal for a candidate to write any of his/her names, index number or a school name inside the answer booklet.
3. A candidate should check if all pages of the answer booklet are complete. No candidate should remove or tear any pages or part of it from the answer booklet.
4. A candidate should answer in the language in which the examination is set. (See page **(ii)**)
5. A candidate should sign on the sitting plan when submitting the answer booklet. He/she has also to check if the answer booklet is well sealed.
6. No extra paper is allowed in the examinations room. If a candidate is caught with it his/her results will be nullified.
7. No candidate is allowed to write answers not related to the subject being sat for, otherwise it will be considered as a cheating case.
8. Write your answers on the 12 lined pages (From page 1 of 12 to page 12 of 12).
9. Use the last non-lined pages as draft.
10. Results for any candidate who is caught in examination malpractices are nullified. The cheating can be recognized during examinations administration, marking exercise or even thereafter.

# **TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021**

**OPTION/TRADE: CROP PRODUCTION**

**SUBJECT: Food crops and post-harvest handling**

**DURATION: 3 hours**

## **INSTRUCTIONS TO CANDIDATES: PART II (Question paper)**

The paper is composed of two (2) main Sections as follows:

**Section I: Attempt all the Twelve (12) questions (60 marks)**

**Section II: Attempt any Four (4) questions out of Six (6) (40 marks)**

### **Allowed materials:**

- Ruler and square
- Calculator

### **Note:**

***Every candidate is required to carefully comply with the provided assessment instructions.***

- 01.** Complete the below table that shows families and scientific names of the following fruits crops. **(5 marks)**

<b>CROP</b>	<b>Family</b>	<b>Sc.name</b>
Banana		
Pineapple		
Passion fruits	Passifloraceae	

- 02.** Talk briefly about the harvesting techniques of mature banana bunch. **(5 marks)**
- 03.** KANYABAGISHA a farmer in Nyamagabe District has decided to grow passion fruits. Before transplanting, he prepared land as required, dig holes by respecting all dimensions and spacing, put organic and inorganic fertilizers and carry out all necessary post planting operations that follow transplanting. Few days after planting, he found that seedlings were burnt.
- a) What do you think are the causes of that burning? **(2 marks)**
- b) How Kanyabagisha should prevent that burning? **(3 marks)**
- 04.** Anthracnose is one of terrible diseases of Common beans which reduces drastically the yield of beans in Rwanda
- a) What are the major symptoms of that disease? **(2 marks)**
- b) What are its control measures? **(3 marks)**
- 05.** As technician in agriculture, what are the importance of legumes in human being and animal bearing? **(5 marks)**
- 06.** As crop production technician, explain the importance of harvesting the crops at the correct physiological maturity. **(5 marks)**
- 07.** Aflatoxins are poisonous substances produced by fungi and affect quality of produce especially for groundnuts. How to minimize these aflatoxins? **(5 marks)**

**08.** Complete the following table with scientific names of vegetables.

**(5 marks)**

Local names	Scientific name	Family name
Cabbages		
Tomatoes		
Pumpkins		
Watermelon		
Beetroot		

**09.** Explain the following terms used in vegetable cropping:

**(5 marks)**

- a) Selective harvesting
- b) Sorting
- c) Land Clearing
- d) Thinning
- e) Hardening off

**10.** Assume that you have cultivated sweet potatoes for market.

a) Indicate different methods that you may use for storage after harvesting. **(2 marks)**

b) Explain other operations that you carry out before delivery on the market. **(3 marks)**

**11.** Give a clear difference between roots and tubers crops. **(5 marks)**

**12.** Mucyo is a farmer of Rusizi District growing rice on plot of 800 Ares and is willing to do planting using the spacing of 25cm between rows and 25cm between plants. As an assistant technician in crop production help this farmer to estimate the planting density when using 2 seedlings. **(5 marks)**

**Section II: Attempt any Four (4) questions out of Six (6) (40 marks)**

13. A farmer in Karongi District, Rubengera Sector wants to grow pineapple crop on a plot of 225 Ares by using double rows method but she doesn't have sufficient information about planting density. You are reminded that the distance between two plants is 30cm and asked to help her to find out the number of planting materials which will be needed. (10 marks)

14. Illustrate the cropping parameters of Soya bean and Ground nut with help of the following table: (10 marks)

	Soya bean	Ground nut
Temperature		
pH		
Soil		
Spacing		
Fertilizers application		

15. In vegetables growing we must till the land according to the vegetable requirement.

a) What are the types of tillage? (2 marks)

b) Give the four (4) objectives for each type. (8 marks)

16. The vegetables produce requires a specific handling technique in order to maintain quality specially packaging.

a) What are the characteristics of good package? (4 marks)

b) Give any four (4) types of packages used in vegetables. (2 marks)

c) Explain the characteristics of good label. (4 marks)

17. Sorghum is the fourth most important cereal in the world after wheat, rice and maize. It is a substitute to maize where the latter fails to grow. What are the specific characteristics which make sorghum being able to grow where maize can fail? (10 marks)

- 18.** A number of control methods for crop pest have been developed. These follow the same principles for the control of pests of all kinds. The methods should hierarchically be thought for any intervention aiming at preventing economic yield loss. Illustrate the general pest control techniques used for stored products.

**(10 marks)**





