



T030

08:30 – 11:30 AM

Names.

Index number

TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

QUESTIONS and ANSWERS BOOKLET

OPTION/TRADE: **ANIMAL HEALTH**

SUBJECT: Fish farming and beekeeping

ACADEMIC YEAR: **2020-2021**

Read carefully the instructions on page (i) & (ii).

FOR EXAMINER'S USE ONLY

[illegible]



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: ANIMAL HEALTH

SUBJECT: Fish farming and beekeeping

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.

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

- 01.** List fish species (scientific names) found in Rwanda. **(5marks)**
- 02.** After liming, the fertilization is done in order to develop the fish food organisms. Outline different ways of application of manure in fish pond. **(5marks)**
- 03.** Characterize the Queen bee in the hive. **(5marks)**
- 04.** How do you proceed to capture a bee swarm attached on a branch of a tree? **(5marks)**
- 05.** In polyculture, more than one fish species is raised in the fish pond. In this way the various natural food resources in the pond are better utilized. What are advantages of polyculture in fish farming? **(5marks)**
- 06.** Identify any five (5) Common disease symptoms in Fish behaviors. **(5marks)**
- 07.** What are advantages of cage culture over pond culture? **(5marks)**
- 08. a)** In general, the hives must always be protected from the hot sun. How can you protect the hive? **(3marks)**
- b)** What consist the natural feeding of bees? **(2marks)**

- 09.** Give the symptoms of the European foul brood disease. **(5marks)**
- 10.** What are the tasks and duties of young workers in beehive? **(5marks)**
- 11.** The Dissolved Oxygen (DO) kept at 3 mg/L or higher is one among successful conditions for tilapia and catfish farming. How can a farmer arrive to maintain this condition? **(5marks)**
- 12.** All activities on the fish farm should be recorded for better management. What types of activities that are recommended to be recorded? **(5marks)**

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

13. a) Describe the parts of a modern hive named LANGSTROTH. (6marks)
b) State its advantages. (4marks)
14. i. Calculate the Daily Feed Ration of a ponds stocked with 2000 African catfish of 5 grams that required a Ration of 8% of its body weight? (3marks)
- ii. What is the amount of feed to distribute per meal (4feeding times)? (2marks)
- iii. What is a FCR in fish farming? (2marks)
- iv. What does FCR indicate? (3marks)
15. a) KAMALIZA, a fish famer in KARONGI District has five (5) fish pond in which has been stocked tilapia species of 10 grams for each and requires a ratio of 8%of its body weight. How much feed should it be given per a day? (5marks)
- b) If there are 1000 fishes in each fish pond, how much feed should be weighed a day? (5marks)

- 16.** The decision about what place to keep the bees is a personal one that reflects personal circumstances. However, there are some helpful guiding principles for choosing an apiary site.
- a)** What is an apiary? Show its components. **(4marks)**
- b)** Give at list 6 principles for choosing an apiary site. **(6marks)**
- 17.** The caste of bees is composed by different members having different tasks to accomplish in the beehives. List the functions /duties of every type of the caste. **(10marks)**
- 18.** A fish pond is a shallow body of water, used for the controlled farming of fish. It is adapted to be easily and completely drained. Explain the main components of fish pond. **(10marks)**

