
College of Agriculture, Fisheries & Forestry
School of Agricultural Sciences and Forestry
Department of Crop Production
Trade Diploma in Agroforestry – Year II
AGF-504 Integrated Farming System
Trimester I, 2018 Final Examination

Total Marks: 100

Time Allowed: Three Hours

[An extra ten minutes is allowed for reading this paper]

Instructions

- This paper consists of 5 pages.
- Answer **ALL** questions in the answer booklet.
- Number your answers correctly.
- Please check to see that your paper is complete
- Write your students number on all the pages that you use including any additional sheet of papers.
- Printed or written material is not allowed into the examination hall.
- Mark values appear at the end of each question or part thereof.
- Non – programmable calculators are permitted

“MOBILE PHONES ARE STRICTLY NOT ALLOWED”

Section	Guidelines	Total Marks	Suggested Time
A	Part 1: Multiple choice questions Part 2: Fill in the blanks Part 3: Matching Part 4: Definition	10 10 10 20 50 Marks	60 minutes
B	Long answers	50 Marks	120 minutes

SECTION –A

Note: Attempt all the questions.

Part 1: Multiple choice questions. Tick the correct answer from the following multiple choice (10 Marks)

1. An agricultural system that cooperates livestock and crop production is known as
 - a. inter cropping
 - b. fixed cropping
 - c. integrated farming system
 - d. farm model

2. Which feed consists more than 70% of blood?
 - a. Water
 - b. Starch
 - c. Vitamins
 - d. Protein

3. Sorghum is a good source of
 - a. protein
 - b. vitamin
 - c. carbohydrates
 - d. fat

4. One of the major draw backs in the production of silage is
 - a. high in demand
 - b. foul smell
 - c. nutritive value
 - d. all of the above

5. Composting depends on providing the favorable conditions to support the growth of
 - a. ants
 - b. plants
 - c. micro organism
 - d. livestock

6. Which phase does silage starts its anaerobic phase?
 - a. 1st phase
 - b. 2nd phase
 - c. 3rd phase
 - d. 4th phase

7. consists of green fodder preserved by fermentation in a silo.
 - a. Hay
 - b. Bio-Digester
 - c. Silage
 - d. Livestock feed

8. Aquaponics refers to the rearing of
 - a. fish and plants
 - b. pigs and fish
 - c. chicken and plants
 - d. bees and fish

9. The best control method that is used in an integrated farming system is
 - a. cultural control
 - b. bio control
 - c. physical
 - d. all of the above

10. Carbohydrates are taken up in the form of
 - a. minerals
 - b. starch
 - c. nucleic acids
 - d. amino acids

Part 2: Complete the following with appropriate answer.

(10 Marks)

1. are the major source of carbohydrates in livestock feed.
2. Consumer demand for a particular product is an factor that determines the type of farming.
3. is the growing of different types of crops throughout the season.
4. The temperature in compost during decomposition will reach up to
5. Integrated farming system improves space and increases productivity per unit area.
6. Animals eat to acquire the and building material that they need to live and grow.
7. method is considered as the first resort of control.
8. are derived from slaughter by-products recycled for use in animal feed

9. Silage can be used for feeding during the

10. In silage the phase where oxygen is present can be referred to as phase.

Part 3:

MATCHING

(10 Marks)

Match List A with the corresponding correct answer from List B and write the answer in the answer booklet provided.

#	Section A		Section B
1	Aquaculture	A	Moisture
2	Apiculture	B	Combination
3	Sericulture	C	Dry areas
4	Silage	D	Aerobic
5	Palatability	E	Wet areas
6	Raised beds	F	Taste
7	Hay	G	Anaerobic
8	Sunken beds	H	Silk worms
9	IFS	I	Bees
10	Mulching	J	Integrated farming system

Part 4. Analyse and discuss the following terms

(20 marks)

1. Tallow
2. Lard
3. Feed-grade animal fat
4. Yellow grease
5. Essential nutrient
6. Vermicomposting
7. Inter cropping
8. Fermentation
9. Nutrient toxicity
10. Biogas

SECTION-B**Long Answer Question****(50 Marks)**

NOTE: Answer the following to the best of your ability. There are 8 optional questions given from which you are to answer ONLY 5. Each question carries 10 marks.

1. Analyze and discuss the need for macronutrients application and their functions.
2. Appraise integrated farming system and list down its advantages and disadvantages.
3. Differentiate between silage and hay with suitable examples.
4. Differentiate and explain various phases of silage in detail.
5. Analyze and discuss major components of feed and briefly explain why these components are essential.
6. Appraise various objectives of silage. Why silage is suitable for integrated farming system and categories down the advantages and disadvantages of silage.
7. Categorize the macronutrients and micronutrients that are present in the soil and in what form they are taken up by the plants.
8. Design a well labeled farm plan of an integrated farming system describing how each component benefits the other.

The End