

RISHIKUL SANATAN COLLEGE

AGRICULTURAL SCIENCE WORKSHEET 1

YEAR 10 – 2021

1. The agricultural crop that **dominates** the area of cultivated land in Fiji is
 - A. dalo
 - B. ginger
 - C. yaqona
 - D. sugar cane
2. Which of the following is an example of an **acquired characteristic** of agricultural produce?
 - A. Size
 - B. Shape
 - C. Damaged
 - D. Texture
3. Canned foods, raw pasta and sugar are classified as **non perishable** items because they
 - A. are fresh
 - B. are cheap
 - C. are readily available
 - D. have a longer shelf life
4. To **prevent** soil degradation and to build the organic matter content of soil, a farmer should practice
 - A. soil conservation
 - B. diversification
 - C. mono cropping
 - D. mixed cropping

SHORT ANSWERS:

- a) Discuss the **importance** of exporting goods and services to other countries. (2 marks)
- b) Give the **relationship** between crop rotation and crop diversity. (2 marks)
- c) Identify at least **one good** quality of a product. (1 mark)
- d) Explain one of the **benefits** of integrated farming system. (2 marks)
- e) **Differentiate** between organic bio fertilizers and organic fertilizer. (2 marks)
- f) State the **importance** of land fallowing. (1 mark)

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AGRICULTURAL SCIENCE WORKSHEET 2

YEAR 10 - 2021

1. Which of the following is a **disadvantage** of organic farming?
 - A. Requires skills
 - B. Reduces pollution
 - C. Uses agrichemicals
 - D. Sustains production

2. A person or groups of people who are the **final users** of products or services are
 - A. farmers
 - B. suppliers
 - C. laborers
 - D. consumers

3. Which of the following **cropping methods** results in the natural control of weeds and pest?
 - A. Crop rotation
 - B. Mixed cropping
 - C. Phase planting
 - D. Mono cropping

4. One way of maintaining the **quality** of farm products would be
 - A. planting on swampy land
 - B. irrigation with stagnant water
 - C. using of excessive chemicals on products
 - D. planting the best quality seeds of appropriate variety

MATCHING:

Match the terms in **List A** with the correct descriptions in **List B**. Write the **LETTER** of the description in the box beside the number of the matching term in **List A** in the answer booklet.

<u>List A</u>	<u>List B</u>
1. Physical record	A. Mechanical means such as mowing, burning ect
2. Grading	B. Situation in which a country buys more than sells.
3. Physical control	C. Sorting out eggs into weight categories.
4. Moulting	D. Layers stop producing eggs due to irregualr lighting.
5. Deficit	E. Feeding and drinking at free will.
6. Evisceration	F. Individuals journey through learning work in life
7. Ad-libitum	G. Poultry products such as meat and eggs.
8. Protein source	H. Release of the eggs from the ovary.
9. Career	I. Taste of the diet.
10. Oviposition	J. Records of non monetary quantities and description .
	K. Process in which birds start to lose feathers.

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AGRICULTURAL SCIENCE WORKSHEET 3

YEAR 10 - 2021

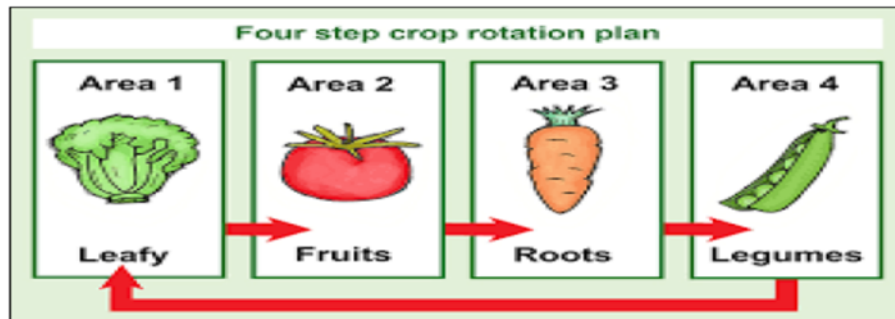
1. The practice of growing **one** particular crop on the whole farm is

- A. diversification
- B. sustainable farming
- C. organic farming
- D. monoculture

2. Which of the following is an example of **biological control** practiced by our sugar cane farmer?

- A. Weeding
- B. Using Weedicides to kill weeds
- C. Using mynah birds to prey on hornets in the sugarcane field
- D. Collecting and killing hornets in the sugarcane field

3. The farming practices that is shown below in the diagrams is known as



<http://www.googleimage.com> - crop-rotation

- A. Mulching
- B. Cover cropping
- C. Crop rotation
- D. Compost making

4. Identify the type of plants that **adds nitrogen** to the soil

- A. leguminous
- B. cucumber
- C. cabbage
- D. tomatoes

SHORT ANSWERS:

a) Explain one way in which **proper storage facilities** can maintain the quality of farm products.

(2 marks)

b) Explain one **solution** for the shortage of few food items in our country due to COVID-19.

(2 marks)

c) Name the **system** where animals are confined in crop field for ploughing the field by digging for roots.

(1 mark)

d) State one **inherited characteristics** of any crop.

(1 mark)

e) Some steps used in slaughtering of broiler birds are listed below. Write the steps in **correct order** in your answer book.

(4 marks)

Steps
Chickens are stabbed in the neck.
Do not feed for at least 8 hours
Chickens are placed upside down with legs held upwards.
Submersion in hot water with temperature of 52 °C – 55 °C for 120 seconds.

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AGRICULTURAL SCIENCE WORKSHEET 4

YEAR 10 - 2021

1. Backyard garden is an example of subsistence farm, its **advantages** would be
 - A. it provides with fresh and healthy food
 - B. provides with soiled and disease crops
 - C. provides with insect and muddy crops
 - D. it provides with good exercise and unhealthy food
2. When preparing compost it is very important **not to include** any
 - A. water
 - B. seeds
 - C. grass clippings
 - D. bio organisms
3. A practice of modifying the growth environment to reduce the prevalence of **unwanted pests** is known as
 - A. biological control
 - B. physical control
 - C. cultural control
 - D. chemical control
4. Agriculture **enterprises** involves
 - A. horticulture and apiculture
 - B. aquaculture and silviculture
 - C. horticulture and livestock
 - D. livestock and agriculture

SHORT ANSWERS:

a) Identify **one method** used to ensure that the broiler birds do not catch diseases on the farm.

(1 mark)

b) Discuss the reason why eggs are packed in specially **shaped boxes**.

(2 marks)

c) **Complete the table** given below for type of feed given to different stages of chicken's ages.

(4 marks)

Type	Growth phase	Age	Feed
Broiler	A. _____	0-2	B. _____
Layer	Laying	C. _____	D. _____

d) **Fill in the basic** requirement of broiler and layer management practices.

(3 marks)

Rearing practices	Broiler	Layers
1) light management	18-20 hours of light	A. _____ Hours of light. Give a reason for your answer. B. _____
2) stocking management	1 bird / 1 ½ ft ²	C. _____.

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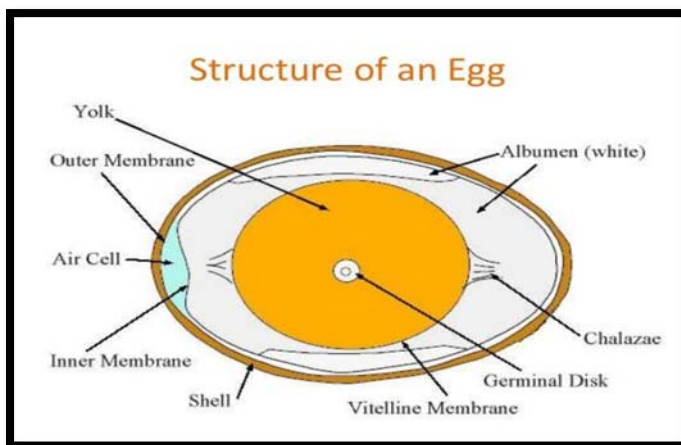
AGRICULTURAL SCIENCE WORKSHEET 5

YEAR 10 - 2021

1. Which of the following poultry breeds is used for **egg production** in Fiji?

- A. Light Sussex
- B. Hy-line
- C. Cobb
- D. Ross

2. The diagram below illustrates the structure of an egg.



(Source: Year 10 text book, pg 94)

The part **labeled X** is the

- A. chalazae
- B. albumen
- C. shell
- D. yolk

3. The process of **holding a light** behind the egg to illuminate the content is

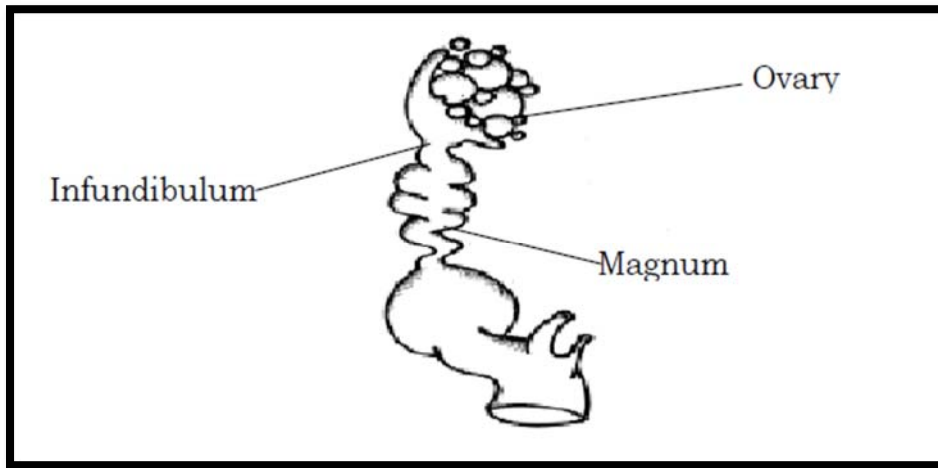
- A. candling
- B. collection
- C. wet cleaning
- D. dry cleaning

4. Fiji is **self sufficient** in poultry products such as

- A. offals
- B. organic manure
- C. egg
- D. employment

SHORT ANSWERS:

a) The diagram below illustrates the **female reproductive system** of poultry.



Source: [http://www.backyard chicken E-learning](http://www.backyardchickenE-learning)

Discuss the **process** of egg formation from the ovary to the magnum. (3 marks)

b) The total amount of feed eaten by 50 birds was 200 kg and gained 100 kg live weight.

Calculate the food conversion ratio (FCR). **Show all your working.** (3 marks)

c) Discuss why a scientist views a **bird as a machine.** (2 marks)

d) Explain why day old chicks should be bought from **reputable hatcheries.** (2 marks)

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AGRICULTURAL SCIENCE WORKSHEET 6

YEAR 10 - 2021

1. When the eggs are **incubated** by the bird sitting on them to keep warm is termed as
 - A. Artificial incubation
 - B. Natural incubation
 - C. Declawing
 - D. Debeaking
2. **Formulation of feed** given to the animal for optimum growth is called
 - A. pellets
 - B. crumble
 - C. ration
 - D. mash
3. The highest percentage of **crude protein** that is needed by the chickens is at the age of
 - A. 2-4 weeks
 - B. 7-8 weeks
 - C. 0-2 weeks
 - D. 3-6 weeks
4. An examination of chickens' health **before slaughtering** is known as
 - A. Stunning
 - B. Post mortem examination
 - C. Ante mortem examination
 - D. Evisceration

PARAGRAPH WRITING:

1. Students must write two paragraphs in this worksheet.
2. Students are to answer only one option from each question, in a paragraph.

QUESTION 1: Answer **either** option A **or** option B.

Option A: Explain **five** acquired characteristics to maintain the quality of any farm products.

Option B: explain **five** components of feed and their function for poultry birds.

QUESTION 2: Answer **either** option A **or** option B.

Option A: Explain **five** processes in preparing compost as organic manure.

Option B: Coccidiosis, CRD and IB are common diseases poultry. Choose a disease that you have studied and discuss under the following headings:

- Causal agents
- Transmission
- Clinical signs
- Treatment
- Prevention

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AGRICULTURAL SCIENCE WORKSHEET 7

YEAR 10 - 2021

1. Broiler birds are ready to be **harvested** in

- A. 2-3 weeks
- B. 3-4 weeks
- C. 7-8 weeks
- D. 9-10 weeks

2. The **equipment** that provides chicks with feed, water, warmth, security and heat from day old to 2 weeks old is

- A. pen
- B. cage
- C. brooder
- D. incubator

3. A farmer noticed that broiler birds passing out diarrhea which contained **blood stained**. This indicated the broiler birds are suffering from

- A. coccidiosis
- B. internal parasites
- C. infectious bronchitis
- D. chronic respiratory diseases

PARAGRAPH WRITING:

1. Students must write two paragraphs in this worksheet.
2. Students are to answer only one option from each question, in a paragraph.

QUESTION 1: Answer **either** option A **or** option B.

Option A: Explain **five** challenges facing the poultry industry with its suggested solutions.

Option B: Explain **five** management practices when raising layer birds.

QUESTION 2: Answer **either** option A **or** option B.

Option A: Explain **five** post harvest treatment methods of one poultry products.

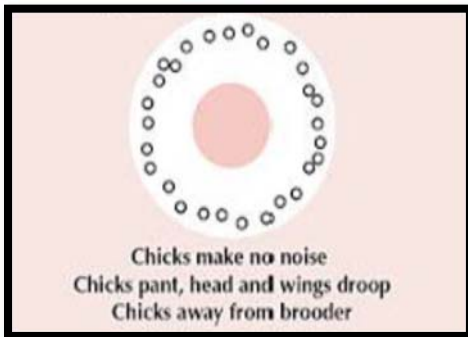
Option B: Explain **five** ways that energy is lost from the food that the chickens eat.

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AGRICULTURAL SCIENCE WORKSHEET 8

YEAR 10 - 2021

1. The effect of temperature on the bird's distribution under brooder is shown in the diagram below.



(Source: year 10 text book, pg 114)

Which of the following **temperature** is identified in the diagram above?

- A. temperature too low
- B. temperature too high
- C. temperature correct
- D. draught

2. Identify the method of raising chickens under **semi intensive system**.

- A. folding unit
- B. deep litter
- C. free range
- D. battery cage

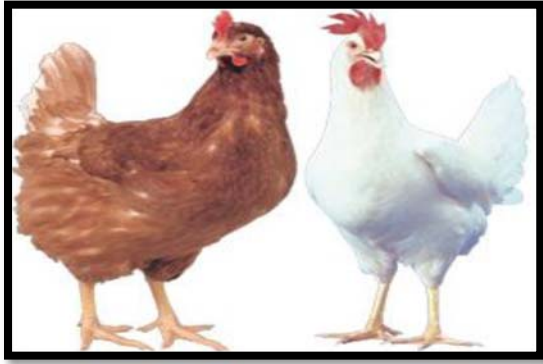
3. A hen may lay egg on each of the four consecutive days and on the fifth day fails to produce an egg, this **pattern of laying eggs** is called

- A. egg incubation
- B. egg clutch
- C. egg grading
- D. egg candling

SHORT ANSWERS:

a. What are the **two** features of the pre commercial poultry industry? **(2 marks)**

b. **Name** the layer breed and state **one** characteristic of it. **(2 marks)**



c. Identify one of the **features** of the rooster and hen that you have learnt in relation to feathers in their tail. **(2 marks)**

d. Briefly **explain** how does poultry birds raised in extensive system are susceptible to diseases. **(2 marks)**

e. **Compare** off laying and moulting in layer birds. **(2 marks)**