



CHUMEY HIGHER SECONDARY SCHOOL
BUMTHANG DZONGKHAG
ANNUAL EXAMINATION-2022



Class: IX
Subject: AgFS

Full Mark: 80
Time: 2 hours

INDEX CODE:

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READ THE FOLLOWING DIRECTIONS CAREFULLY:

1. **Do not** write for the first **fifteen minutes**. This time is to be spent reading the questions. After having read the questions, you will be given two hours to answer all questions.
2. In this paper, there are two sections: **A, and B**. Read the directions to each question **carefully** and write your answer accordingly in the space provided in this question booklet itself.
3. Remember to write quickly but neatly.
4. **Do not** leave the examination hall before you have made sure that you have answered all the questions.

Section A

Answer ALL the questions
(Total 40 marks)

Question1.

a. Choose the correct answer from the options given below. Circle the correct option with a PEN. [5]

- i. An indigenous pigs are found throughout Bhutan. They are smaller in size as compared to exotic breeds of Bhutan. which one is the native pigs of Bhutan?
A. Large white
B. Duroc
C. Sapha
D. Landrace
- ii. The layers start to lay eggs when the birds attend the age of
A. 18 to 22 weeks old
B. 10 to 14 weeks old
C. 14 to 16 weeks old
D. 8 to 12 weeks old
- iii. All given below are the technique for soil management **EXCEPT**
A. Terracing
B. Crop rotation
C. Cover cropping
D. Use chemical fertilize
- iv. The dzongkha name for cabbage is
A. meto kopi
B. dama kopi
C. metohontse
D. boesem

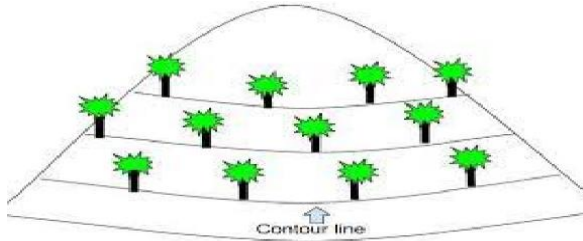
- v. Which family does peach belongs to
 A. musaceae
 B. myrtaceae
 C. rosaceae
 D. rutaceae
- vi. Farmers follow important intercultural management practices to increase the productivity of tomato. One such practice is shown in the diagram below.



If you are a farmer, what technique would you consider shown in above figure?

- A staking.
 B pruning.
 C training.
 D mulching
- vii. Place where plants are grown for transplanting, for use as stock for budding and grafting, or for sale.
 A Nursery
 B Mass production
 C Small scale production
 D Large-scale production
- viii. Removable of unwanted grass from the vegetable garden is called
 A harding
 B thinning
 C weeding
 D earthing up
- ix. Which one is the variety of potato?
 A White top
 B Snowball 16
 C white summer
 D Kufri Jyoti
- x. It is predominantly cultivated as a cash crop than as a staple food by Bhutanese farmers. It is mostly eaten as vegetables. The above statement best describes about
 A peas
 B potatoes
 C bush beans
 D cauliflower

- xi. The diagram below shows the orchard layout.



Which orchard layout is shown in the above diagram?

- A Square system
 B Contour system
 C Hexagonal system
 D Rectangular system
- xii. It is native to China and Siberia. In Bhutan it is found in places like the backyard of the Dzongs. It is rich in vitamin C. It also contains carbohydrates, proteins, iron, calcium, niacin and phosphorus. Which fruit does the above statement describe?
 A guava B Apple C Peach D Apricot
- xiii. The diagram below shows one of the vegetative propagations of fruit trees.



The type of vegetative propagation in the above diagram is

- A bark grafting
 B side grafting
 C root grafting
 D tongue grafting
- xiv. It is also known as Bajo apple as it was released from Bajo Agriculture research Centre. It is a variety recommended for cultivation in subtropical region. Which one given below is known as Bajo apple?
 A Lobo C Red delicious
 B Anna D Golden Delicious
- xv. Tashi wants to grow climber beans in her garden but she is not sure about plant spacing that is plant to plant and row to row distance. The spacing you would recommend her to follow would be
 A P-P = 45cm and R-R = 60 cm C P-P = 60 cm and R-R = 80 cm
 B P-P = 50 cm and R-R = 70 cm D P-P = 50 cm and R-R = 100 cm

b. Fill in the blanks

[5]

- i. The diet that provides appropriate amounts of all nutrients in the correct proportion is called.....
- ii. The Dzongkha name of plum is
- iii. The covering of garden soil with dried leaves to retain moisture for vegetable is called.....
- iv. The rearing of birds by people for eggs, meat, and feather is called.....
- v. The technique of converting the wastes into humus to improve the fertility and productivity of soil is called.....

c. Match each item in column A against the most appropriate item in column B.

[5]

Column A	Column B	Answers
1. It is done to make the plant base strong and stable to avoiding lodging of plants even if there happens to be strong winds.	a. Thinning	1.....
2. it is the cutting of unwanted branches with tangled mass of vegetation allows light and penetration inside the canopy.	b. hardening	2.....
3. It involves removing of weak, unhealthy, diseases, insect pest damaged and dense plants from the nursery beds.	c. Mulching	3.....
4. It is done, so that, the seedlings become hardy to bear the the shock of transplanting.	d. Pruning	4.....
5. It is the covering of nursery beds with organic matter like straw or chopped grasses such as young artemisia leaves to control weeds and easy emergence of seedlings.	e. Earthing up	5
	f. Training	

d. Write True or False against each statement.

[1x5= 5]

- i. Agriculture is anything having to do with farming.
Ans.....
- ii. Exotic poultry production is high and also required more care and attention.
Ans.....
- iii. The oestrus cycle for pig is 31 days.
Ans.....
- iv. Weed control becomes difficult while raising seedling in the nursery.
Ans.....
- v. Fruits are rich in carbohydrates, vitamins and minerals.
Ans.....

e. Short questions answer

i. Why watering and thinning of fruits is very important in the early stages? Give two reasons. [2]

Ans.....
.....
.....
.....

ii. Name at-least **TWO** varieties of peach in Bhutan. [2]

Ans.....
.....
.....

iii. What is the full form of FYM and AgFS? [2]

Ans.....
.....
.....

iv. Explain how cabbage are transplanted. Mention its steps. [2]

Ans.....
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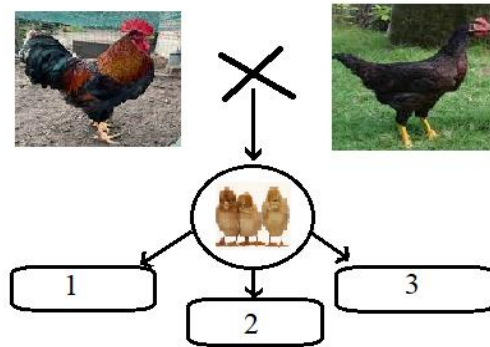
v. Why grafting is considered as very expensive method of propagation? Give Two reasons. [2]

Ans.....
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Section –B
Attempt any four questions
(Total mark: 40 marks)

Question2.

- a) The picture below is the crossbreeding program for the enhancement of poultry production. Mention at-least three advantages of crossbreeding purebred rooster with native hens. [3]



Ans.....

- b) In the modern agriculture system, most people prefer to developed nursery to enhanced the production of seedlings. Mention some of the process of nursery preparation for cabbage. [3]

Ans.....

- c) Transplantation process is the most important aspects in growing green vegetables of any types. Explain the transplantation procedure of the cauliflower. [2]

Ans.....

d) Plum is grown mainly for self-consumption but not for commercial production. Justify with at-least **TWO** reasons. [2]

Ans.....

Question 3

a) You are asked to identify the sick chicken in the poultry farm. Mention at-least two sign and symptoms you would consider? [2]

Ans.....

b) Complete the table given below: [2 ½]

Procedures of growing	Optimum temperature required for growth	Spacing R-R and P-P	Soil pH value Requirement
Cabbage	1.....	R-R= 60 cm P-P= 45 cm	4.....
Apple	3.....	R-R= 5m P-P= 5m	5.....
Cauliflower	15-20°C	2.....	PH= 6 to 7

c) Most of the people in Bhutan now take keen interest in growing vegetables and fruits trees which contributes to the income generation of the nation. Mention some of the future scopes of agriculture in Bhutan. [2 ½]

Ans.....

d) Imagine you are one of the successful educated farmers in your locality. Prepare a plan to increase you production of fruits and vegetables in your field? [3]

Ans.....

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.....
Question 4.

a) The most challenging task for vegetable and fruits growers is the protection and control of pest that ruins the life of a farmers. Explain how to carry out the plant protection and pest control measures in your community. [3]

Ans.....
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b) If you are the agriculture extension officer of your gewog, how will you encourage farmers to draw interest in doing agriculture? [2]

Ans.....
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.....

c) Study the figure given below and answer to the following questions.



A



B

i. Name the care and management process that is practice in figure A and B. [1]

Ans.....
.....

ii. Mention at-least **TWO** advantages of garden care and management practices. [2]

Ans.....
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.....

iii. How would you prevent from the postharvest losses of the fruits and vegetables? [2]

Ans.....
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.....
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Question 5.

a) Farmers uses locally available organic matter like artemisia leaves as a mulching material for the cultivation of chilies. Mention **TWO** benefits of using artemisia leaves as mulching material. [2]




Ans.....
.....
.....
.....
.....
.....

b) Write the dzongkha name for the following fruits and vegetables. [3]

Fruits And Vegetables	Dzongkha name
i. Apricot	
ii. Mustard green	
iii. Walnut	
iv. Bush bean	
v. Broccoli	
vi. Peas	

c) Identify the pig breeds given below and complete the table.

[3]

Breeds of pig	Name of pig	Description of pigs
	<p>.....</p> <p>....</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
	<p>.....</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
	<p>.....,....</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>

d) State the Food and Nutrition Security Policy of the Kingdom of Bhutan, 2014.

[2]

Ans.....

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Question 6.

a) Identify the type of the soil and briefly describe their soil texture. [6]

Types of soil	Soil picture	Description of the soil based on the texture.
1.....		
2.		
3.....		

b) What is composting? Mention some of the compost making steps. [4]

Ans.....

