



# Coimisiún na Scrúduithe Stáit State Examinations Commission

AP 9.5

Leaving Certificate Applied 2006

## Vocational Specialism Agriculture/Horticulture (240 marks)

Wednesday 14 June 2006  
Morning 9.30 am to 11.00 am

### General Directions

1. Write your EXAMINATION NUMBER in this space:

2. WRITE ALL ANSWERS INTO THIS ANSWER BOOK.

THERE ARE TWO SECTIONS IN THIS EXAMINATION

*Section One:* One question of which **twelve** parts must be answered.  
Each part carries 10 marks.

*Section Two:* Candidate must answer any **four** questions from this section, based on the modules studied. Each question carries 30 marks.

For the Superintendent only	For the Examiner only	
<b>Centre Stamp</b>     	1. <i>Total of end of page totals.</i>	
	2. <i>Aggregate total of all disallowed questions.</i>	
	3. <i>Total mark awarded (1 minus 2)</i>	
	4. <i>Bonus mark for answering through Irish (if applicable)</i>	
	5. <i>Total mark awarded if Irish Bonus. (3 + 4)</i>	
	<i>Note: The mark in row 3 (or row 5 if an Irish bonus is awarded) must equal the mark in the Total box on the marking grid.</i>	

**Section One**

**(120 marks)**

**Question 1. This is made up of eighteen parts i.e. (a) to (r). Any 12 parts must be answered. All parts carry equal marks (10 marks each).**

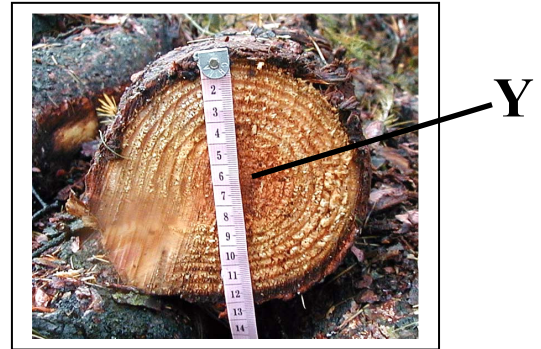
**1.**

(a) Identify the part of the tree labelled Y

Y \_\_\_\_\_

How would you calculate the age of this tree?

\_\_\_\_\_



(b) A deciduous tree is one which

\_\_\_\_\_

Name a deciduous tree used in forestry in Ireland

\_\_\_\_\_

(c) How are the seeds of coniferous trees scattered?

\_\_\_\_\_

The terminal bud is found on what part of the tree/branch?

\_\_\_\_\_

(d) Identify the garden tool shown in the picture

\_\_\_\_\_

How would you safely store this tool?

\_\_\_\_\_



(e) Identify the motor/electric tool used in the garden

\_\_\_\_\_

Name one piece of safety equipment you need when using this motor/electric tool

\_\_\_\_\_



(f) A common plant nutrient added to the soil is

\_\_\_\_\_

Plants use this nutrient to develop what part of the plant structure?

\_\_\_\_\_

(g) A common weed found on lawns is

\_\_\_\_\_

This weed is best removed by using a particular type of weed killer. Name this type of weed killer

\_\_\_\_\_

(h) The garden feature labelled **X** is called a

\_\_\_\_\_

Name a plant you would use to grow up and over this feature

\_\_\_\_\_



(i) The production of new plants without using flowers and seeds is called

\_\_\_\_\_

Name one structure or method used for producing new plants in this way \_\_\_\_\_

\_\_\_\_\_

(j) The sorting of flowers or fruit or vegetables according to their quality before being sold is called

\_\_\_\_\_

Another way in which flowers or fruit or vegetables can be sorted is according to their

\_\_\_\_\_

(k) In the growing of flowers or fruit or vegetables a 'cold frame' will

**preserve plants    slow growth    speed up growth    kill pests    none of these**

Underline the correct answer above

The shelf life of flowers or fruit or vegetables is lengthened by \_\_\_\_\_

(l) Identify one aspect of our climate which can seriously affect the production of flowers or fruit or vegetables \_\_\_\_\_

What could you do to prevent the damage caused by the above named aspect of our climate?

\_\_\_\_\_

(m) You investigated a number of careers or jobs as part of your study of the Milk and Meat Production module.

In the case of one named career or job what work is done by this person as part of their job?

Name of career or job \_\_\_\_\_

Name **one** skill required in this career or job \_\_\_\_\_

\_\_\_\_\_

(n) The farm machine shown is called

\_\_\_\_\_

The purpose of this machine is to

\_\_\_\_\_



(o) Another word or term for 'oestrus' is

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A symptom or sign that an animal is in 'oestrus' is

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(p) Dried preserved grass is called \_\_\_\_\_

Fermented grass is called \_\_\_\_\_

(q) Name a poisonous plant found in grassland

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Why is the topping of grass carried out?

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(r) Identify the hazard symbol shown

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Name a substance likely to carry this symbol

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**Section Two**

**(120 marks)**

Answer any 4 questions from the following 6 questions, which are based on the modules you have studied. All questions carry equal marks.

**2. BASIC HORTICULTURE**

- (a) The root of a plant absorbs water and \_\_\_\_\_ from the soil
  
- (b) Match the plant structure in column A with the descriptive term in column C by placing the most appropriate term in column B. See shaded example.

Column A	Column B	Column C
Rose Thorn	Modified Leaf	Modified Root
Potato Tuber		Modified Leaf
Onion Bulb		Modified Leaf
Turnip		Modified Stem

- (c) Soil is composed of both living and non-living parts.

Identify or name a living part of soil \_\_\_\_\_

Identify or name a non-living part of soil \_\_\_\_\_

In the case of the above named 'living part' of the soil describe how it creates a healthy soil

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(d) The pictures below show a number of factory-produced compost bins.



Briefly describe the steps you would take in making a compost heap.

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What household or garden waste materials should not be placed in a compost heap?

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Suggest one problem or disadvantage associated with a compost heap and state how you would solve or deal with the named problem or disadvantage

Problem or disadvantage \_\_\_\_\_

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Solution \_\_\_\_\_

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### 3. GARDEN DESIGN

(a) Name a plant that flowers in late winter/ early spring \_\_\_\_\_

(b) State whether the following statements are true or false, by ticking  the correct box.

- Luxury lawn seed is best for playground areas      True       False
- ‘Damping Off’ is a disease of seedlings      True       False
- A Trellis is a Hard Landscape feature      True       False

(c) In preparing for your summer garden you have decided to raise your own bedding plants from seed. The pictures below show some of the steps you would take



How would you make sure the compost you use is free from pests and diseases?

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In sowing very tiny seeds how would you make sure they are well scattered over the full area of the tray?

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Suggest a method for keeping the compost moist and well watered

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(d) During your study of the Garden Design module you looked at a number of gardens and compared their design and layout.

What have you learned about creating a well designed garden?

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Gardens can be designed according to different styles. Name **one** of these styles and what it is about the appearance of the garden that makes it belong to this style.

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What would you take into consideration in designing a garden layout for an elderly person?

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Name **two** features you would place in a garden for young children.

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## 4. FLORISTRY, FRUIT & VEGETABLES.

(a) Name the State body responsible for the promotion of the floristry, fruit and vegetable industries

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(b) Complete the following sentences in the spaces provided, using the words listed below.

- A common pest of flowers or fruits or vegetables is the \_\_\_\_\_
- The production of flowers or fruits or vegetables is best done on a large \_\_\_\_\_
- Organic weed control can involve the use of \_\_\_\_\_

**Mouse**

**Scale**

**Herbicides**

**Mulching**

**Number**

**Aphid**

(c) In your study of this module you visited a retail outlet

In what way were the flowers or fruit or vegetables displayed?

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Give a reason for the form of presentation or display\_\_\_\_

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Comment on the reason for locating the flowers or fruits or vegetables close to the entrance to the retail outlet.

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(d) During your study of this module on flower or fruit or vegetables you looked at their production. Describe what you have learned under each of the following headings.

Name of flower or fruit or vegetable \_\_\_\_\_

A problem, during production, other than pests and disease \_\_\_\_\_

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How to solve the problem mentioned above \_\_\_\_\_

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Disease control/prevention during production \_\_\_\_\_

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Packaging \_\_\_\_\_

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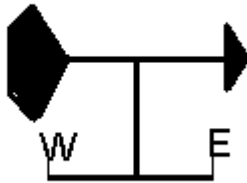
## 5. FORESTRY

(a) Clear-felling a forest means \_\_\_\_\_

(b) Match the correct word in column A with the correct word in column B to give an answer in Column C. **See shaded example**

Column A	Column B	Column C
1 Holly Tree	a Hurley	1 + c
2 Pine Cone	b Seed	
3 Chestnut	c Evergreen	
4 Ash Tree	d Fruit	

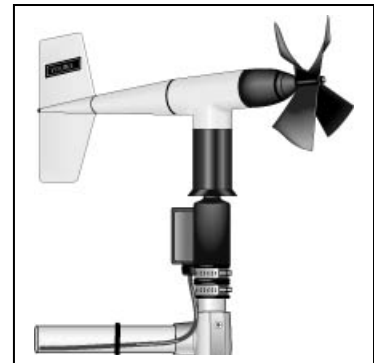
(c) The diagrams below show **three** pieces of equipment used in the monitoring and recording of the weather. Name the three pieces of equipment



**A**



**B**



**C**

A \_\_\_\_\_ B \_\_\_\_\_ C \_\_\_\_\_

What does each piece of equipment measure?

A \_\_\_\_\_

B \_\_\_\_\_

C \_\_\_\_\_

- (d) As part of your study of this module you investigated the effect of forestry, particularly coniferous forests, on the environment. Briefly describe these effects using the following headings as a guide.

The landscape \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The atmosphere \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The rivers \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The habitat of animals and plants \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## 6. GRASS

(a) Why is clover added to a grass seed mixture? \_\_\_\_\_

(b) State whether the following statements are true or false, by ticking  the correct box.

- Grass is a monocotyledonous plant      True       False
- Grass grows best in soil with a low pH      True       False
- Rye grasses are not commonly used in agriculture      True       False

(c) Examine the photograph of the silage pit shown below



Suggest **two** ways in which you could alter the design of the above silage pit in order to reduce the possibility of pollution of nearby rivers and streams.

1 \_\_\_\_\_

\_\_\_\_\_

2 \_\_\_\_\_

When cutting silage what could you do to reduce the amount of effluent produced when it is in the silage pit?

\_\_\_\_\_

\_\_\_\_\_

- (d) You have been assigned the task of advising a farmer how to improve some grassland. Describe the work to be carried out using the following headings as a guide.

Adjusting the pH of the grassland\_\_\_\_\_

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Improving drainage\_\_\_\_\_

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Controlling weeds\_\_\_\_\_

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Applying fertilisers\_\_\_\_\_

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## 7. MILK AND MEAT PRODUCTION

(a) 'Long Life' milk is milk which has been \_\_\_\_\_

(b) Match the correct word in column A with the correct statement in column B to give an answer in Column C. **See shaded example**

Column A	Column B	Column C
<b>1 Dual Purpose</b>	<b>a Harmful Pest</b>	<b>1 + d</b>
<b>2 Parasite</b>	<b>b Animal Waste</b>	
<b>3 Offal</b>	<b>c Afterbirth</b>	
<b>4 Placenta</b>	<b>d Milk and Meat</b>	

(c) Milk or meat animals are often given additional feedstuffs other than grass, hay or silage. In relation to an animal you have studied,

Name an additional feedstuff \_\_\_\_\_

\_\_\_\_\_

Why give the animal this additional feedstuff? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Describe how you would properly store this feedstuff.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



(d) The diagram on the next page is the layout of an animal farm

Identify two good features of the layout design

1
2

Identify two features of the layout design which could be improved upon

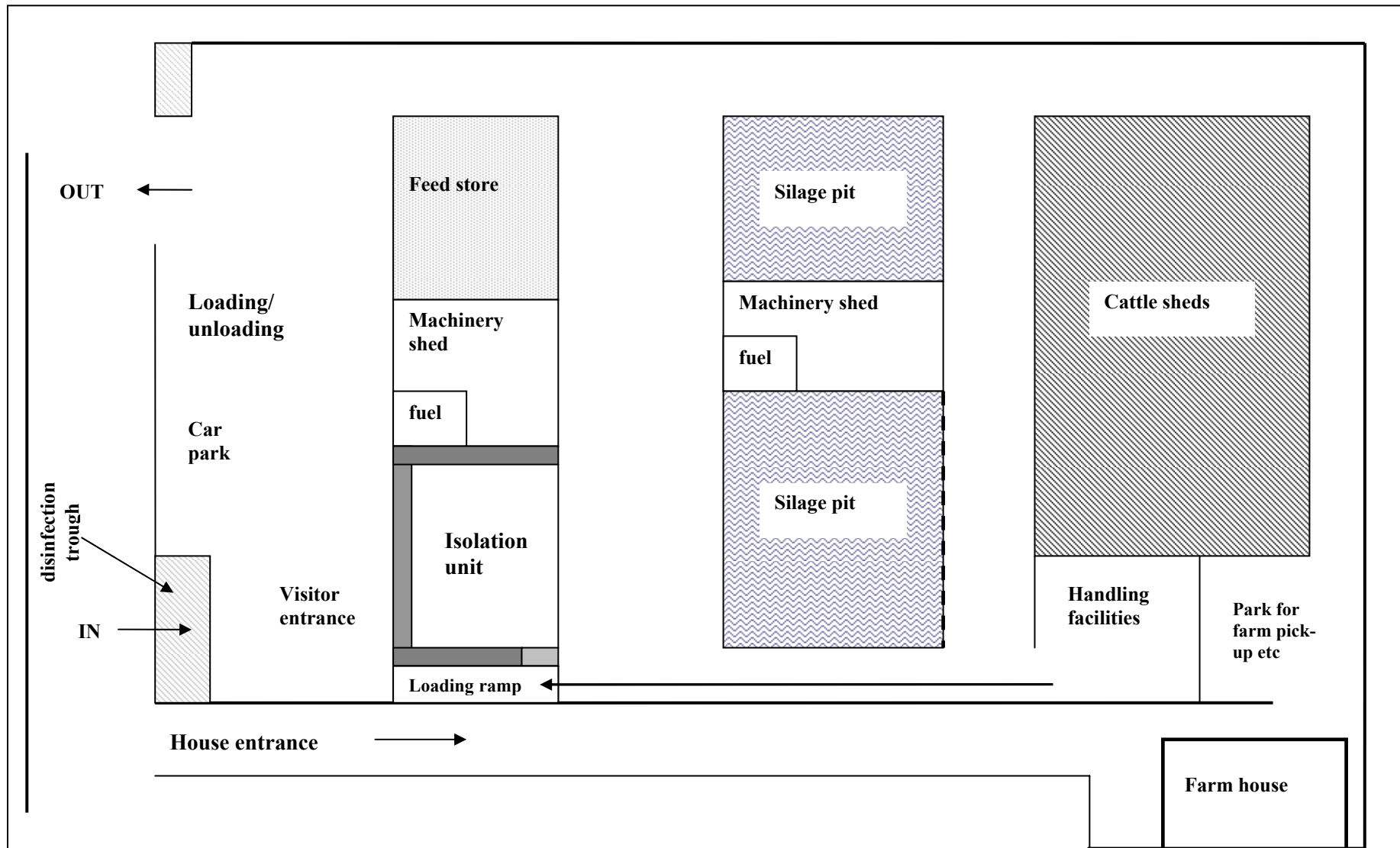
1
2

What features in the layout design will help to prevent pollution?

1
2

What features in the layout design will help to reduce the spread of disease?

1
2



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**For the examiner only**

<b>Question</b>	<b>Mark</b>
<b>Section 1</b>	
<b>1</b>	
<b>Section 2</b>	
<b>2</b>	
<b>3</b>	
<b>4</b>	
<b>5</b>	
<b>6</b>	
<b>7</b>	
<b>Grand Total</b>	
<b>Disallowed</b>	
<b>Total</b>	