



Candidate Number:

Candidate Name:

Centre Number/Name:

RHS LEVEL 2 CERTIFICATE IN HORTICULTURE

Wednesday 28 June 2006

IMPORTANT - please read carefully before commencing

- i) The duration of the papers in Horticulture II is **1½ hours**;
- ii) **ALL** questions should be attempted in Section 1;
- iii) **EACH** question carries **2 marks**;
- iv) Write your answers legibly on the lines provided;
- v) Use **EITHER** metric **OR** imperial measurements but **NOT** both;
- vi) Where plant names are required they should include genus, species and, where appropriate, cultivar.

HORTICULTURE II – Ornamental, Principles & Maintenance

Section 1 – Short Answer Questions

Please turn over

ALL questions should be attempted

	Marks
Q1 Define the term 'compound fertiliser' using a NAMED example.	2
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Q2 State the damage caused by a NAMED type of pest on a NAMED plant.	2
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Q3 a) Name TWO grasses suitable for a utility lawn.	
b) State the height of cut for this mixture in summer.	2
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ALL questions should be attempted.

Q4 a) State **TWO** characteristics which make a plant suitable for use as a green manure.

b) Name **TWO** plants used for this purpose.

2

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Q5 State **FOUR** essential maintenance operations carried out to an herbaceous border in spring.

2

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Q6 Define **EACH** of the following terms:

- i) field capacity;
- ii) available water.

2

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Please turn over

ALL questions should be attempted.

Q7 State the mode of action of **TWO** different **NAMED** types of herbicide. **2**

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Q8 a) State **TWO** methods of sowing hardy annual seeds directly into the ground.

b) State **ONE** advantage and **ONE** limitation of **EACH** method.

2

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Q9 State **FOUR** methods by which damage to the environment may be minimised in horticultural practice.

2

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Please see over

ALL questions should be attempted.

Q10 a) State **TWO** fungal diseases of **NAMED** plants.

b) Give a cultural method of control for **ONE** of the diseases named in a).

2

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Q11 Name **FOUR** plants suitable for a summer display in a hanging basket.

2

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Q12 Describe **TWO** distinct pruning techniques used for roses and state the season when **EACH** is carried out.

2

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Please turn over

ALL questions should be attempted.

Q13 State **FOUR** symptoms which may indicate a plant needs repotting.

2

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Q14 State **TWO** environmental conditions required for a **NAMED** tender perennial plant over-wintering in a specified protected setting.

2

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Q15 State **FOUR** risk factors to be considered before using a pedestrian operated rotary cultivator.

2

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RHS LEVEL 2 CERTIFICATE IN HORTICULTURE

Wednesday 28 June 2006

IMPORTANT - please read carefully before commencing

- i) The duration of the papers in Horticulture II is **1½ hours**;
- ii) Any **THREE** questions in Section 2 should be attempted;
- iii) **EACH** question carries **10 marks**;
- iv) Start **EVERY** new question on a separate answer booklet;
- v) Use **EITHER** metric **OR** imperial measurements but **NOT** both;
- vi) Where plant names are required they should include genus, species and, where appropriate, cultivar.

HORTICULTURE II – Ornamental, Principles & Maintenance

Section 2 – Structured Questions

Please turn over

Answer **THREE** questions only from this section.

		Marks
Q16	a) Describe TWO distinct uses for peat in horticulture.	2
	b) State an alternative that may be used for EACH of those described in a) and compare its properties with those of peat.	8
Q17	a) State FIVE environmental differences between a protected situation and outdoor unprotected conditions.	5
	b) Explain how EACH difference affects the growth of plants under protection.	5
Q18	a) Name TWO trees for providing attractive ornamental bark and TWO for ornamental fruit.	2
	b) Describe the horticultural characteristics of TWO of the trees named in a) AND state the range of sites and soils suitable for EACH .	8
Q19	Describe the cultivation of a NAMED hardy annual grown for cut flower production under the following headings:	1
	i) sowing/thinning;	3
	ii) crop culture and support;	3
	iii) harvesting.	3

Please see over

- Q20** a) Name **ONE** bacterial disease of a **NAMED** plant. **2**
- b) For the disease named in a), state:
- i) method of infection; **3**
- ii) symptoms of attack; **3**
- iii) **ONE** method of minimising the damage caused. **2**
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- Q21** a) State **FOUR** hazards associated with the use of **2**
- chemical sprays in the garden.
- b) Describe the safety precautions necessary when **8**
- handling, using and storing horticultural chemicals.



RHS LEVEL 2 CERTIFICATE IN HORTICULTURE

22nd June 2006

Horticulture II

Examiners Comments

Candidates Registered	1779	Pass with Commendation	747 (36.5%)
Candidates Entered	1540 (87%)	Pass	559 (48.5%)
Absent/Withdrawn/Deferred	239 (13%)	Fail	234 (15%)
Total Candidates Passed	1306 (85%)		

General Overview by Senior Examiner

1. Candidates should be able to demonstrate a good range of plant knowledge and be able to give accurately named plant examples where appropriate. Common names and generic names are often too vague and cannot be rewarded in the positive manner that genus, species and where appropriate, variety/cultivar can.
2. Candidates must be able to display accurate knowledge of the technical terms and concepts detailed in the syllabus, in the context of horticulture, and be aware that wider interpretation will not be rewarded
3. The introductory rubric given on the first page of the question paper should be read carefully by candidates. Each year there is a significant number of candidates who ignore, or misread the instructions given and consequently may not perform as well as they could have done. This is particularly so where candidates answer either more questions, or more parts to a question, than are required.
4. Candidates should pace themselves during each paper. The most successful candidates allow sufficient time to read the question thoroughly before answering it and also take time to read through their answers.
5. Candidates need to interpret key words within questions, particularly those such as state, list and describe. Questions requiring descriptions, or explanations, obviously require a more detailed answer than those requiring a list.

6. In the short answer sections, it is important to ensure that responses are to the point and contained within the space allocated. Candidates should bear in mind that small sketches may be used to convey information more succinctly than words in some cases.
7. Successful candidates ensure that their answers to structured questions are focussed and to the point. It is disappointing when they cannot be rewarded for their efforts because the answer is irrelevant to the particular question. Candidates should take note of the mark allocation for specific sections and allocate their time and efforts accordingly.
8. Diagrams in structured questions can enhance an answer and where appropriate, can replace detailed descriptions. They should be large, clear and well-annotated and preferably with a pencil. Colour may be used successfully but only where it is relevant to the answer.
9. It is important that candidates have the opportunity to practise both short and structured questions. Ideally, some practice should occur in time-constrained situations.
10. Candidates should be aware of the reading list of suggested books for the RHS Level 2 Certificate in Horticulture is available from the Education Department.

Paper 1. Short Answer Questions

Marks

*Q1. Define the term 'compound fertiliser' using a **NAMED** example.* **2**

A well understood concept, with most candidates able to give a named example.

*Q2. State the damage caused by a **NAMED** type of pest on a **NAMED** plant* **2**

Many good answers were received, although some candidates failed to specify damage fully. For example 'slime trails' for slugs was not rewarded.

*Q3. a) Name **TWO** grasses suitable for a utility lawn.*
b) State the height of cut for this mixture in summer. **2**

Although some good answers were received, a significant number of candidates named grasses suitable for 'luxury' lawns, and there was a failure to fully identify the plants. Only a proportion of answers was within an acceptable range of heights of cut.

- Q4. a) State **TWO** characteristics which make a plant suitable for use as a green manure.
- b) Name **TWO** plants used for this purpose. 2

Generally well answered, although many points were lost where recommended plants were not fully identified.

- Q5. State **FOUR** essential maintenance operations carried out to an herbaceous border in spring. 2

Many good responses were given, however operations such as digging, and shrub pruning were penalized.

- Q6. Define **EACH** of the following terms:
- i) field capacity;
- ii) available water. 2

Disappointingly few fully correct definitions were given of these basic soil science terms.

- Q7. State the mode of action of **TWO** different **NAMED** types of herbicide. 2

Some good answers were seen, but there was in some, confusion between the terms translocated and systemic, and trade names were sometimes given rather than active ingredients.

- Q8. a) State **TWO** methods of sowing hardy annual seeds directly into the ground.
- b) State **ONE** advantage and **ONE** limitation of **EACH** method. 2

Part a) was well answered, with most candidates quoting sowing in drills or broadcasting. Part b) was less well rewarded, as many answers lacked sufficient detail.

- Q9. State **FOUR** methods by which damage to the environment may be minimised in horticultural practice. 2

A well answered question. Full marks were awarded where each point was significantly different.

- Q10. a) State **TWO** fungal diseases of **NAMED** plants.
b) Give a cultural method of control for **ONE** of the diseases named in a). 2

Most candidates were able to give correct examples, although some lost marks for failing to give named examples. A few diseases were not fungal. Some discretion in marking was used to decide to which disease part b) was being referred. A few candidates lost marks by giving a chemical method of control.

- Q11. Name **FOUR** plants suitable for a summer display in a hanging basket. 2

This question showed a disappointing lack of knowledge of the plants commonly used in temporary summer displays. Full marks were only awarded for plants fully identified genus & species, or genus & variety name.

- Q12. Describe **TWO** distinct pruning techniques used for roses and state the season when **EACH** is carried out. 2

This was generally well answered with candidates typically describing autumn pruning, spring pruning and dead heading of bush roses. Full marks were awarded where details of the position of the cuts was given.

- Q13. State **FOUR** symptoms which may indicate a plant needs repotting. 2

This was well answered, with most candidates describing the visible effects on roots, and aerial symptoms of nutrient and moisture stress.

- Q14. State **TWO** environmental conditions required for a **NAMED** tender perennial plant over-wintering in a specified protected setting. 2

Satisfactory answers were generally given to this question. The highest marks were awarded where specific conditions eg temperature and moisture status were cited.

- Q15. State **FOUR** risk factors to be considered before using a pedestrian operated rotary cultivator. 2

Candidates most commonly responded to this question by stating precautions (eg the use of protective clothing) rather than risk factors (eg loose stones being projected and causing injury).

Paper 2. Structured Questions.

**Mark
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- Q16. a) Describe **TWO** distinct uses for peat in horticulture. 2
- b) State an alternative that may be used for **EACH** of those described in a) and compare its properties with those of peat. 8

The first part of this question was generally well answered by those candidates who attempted it, highest marks being obtained for full descriptions of two uses of peat. Alternatives given were not always appropriate, for example John Innes compost contains peat. Marks were lost if properties of alternatives were correctly described, but not compared with those of peat.

- Q17. a) State **FIVE** environmental differences between a protected situation and outdoor unprotected conditions. 5
- b) Explain how **EACH** difference affects the growth of plants under protection. 5

Many good responses were made to this question. However many candidates simply listed 5 environmental factors without stating in what way they differed under protection (eg 'higher', 'lower'). Many good descriptions of how environmental factors are controlled, but some failed to link these with the effect on plant growth. The best answers applied knowledge and information to the exact requirements of the question.

- Q18. a) Name **TWO** trees for providing attractive ornamental bark and **TWO** for ornamental fruit. 2
- b) Describe the horticultural characteristics of **TWO** of the trees named in a) **AND** state the range of sites and soils suitable for **EACH**. 8

There were some excellent answers to this question. Marks were, however, lost for failing to fully identify recommended plants according to the rubric. Some inappropriate plants were also named, for example *Cornus alba* is a shrub, and *Prunus subhirtella* is noted for its flowers, rather than fruit. Some candidates gave inadequate plant descriptions, and/or were unsure of suitable sites and soils.

Q19. Describe the cultivation of a **NAMED** hardy annual grown for cut flower production under the following headings: 1

- i) sowing/thinning; 3
- ii) crop culture and support; 3
- iii) harvesting. 3

Some good answers were given, but there was disturbing evidence that a proportion of candidates who attempted the question were unable to fully name a hardy annual plant grown for cut flower. In the second part of the question, description of sowing and thinning did not always include spacing details, but crop culture and support was well covered. Harvest was generally described to include, time of day, crop condition and treatment.

Q20. a) Name **ONE** bacterial disease of a **NAMED** plant. 2

b) For the disease named in a), state:

- i) method of infection; 3
- ii) symptoms of attack; 3
- iii) **ONE** method of minimising the damage caused. 2

Although there were some good responses, too many candidates named a fungal disease rather than bacterial. The method of infection, and symptoms were often described in a rather vague way. Control was often well covered, involving pruning, hygiene, and disposal of affected material.

Q21. a) State **FOUR** hazards associated with the use of chemical sprays in the garden. 2

b) Describe the safety precautions necessary when handling, using and storing horticultural chemicals. 8

Many excellent responses were received to this question. Marks were, however, lost where safety precautions were simply listed, with no qualification as to why they were required.
