

RHS LEVEL 3 ADVANCED CERTIFICATE IN HORTICULTURE

2012

PRACTICAL EXAMINATION – MODULE C

IMPORTANT: Please read carefully before commencing.

- i) Duration of this paper is **3 hours**.
- ii) There are **THREE** sections **A**, **B** and **C** to complete.
- iii) **ALL** questions are to be attempted.
- iv) **ALL** work to be labelled with the candidate's number.

ANSWER ALL QUESTIONS

Section A – Potting Shed

MARKS

NOTE – 15 Proficiency marks are available for this section of the paper.

- Q1** Prick off **ONE** tray of **40** seedlings labelled **A**, using the full-size tray and potting compost provided. **20**
- Q2**
- a) Sow **ONE** full sized seed tray for **EACH** of the seeds labelled **B** and **C**, using the appropriate compost.
 - b) Cover **HALF** of **EACH** seed tray if appropriate.
 - c) Label **EACH** seed tray as appropriate. **30**
- Q3** Pot up **FIVE** of the rooted cuttings labelled **D**, using the containers and compost provided.
- Carry out any appropriate maintenance tasks. **20**
- Q4** Select, prepare and insert cuttings from **EACH** of the specimens labelled **E** and **F** into the appropriate container and cutting compost provided. **30**
- Leave any unused material together with the mother plants at your workstation.

ANSWER ALL QUESTIONS

Section B – Plots

MARKS

NOTE – 15 Proficiency marks are available for this section of the paper.

- | | | |
|-----------|--|-----------|
| Q5 | In this question you will aim to sow grass seed on to an accurately marked out and prepared seed bed. | |
| | a) Roughly prepare approximately half of your plot, commencing with forking. | 10 |
| | b) Accurately mark out a rectangle 1.5m x 2m, using the equipment provided. | 10 |
| | c) Carry out final soil cultivations in preparation for the sowing of grass seed on the rectangle. | 7 |
| | d) Sow the grass seed labelled G at a rate of 35g/m ² on to the prepared rectangle. | 8 |
| | | |
| Q6 | a) Across the 3m width of the plot, prepare the soil in readiness for planting the transplants labelled H . | 10 |
| | b) Select and plant out SIX transplants in EACH of TWO staggered rows at the correct spacing, leaving the rest of each row marked out but NOT planted. | 10 |
| | | |
| Q7 | a) Across the 3m width of the plot, prepare the soil in readiness for sowing TWO rows of the seed labelled I . | 12 |
| | b) Sow TWO rows of the seed labelled I across the width of the plot at appropriate spacing, with rows 20cm apart. | |
| | Leave half of EACH row uncovered. | 18 |
| | | |
| Q8 | Plant the container grown woody shrub labelled J . | 15 |

Please turn over/.....

ANSWER ALL QUESTIONS

Section C – Plant, Pest, Disease & Disorder Identification

	MARKS
Q9 Determine the pH of the soil sample K , using the kit provided. At the conclusion of your test, label the test tube with your candidate number and leave where advised.	6
Q10 A pH test has been carried out on a soil and the result is shown by the tube labelled L . On the pro-forma provided, name TWO plants from different genera that would grow well in soil of this pH. Give the genus and specific epithet in EACH case.	4
Q11 On the pro-forma provided, identify the plant specimens labelled 1 – 40 , giving the genus and specific epithet in EACH case.	40
Q12 On the pro-forma provided, identify the pest, disease or disorder affecting EACH of the specimens labelled 41 – 50 , giving the common name in EACH case.	10
Q13 On the pro-forma provided, identify the weeds and seeds labelled 51 – 60 , giving the genus and specific epithet for EACH weed and genus only for EACH seed.	10
	300

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Sharing the best in Gardening

RHS LEVEL 3 ADVANCED CERTIFICATE IN HORTICULTURE 2012

MODULE C PRACTICAL EXAMINATION

Examiners Report

Candidates Registered	26		Total Candidates Passed	15	71.43%
Candidates Entered	21	80.77%	Passed with Commendation	4	19.05%
Candidates Absent	1	3.85%	Passed	11	52.38%
Candidates Deferred	0	0.00%	Failed	6	28.57%
Candidates Withdrawn	4	15.38%			

Guidance notes for candidates and tutors

Please note that this practical examination operated for the last time in 2012. RHS practical qualifications are now assessed within approved centres.

This examination report concentrates on areas which candidates found challenging or appeared not to be fully prepared. The report contains two components.

1) The examination question is recorded with the marks allocated.

2) Comments.

These comments relate to:

- a) Was the task completed safely?
- b) Did the candidate use the appropriate resources efficiently?
- c) Was the method used correct and appropriate for the task?
- d) The method used relates to modern* horticultural practices
*within the last 10 years.
- e) An overall comment on the performance of candidates with each question.

Important Note

A common misconception by candidates is “we must do this the RHS way”. There is no RHS way. Examiners mark candidates’ work with reference to the criteria as recorded under the specific comments in this report.

ANSWER ALL QUESTIONS

Section A – Potting Shed

MARKS

NOTE – 15 Proficiency marks are available for this section of the paper.

- Q1** Prick off **ONE** tray of **40** seedlings labelled **A**, using the full-size tray and potting compost provided. **20**

The pricking out of seedlings was conducted efficiently by the majority of candidates. Examiners however observed that several candidates, inadequately filled trays of compost resulting in insufficient depth to hold roots and the hypocotyl.

- Q2**
- a) Sow **ONE** full sized seed tray for **EACH** of the seeds labelled **B** and **C**, using the appropriate compost.
 - b) Cover **HALF** of **EACH** seed tray if appropriate.
 - c) Label **EACH** seed tray as appropriate. **30**

The seed sowing was very variable. Candidates lost marks by inadequate tray filling, lack of labelling and more seriously covering fine seed and sowing medium seed too thickly.

- Q3** Pot up **FIVE** of the rooted cuttings labelled **D**, using the containers and compost provided.

Carry out any appropriate maintenance tasks. **20**

The potting of rooted cuttings was in general efficiently conducted. Marks were lost by candidates who did not tip the plants and failed to remove the dead and damaged leaves. It was noted that some candidates overfilled the pot with compost which will prevent efficient watering at a later date.

- Q4** Select, prepare and insert cuttings from **EACH** of the specimens labelled **E** and **F** into the appropriate container and cutting compost provided. **30**

Leave any unused material together with the mother plants at your workstation.

The Streptocarpus cuttings were prepared efficiently and high marks were gained in this section. The Primula cuttings were inappropriately prepared, the majority of candidates prepared the cuttings as leaf lamina cuttings which was incorrect. The cuttings should have been prepared as root cuttings. The examiner noted that many of the Primula cuttings were labelled as Streptocarpus which could explain the incorrect cutting method selected by candidates.

In general marks were lost owing to a failure to care for the stock plant. Organisation of the bench space was poor which in some cases resulted in contamination of the potting compost with the cutting compost.

ANSWER ALL QUESTIONS

Section B – Plots

MARKS

NOTE – 15 Proficiency marks are available for this section of the paper.

- Q5** In this question you will aim to sow grass seed on to an accurately marked out and prepared seed bed.
- | | | |
|----|--|-----------|
| a) | Roughly prepare approximately half of your plot, commencing with forking. | 10 |
| b) | Accurately mark out a rectangle 1.5m x 2m, using the equipment provided. | 10 |
| c) | Carry out final soil cultivations in preparation for the sowing of grass seed on the rectangle. | 7 |
| d) | Sow the grass seed labelled G at a rate of 35g/m ² on to the prepared rectangle. | 8 |

In general this question was efficiently completed by the majority of candidates. It was noted however that candidates spent too much time on the marking out component of the question, which resulted in rather rushed work on the other components of the question.

Some candidates struggled to use the rake effectively to produce a fine tilth for the seed bed.

- Q6**
- | | | |
|----|---|-----------|
| a) | Across the 3m width of the plot, prepare the soil in readiness for planting the transplants labelled H . | 10 |
| b) | Select and plant out SIX transplants in EACH of TWO staggered nursery rows at the correct spacing, leaving the rest of each row marked out but NOT planted. | 10 |

The main problem observed by the examiner was the inability of candidates to produce a taut line. In addition a number of candidates misread the question and planted only half the required number of plants. The majority of candidates did not correctly identify the transplants. The examiner reduced marks from candidates who planted the transplants at very close or very wide spacing.

- Q7**
- | | | |
|----|--|-----------|
| a) | Across the 3m width of the plot, prepare the soil in readiness for sowing TWO rows of the seed labelled I . | 12 |
| b) | Sow TWO rows of the seed labelled I across the width of the plot at appropriate spacing, with rows 20cm apart. | |
| | Leave half of EACH row uncovered. | 18 |

The main problem observed by the examiner was the inability of candidates

to produce a taut line.

Many candidates lost marks as the seed (Beetroot) was sown at wide spacing e.g. 300 mm apart in a single row.

Q8 Plant the container grown woody shrub labelled **J**.

15

The planting of the container grown woody shrub was completed efficiently by the majority of candidates. Some candidates rushed this question, which resulted in poor after-care of the shrub. The shrub should have been carefully pruned in order to produce balanced growth in future years.

ANSWER ALL QUESTIONS

Section C – Plant, Pest, Disease & Disorder Identification

MARKS

Q9 Determine the pH of the soil sample **K**, using the kit provided. At the conclusion of your test, label the test tube with your candidate number and leave where advised.

6

This question asked candidates to ascertain the pH of a given soil sample. All materials and equipment necessary to undertake this exercise were provided, with guidance charts available. Very few candidates were unable to successfully determine the correct pH level, and high marks were awarded. The sample had a pH of 7.5 and care needed to be taken when quantities of soil, barium sulphate, reagent (universal indicator) and deionised water were added. Warnings were offered not to undertake this question within the last 10 minutes of the examination as insufficient time remained to allow settling and to record a pH reading.

Q10 A pH test has been carried out on a soil and the result is shown by the tube labelled **L**. On the pro-forma provided, name **TWO** plants from different genera that would grow well in soil of this pH. Give the genus and specific epithet in **EACH** case.

4

A given pH value was given on a pre-set soil sample. The question asked for candidates to offer two plants from different genera that would be best suited to the pH value and grow well. Appropriate plant examples include: *Rhododendron ponticum*; *Skimmia japonica*; *Calluna vulgaris*; *Camellia japonica*; *Erica tetralix*, any two of which would have given full marks.

- Q11** On the pro-forma provided, identify the plant specimens labelled **1 – 40**, giving the genus and specific epithet in **EACH** case. **40**

Candidates were required to identify 40 plant specimens providing both genus and specific epithet in each case. Candidates offered a wide range of answers and in general scored well, suggesting plant identification had been studied in advance of the assessments. It was important for candidates to recognise that plant identification is an important element of horticulture, and high marks could be gained from this question.

- Q12** On the pro-forma provided, identify the pest, disease or disorder affecting **EACH** of the specimens labelled **41 – 50**, giving the common name in **EACH** case. **10**

Candidates were asked to identify 10 pest, disease or disorders giving a common name in each case. The samples presented for identification were: Capsid damage; canker on apple; blackfly damage on cherry; rust on garlic; sooty mould on camellia/cushion scale; adult weevil damage on Rhododendron; fasciation; powdery mildew on oak; chlorosis on wisteria; slug/snail damage. In some cases, candidates did experience difficulty with the identification, but on average many scored slightly above 50% of available marks.

- Q13** On the pro-forma provided, identify the weeds and seeds labelled **51 – 60**, giving the genus and specific epithet for **EACH** weed and genus only for **EACH** seed. **10**

This question asked candidates to identify 10 weeds and seeds providing both genus and specific epithet for each weed and genus for the seeds. In general candidates scored well where clearly revision for this type of question had been done, and where an average score was about 60% of the available marks.

General Comments

Of the three disciplines section B Plots remains the most demanding with regards to time; whilst sections A and C tend to be managed well. This year had evidence that candidates had revised all aspects of the assessments and gave evidence that they were well organised, undertook the questions in a logical and systematic order to gain allotted marks. Again proficiency marks were awarded at the discretion of the markers for sections A and B observing candidates preparation, technical skills, and approach to each question. It was important for candidates to follow the instructions of the questions opposed to assuming what a question asked.

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