



R2112

**UNDERSTANDING THE CHOICE, ESTABLISHMENT AND
MAINTENANCE OF GARDEN PLANTS AND LAWNS**

Level 2

Tuesday 14 February 2012

11.00 – 11.40

Written Examination

Candidate Number:

Candidate Name:

Centre Number/Name:

IMPORTANT – Please read carefully before commencing:

- i) The duration of this paper is **40 minutes**.
- ii) **ALL** questions should be attempted.
- iii) **EACH** question carries **10 marks**.
- iv) Write your answers legibly in the spaces provided.
- v) Use metric measurements only.
- vi) Where plant names are required, they should include genus, species and where appropriate, cultivar.
- vii) Please note, sufficient lined space is provided. It is not necessary that all lined space is used when answering a question.

ANSWER ALL QUESTIONS

MARKS

- Q1** a) State the tasks carried out when preparing and planting a spring bedding display in an established bed.

8

- b) Name **TWO** bulbous plants suitable for a spring bedding display.

2

.....

Total Mark

Total Mark

Please see over/.....

Q2 a) Describe **THREE** different methods of controlling weeds in an established herbaceous border.

6

b) Name **FOUR** plants **EACH** from a different genus suitable for a herbaceous border.

4

Total Mark

Please turn over/.....

Q3 a) Describe the planting of a container grown shrub in an ornamental border.

6

b) Name **FOUR** shrubs **EACH** from a different genus grown for autumn display.

4

Total Mark

Please see over/.....

5

5

5

Q5 a) Name **TWO** aquatic plants **EACH** from a different genus suitable for a bog garden.

2

b) Describe the establishment of a plant in a bog garden under **EACH** of the following headings:

- i) planting;
- ii) maintenance.

3

5

Total Mark

7

Q6 a) Describe the symptoms of the following lawn pest and disease:

- i) Leatherjackets;
- ii) Fusarium patch.

33

- b) State **ONE** appropriate control method for **EACH** pest and disease named in a).

2

- c) Name **ONE** pest and **ONE** disease of lawns other than those named in a).

2

Total Mark

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**The Royal Horticultural Society, Wisley, Woking, Surrey GU23 6QB.
Registered Charity Number: 222879/SC038262**



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MAINTENANCE OF GARDEN PLANTS AND LAWNS**

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| | | | |
|----------------------------------|--------------|-------------------------------|--------------|
| Candidates Registered | 494 | Pass with Commendation | 130 (32.99%) |
| Candidates Entered | 394 | Pass | 167 (42.39%) |
| Absent/Withdrawn/Deferred | 100 | Fail | 97 (24.62%) |
| Total Candidates Passed | 297 (75.38%) | | |

Senior Examiner's Comments:

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. This is particularly important when answering questions relating to particular (named) plant(s). Marks can only be awarded for these narratives where the example(s) are correctly and fully identified.
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. The examination should be regarded as a possible introduction to higher level studies, which will only be open to those who are in possession of a clear understanding of the horticultural terms and concepts which are current.
3. The introductory rubric given on the first page of each question paper should be read carefully by candidates. At each examination there are a significant number of candidates who ignore or misread the instructions given and consequently may not perform as well as they could have done.
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. They should take care to write as legibly as possible, so that the examiner is in no doubt about what is intended.
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. It is important to ensure that responses to questions are to the point. Candidates should bear in mind that small sketches might be used to convey information more succinctly than words.

7. Successful candidates ensure that their answers are focused 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 can enhance an answer and where appropriate can replace detailed descriptions. They should be large, clear and well annotated, and preferably in pencil. Colour may be used successfully but only where it is relevant to the answer.
9. In each examination it is clear that some candidates are ill prepared to answer papers of the type set. It is essential that candidates have the opportunity to practice questions. Ideally some papers should be answered in a time constrained situation.
10. Candidates should be aware of the reading list of suggested books for the RHS Level 2 Certificate in The Principles of Garden Planning, Establishment and Maintenance which is available from the Qualifications Section and can also be found on the RHS website together with past papers.

Examiners' Comments:

| | | Marks |
|-----------|--|--------------|
| Q1 | a) <i>State the tasks carried out when preparing and planting a spring bedding display in an established bed.</i> | 8 |
| | b) <i>Name TWO bulbous plants suitable for a spring bedding display.</i> | 2 |
| | a) Most candidates were able to state a range of tasks which included; removal of summer bedding, incorporation of well-rotted organic matter, raking to finished levels, planting bulbs and groundwork plants. It is important for candidates to remember that a fine tilth is not required as seeds are not being sown. Candidates who related their answer to a spring display instead of a spring bedding display could not be awarded any marks. | |
| | b) Candidates who provided the botanical names of bulbs with a long flowering season e.g. <i>Narcissus 'February Gold'</i> , <i>Tulipa 'Queen of Night'</i> and <i>Hyacinthus 'Delft Blue'</i> gained maximum marks. | |
| Q2 | a) <i>Describe THREE different methods of controlling weeds in an established herbaceous border.</i> | 6 |
| | b) <i>Name FOUR plants EACH from a different genus suitable for a herbaceous border.</i> | 4 |
| | a) The majority of candidates were familiar with a range of methods to control weeds and those that received maximum marks described them in full. These included hoeing annual and ephemeral weeds when the soil is dry, applying a mulch to suppress the growth of annual and ephemeral weeds, treating perennial weeds with a suitable herbicide e.g. glyphosate and hand weeding using a hand or border fork. | |

- b) Full marks were awarded to candidates who gave botanical names for correct examples of plants suitable for an herbaceous border e.g. *Aster novi-belgii*, *Sedum gypsicola* Herbstfreude Group, *Astrantia major* and *Geranium endressii*.
- Q3** a) *Describe the planting of a container grown shrub in an ornamental border.* **6**
- b) *Name **FOUR** shrubs **EACH** from a different genus grown for autumn display.* **4**
- a) The majority of candidates provided good descriptions of the many tasks involved in the planting of a container grown shrub e.g. from soaking the rootball through to mulching and final watering.
- b) The best candidates provided the full botanical names for a range of shrubs grown for autumn display including; *Cotinus coggygia*, *Euonymus alatus*, *Fothergilla major* and *Rhus hirta*.
- Marks could not be awarded for examples of trees.
- Q4** a) *Describe the soil characteristics required when cultivating alpine or rock garden plants in open soil.* **5**
- b) *Name **FIVE** alpine or rock garden plants **EACH** from a different genus.* **2**
- a) Most candidates described the soil characteristics required when cultivating alpine or rock garden plants in open soil as needing to have good drainage and of a gritty texture. Those candidates who also described the depth of soil and type of subsoil required gained maximum marks.
- b) Candidates provided a range of suitable plant species providing full botanical names and were awarded full marks. Examples included; *Sedum acre*, *Cotula hispanica*, *Pusatilla vulgaris*, *Saxifraga longifolia* and *Gentiana verna*.
- Q5** a) *Name **TWO** aquatic plants **EACH** from a different genus suitable for a bog garden.* **2**
- b) *Describe the establishment of a plant in a bog garden under **EACH** of the following headings:*
- i) *planting;* **3**
- ii) *maintenance.* **5**
- a) Candidates who provided names of aquatic plants e.g. *Primula japonica* and *Lobelia cardinalis* gained maximum marks.
- Those candidates who provided names of deep water aquatics and species which prefer damp soil could not be awarded any marks.

- b) The best answers were from candidates who related the tasks of planting to the situation of a bog garden and were awarded full marks. Suitable answers included descriptions of avoiding damage to the liner, the highly organic nature of the planting medium, working safely from boards and problems with moss and algae as weed species.

Q6 a) *Describe the symptoms of the following lawn pest and disease:*

- | | | |
|-----|------------------------|----------|
| i) | <i>Leatherjackets;</i> | 3 |
| ii) | <i>Fusarium patch.</i> | 3 |

- b) *State **ONE** appropriate control method for **EACH** pest and disease named in a).* **2**

- c) *Name **ONE** pest and **ONE** disease of lawns other than those named in a).* **2**

- a) Detailed descriptions of the lawn pest and disease gained full marks. Details provided by the best candidates included; yellow colouration of grass, weak grass growth, grass easily pulled out as damage to the roots and evidence of larvae present due to starlings pecking on the lawn for leatherjackets and yellow-brown patches on the lawn and pink colouration of cobweb effect on the lawn which occurs in the autumn for fusarium patch.

Life cycles of the pest and disease were not asked for and could not be awarded any marks.

- b) A range of chemical and cultural controls were provided by candidates but to gain full marks answers needed to be specific e.g. either lay damp sacks on the ground overnight to encourage the larvae to the surface of the lawn which can then be swept up and disposed of or the use of chlorpyrifos for leatherjackets and improve drainage, avoid the use of nitrogenous fertilisers in the late summer or autumn or use a fungicide e.g. azoxystrobin for fusarium patch.

When naming the active ingredients of chemicals it is important that candidates only use those that are currently approved.

- c) The majority of candidates named a range of pests and diseases and gained full marks e.g. chafer grubs, casting worms and moles for pests and dollar spot, take-all-patch and red thread for diseases.

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