



R2112

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

Level 2

Tuesday 21 June 2022

11:20 – 12:10

Written Examination

Candidate Number:

Candidate Name:

Centre Name:

IMPORTANT – Please read carefully before commencing:

- i) The duration of this paper is **50** minutes;
- ii) **ALL** questions should be attempted;
- iii) **EACH** question carries **10 marks**;
- iv) Write your answers legibly in the spaces provided. It is **NOT** necessary that all lined space is used in answering the questions;
- v) Use **METRIC** measurements only;
- vi) Use black or blue ink only. Pencil can be used for drawing purposes only. Ensure that all diagrams are labelled accurately with the line touching the named object;
- vii) Where plant names are required, they should include genus, species and where appropriate, cultivar;
- viii) Where a question requires a specific number of answers; only the first answers given that meet the question requirement will be accepted, regardless of the number of answers offered;
- ix) Please note, when the word '**distinct**' is used within a question, it means that the items have different characteristics or features.

ANSWER ALL QUESTIONS

Q1 a) Name **TWO** distinct plants suitable for a winter hanging basket.

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b) Describe how to prepare and plant a winter hanging basket under **EACH** of the following headings:

- i) liner
- ii) growing media
- iii) planting

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MARKS

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Q4 a) Describe the soil preparation for the planting of alpine **OR** rock garden plants in open soil.

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b) Name **FOUR** alpine or rock garden plants grown for summer interest.

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MARKS
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Q5 a) Describe how to plant **ONE NAMED** marginal plant in a garden pond.

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b) Describe how to control blanket weed in a garden pond.

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MARKS

Q6 a) State **FIVE** tasks in the cultivation of soil prior to sowing grass seed across a level site.

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b) Name **TWO** grass species suitable for a high quality ornamental lawn.

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c) Describe the sowing method for a high quality ornamental lawn.

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Total Mark

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

RHS LEVEL 2 CERTIFICATE IN THE PRINCIPLES OF GARDEN PLANNING,

ESTABLISHMENT AND MAINTENANCE

Monday 20 June 2022

Level 2

Candidates Registered	883		Total Candidates Passed	528	71%
Candidates Entered	746	84%	Passed with Commendation	106	14%
Candidates Absent/Withdrawn	114	13%	Passed	422	57%
Candidates Deferred	23	3%	Failed	218	29%

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 also 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, ensuring that labels are properly attached to the features they describe. Diagrams should preferably be 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. Appropriate feedback must, in any case be provided.

Q1 a) Name **TWO** distinct plants suitable for a winter hanging basket. **2**

b) Describe how to prepare and plant a winter hanging basket under **EACH** of the following headings:

- i) liner
- ii) growing media
- iii) planting

**1
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Q1a) Full marks were awarded to candidates who named plants suitable for a winter hanging basket. These included:

Hedera helix, *Viola x wittrockiana*, *Narcissus* 'Tête-à-tête', *Buxus sempervirens*, *Erica carnea*.

Q1b) Candidates who were able to describe how to prepare and plant a winter hanging basket achieved maximum marks. Suitable answers included:

i) **Liner**

A liner made from pre-formed coir or cardboard, sphagnum moss or wool waste are all suitable for a winter hanging basket.

ii) **Growing Media**

An ideal growing media for a winter hanging basket is John Innes No.2 or a multi-purpose one. These can be supplemented with a controlled release fertiliser e.g. Osmocote and water retaining granules as required.

iii) **Planting**

The basket is usually stood on a large container or bucket for ease of planting and stability and is half filled with growing media. An upright plant is placed in the centre e.g. *Erica carnea* and then trailers e.g. *Hedera helix* around the edge. Additional fillers e.g. *Viola x wittrockiana* and bulbs e.g.

Narcissus 'Tête-à-tête' can be planted at a suitable depth. Backfilling the basket with growing media is completed, leaving room for watering by allowing the growing media to slope gently to the centre of the basket. The plants are gently firmed.

- Q2 a)** Name **FOUR** distinct bulbs, corms or tubers suitable for growing in an herbaceous border. **4**
- b) Describe **THREE** distinct methods of controlling weeds in an established herbaceous border. **6**

Q2a) A range of bulbs, corms or tubers suitable for growing in an herbaceous border were named by the best candidates who gained full marks. These included:

Crocsmia 'Lucifer', *Dahlia* 'Bishop of Llandaff', *Lilium regale*, *Allium x hollandicum* 'Purple Sensation', *Tulipa* 'Queen of Night', *Gladiolus byzantinus*.

Candidates who named herbaceous perennials, small cultivars of *Narcissus* and rhizomes could not be awarded any marks.

Q2b) Good descriptions of specific methods of controlling weeds in an established herbaceous border were provided by many candidates who were awarded maximum marks. Suitable answers included:

Annual weeds can be removed with the use of a hoe, trowel or fork while perennial weeds can be dug out with a garden fork ensuring that all roots are removed e.g. *Taraxacum officinale*.

Weeds can be suppressed by the use of a mulch of spent mushroom compost applied in the early spring to a depth of 50-100mm or by the use of a weed control fabric.

A translocated herbicide e.g. Glyphosate can be carefully applied to the foliage of actively growing perennial weeds throughout the growing season.

Q3 a) Name **FOUR** distinct shrubs grown for autumn interest.

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b) Describe **TWO distinct** maintenance tasks for **ONE** of the shrubs named in a).

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Q3a) Many candidates were able to name shrubs grown for autumn interest and achieved full marks. These included:

Cornus alba 'Sibirica', *Acer palmatum*, *Berberis thunbergia*, *Rhus typhina*,
Cotinus coggygria, *Euonymus alatus*, *Callicarpa bodinieri*, *Clerodendrum*
trichotomum.

Q3b) Candidates who were able to describe appropriate maintenance tasks for a specific shrub were awarded full marks. Acceptable answers included:

Cornus alba 'Sibirica' is pruned every two years by stooling to maintain the colour of its stems for winter interest. All stems are cut to 5 cm from the ground above a bud in late winter early spring.

Following pruning in early spring *Cornus alba* 'Sibirica' can be mulched using bark chips to a depth of 50-100mm.

Weeding and feeding were also suitable maintenance tasks which were awarded marks.

Q4 a) Describe the soil preparation for the planting of alpine **OR** rock garden plants in open soil.

6

b) Name **FOUR** alpine or rock garden plants grown for summer interest.

4

Q4a) Candidate who had a good understanding of the soil preparation for the planting of alpine or rock garden plants in open soil gained full marks. Acceptable answers included:

Following weed removal, the soil should be cultivated by single or double digging incorporating coarse grit or gravel to improve drainage. The area should be roughly raked level and then consolidated to remove any large air pockets. A suitable tilth can then be produced for planting by raking.

Candidates who described how to create a rock garden could not be awarded any marks.

Q4b) Suitable alpine or rock garden plants grown for summer interest were named by many candidates who gained maximum marks. These included:

Dryas octopetala, Aethionema 'Warley Rose', Helianthemum nummularium, Campanula carpatica, Leontopodium alpinum, Geranium subcaulescens, Alchemilla alpina, Sempervivum tectorum, Dianthus alpinus.

Candidates who named alpines or rock garden plants that flower in spring could not be awarded any marks.

- Q5 a)** Describe how to plant **ONE NAMED** marginal plant in a garden pond. **5**
- b) Describe how to control blanket weed in a garden pond. **5**

Q5a) Maximum marks were achieved by candidates who provided good descriptions of how to plant a named marginal plant in a garden pond. Suitable answers included:

Caltha palustris, *Iris pseudacorus*, *Mentha aquatica* or *Butomus umbellatus* can be planted in a garden pond in spring. The water in the pond must be level with the compost in the basket. This should be placed on a shelf in the pond ensuring that the crown of the plant is fully submerged and the leaves are mainly above the water level. The depth of water can be adjusted by placing the basket on a brick (or similar) until the plant is established. Health and safety must be observed at all times when positioning the basket in the pond. Alternatively, the plant can be planted directly into soil on the margin of the pond. It is important to ensure that the plant is secured into the planting position.

Q5b) Most candidates provided suitable descriptions of how to control blanket weed in a garden pond and gained full marks. Acceptable answers included:

Barley straw can be controlled by manually removing it from the pond by twirling it around a cane, rake or net. A bale of barley straw contained in a net can also be placed in the pond to control blanket weed but must be removed when it turns black. A pond requires a balance of 50:50 light and shade and this can be achieved by the use of plants e.g. *Nymphaea* spp. Topping up the pond in summer with rainwater rather than tap water will also help to reduce the amount of blanket weed in a pond. Algicides and black dye can also be used.

Q6 a) State **FIVE** tasks in the cultivation of soil prior to sowing grass seed across a level site.

**5
2**

b) Name **TWO** grass species suitable for a high quality ornamental lawn.

c) Describe the sowing method for a high quality ornamental lawn.

3

Q6a) The best candidates provided a range of tasks carried out in the cultivation of soil prior to sowing grass seed across a level site. These included:

- removal of large stones
- primary cultivation by single/double digging or with the use of a rotavator
- knocking down clods with a fork (if rotavator not used)
- raking to roughly level the site
- consolidation of the soil using the heels or by treading
- raking to achieve a fine tilth.

Q6b) The majority of candidates named suitable grass species for a high quality ornamental lawn and were awarded full marks. These included:

Festuca rubra subsp. *commutata* or *Festuca rubra* subsp. *litoralis*, *Agrostis capillaris*/*Agrostis tenuis*.

Q6c) A good knowledge of the sowing method for a high-quality ornamental lawn was described by many candidates who achieved maximum marks. Suitable answers included:

Seed can be sown broadcast or through a seed distributor at a rate of 15-35g per m². The seed should be divided into two equal amounts and sown in two directions to ensure an even distribution. The area can be marked out in a grid prior to sowing if required.