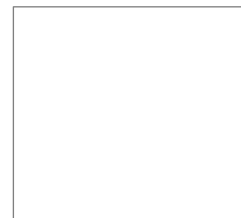




Including examiner comments



R3112

**UNDERSTANDING THE SELECTION & USE OF LANDSCAPING ELEMENTS
IN THE GARDEN**

Level 3

Thursday 9 February 2023

11:25 – 12:50

Written Examination

Candidate Number:

Candidate Name:

Centre Name:

IMPORTANT – Please read carefully before commencing:

- i) The duration of this paper is **85** 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

MARKS

Q1 a) State **FOUR** advantages of selecting gravel for a garden path.

4

.....

.....

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.....

.....

.....

b) Describe **TWO NAMED** plants which will thrive in a free draining sandy soil by completing the table below:

	Plant example 1	Plant example 2
Named Plant		
Decorative merit 2		
Decorative merit 2		
Season of interest		
Height		

2

1

1

1

1

Total Mark

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Q2 a) Describe **THREE** maintenance tasks for a grass parterre.

6

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- b) Describe **TWO** mowing effects that could be used as alternative design options for a grassed area.

Q3 a) Describe **THREE** ways by which plant quantities may be shown on a planting plan.

6

Please see over/.....

Please turn over/.....

- b) State **FOUR** problems that may arise if incorrect plant quantities are shown on a planting plan.

Q4 a) State **ONE** benefit of using reclaimed materials for hard landscaping in a garden.

1

b) Describe how **THREE** distinct **NAMED** reclaimed hard landscape materials can be used in a garden.

6

Please see over/.....

- c) State **ONE** limitation of **EACH** reclaimed material named in b).
(excluding cost)

3

Total Mark

Please turn over/.....

Q5 a) State **FOUR** distinct contributions that shrub borders can make to the design of a garden.

4

Please see over/.....

- b) Describe **TWO NAMED** shrubs from different genera to meet the requirements of **ONE** of the contributions stated in a) above, giving reasons for **EACH** choice of shrub by completing the table below:

	Shrub example 1	Shrub example 2
Named shrub		
Decorative merit 1:		
Decorative merit 2:		
Season of interest		

Total Mark

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12

Please turn over/.....

- 13

Q7 a) Describe **THREE** distinct ways that play areas may be incorporated aesthetically into the design of a domestic garden.

6

Please see over/.....

b) Identify **FOUR** potential hazards to children associated with play areas.

4

Total Mark

Please turn over/.....

Q8

Select **FOUR NAMED** plants from different genera suitable for a rock garden, stating their decorative merits and season of interest by completing the table below:

10

Named plant	Decorative merit 1	Decorative merit 2	Season of interest

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Total Mark

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R3112

UNDERSTANDING THE SELECTION & USE OF LANDSCAPING ELEMENTS IN THE GARDEN

Level 3

Thursday 9 February 2023

Candidates Registered	TBC		Total Candidates Passed	TBC	93%
Candidates Entered	80	TBC%	Passed with Commendation	58	73%
Candidates Absent/Withdrawn	TBC	TBC%	Passed	16	20%
Candidates Deferred	TBC	TBC%	Failed	6	8%

General comments

Questions - It is essential to read the question carefully and to note the **key words** before starting to write to ensure answers are relevant. Candidates should take account of the command statements in the question e.g. 'list', 'describe', 'explain', together with the mark allocation, to judge the depth of the answer required. Extra information, even if it is accurate, does not gain extra marks.

Where a number of answers were specified in the question and a candidate gave a list with more than that number, **only the first answers** in the list were marked, e.g. where the question stated 'Name **TWO** locations' or 'State **TWO** ways' only the first **TWO** answers were marked even if the correct answers were given further down. It is helpful (but not essential) if the answers are numbered in the text or separate paragraphs or bullet points are used.

Plant names - Where named plant examples were asked for, **full botanical names are required** to achieve full marks: genus, species and where appropriate variety, cultivar etc. needed to be written and spelt correctly. Where genus alone was given, all species in that genus need to show the characteristic asked for to gain any credit. **Common names were NOT accepted** and misspellings were penalised. Candidates needed to use unambiguous plant examples from sources such as the RHS Plant Finder and/or the RHS A-Z Encyclopaedia of Plants together with examples given in the syllabus and avoid obscure or difficult to verify plant examples, which risked being not credited.

Labels on diagrams must be carefully and correctly positioned to avoid ambiguity. Marks can be easily lost if this is not followed. Labels must actually touch the appropriate part of the diagram and must not be left hanging in mid air. Annotations on diagrams can be accepted as an alternative to description in the text as long as these are clear and answer the question. No marks were awarded for artistic merit or for unlabelled diagrams.

Continuation sheets - Where these have been included, it is vital that the relevant question number is included in the left hand margin if information written here is to be considered. These should also be attached to the answer booklet in the appropriate place and candidates should indicate in their answer booklet that they have written part of their answer on the attached sheet/s.

MARKS**4****Q1 a)** State **FOUR** advantages of selecting gravel for a garden path.b) Describe **TWO NAMED** plants which will thrive in a free draining sandy soil by completing the table below:

	Plant example 1	Plant example 2	
Named Plant			2
Decorative merit 2			1
Decorative merit 2			1
Season of interest			1
Height			1

Q1 a) The majority of candidates could state four advantages, giving a range of answers covering functional and design qualities. Maximum marks were gained by candidates detailing their reasons, such as 'can create unity by using similar coloured stone to nearby features/house'.

Popular candidate answers were 'cheaper than other specified materials', 'can be laid in any shape' and 'permeable surface'.

Expected answers included:

- Provides a permeable surface to reduce run-off and potential contribution to flooding
- Enables plants to grow in the feature
- Provides sound when walked on
- can be used for contrast with paving
- can provide unity using similar coloured stone for another feature
- Provides a non-slip surface
- easy to lay compared with paving
- cheaper than other materials such as York stone
- Can be laid in any shape/easy to create curved paths vs. paving or bricks

- b) Candidates were asked to describe two named plants that thrive in a freely draining sandy soil by completing a table that included name, two decorative merits, season of interest and height for each plant.

Nearly every candidate could name a suitable plant for a freely draining sandy soil and describe two decorative features for each. Most candidates associated flowering season correctly for season of interest, with some including all year-round interest with evergreens. Not every candidate correctly gave an accurate height range and could not gain full marks. A small number of candidates suggested plants that do not thrive in a well-drained, sandy soil and these plants could not gain marks, for example *Lobelia x milleri* 'Queen Victoria' needs consistently moist soil and would not thrive.

- Q2** a) Describe **THREE** maintenance tasks for a grass parterre. **6**
- b) Describe **TWO** mowing effects that could be used as alternative design options for a grassed area. **4**

Q2 a) Most candidates included mowing and edging in their answers, with the highest scoring candidates giving specific details in their answers as indicated below. 'Describe' command words require some detail to gain full marks and are an opportunity for candidates to demonstrate deeper knowledge. Expected answers included activities such as:

- Mowing between March and November (and as required during mild winter spells), using a cylinder mower that collects arisings
- Edging turf using edging shears to maintain a crisp design, generally through March – November, removing fallen clippings.
- Re-edging as required, typically at the end of the growing season (October/November), to re-establish crisp edges using half-moon edging iron
- Raking gravel in parterre design to a level and brushing or blowing to remove debris

Popular answers were mowing and edging. Given the size and intricacy of some parterres, scarifying and aerating machinery is not usually used with hand tools being more suitable.

- b**
) Responses to this question included many valid ideas and marks were awarded accordingly. Some candidates suggested allowing the area to develop into a wildflower area, which is not a mowing effect. Those who suggested mown paths/patterns through longer grass/wildflower meadow were awarded marks as they included a mowing aspect to their design idea.

Expected answers included:

- Mowing a symmetrical pattern (turf art) into a level lawn using two or more different heights of cut
- Mowing a turf maze using two different heights of cut, creating concentric circles or other patterns
- Allowing parts of the lawn to grow longer with paths mown through and larger mown areas for picnicking accessible via mown paths.

Candidates who recommended leaving all the grass to grow long, i.e., no mowing effects, did not gain marks.

- | | | |
|-----------|--|----------|
| Q3 | a) Describe THREE ways by which plant quantities may be shown on a planting plan. | 6 |
| | b) State FOUR problems that may arise if incorrect plant quantities are shown on a planting plan. | 4 |

- Q3 a)** Responses were mixed with some candidates demonstrating a high level of knowledge and others lacking range and clarity in their suggestions. Use of diagrams helped some candidates to express their knowledge and marks were awarded accordingly.

Expected answers included:

- Individual plants are shown on the plan. These can be counted to provide info on quantities
- Plant list detailing all the plants of each species used in the scheme with a column showing total quantities for each
- Planting densities may be shown on plan, showing number of plants per given area/unit of area
- Plant spacing may be shown from which plant densities may be calculated

Some of the better written script answers were accompanied by diagrams as many candidates found it quite difficult to describe the ways. Often candidates could describe two ways of showing plant quantities but found the third elusive.

- b**
-) This was generally well answered with candidates relating too many or too few plants to costs, aesthetics, client expectations and other reasons, with many gaining full marks.

Expected answers included:

- Too many plants may be purchased, causing maintenance/establishment problems
- Too many plants may be ordered, leading to budget being overspent
- Not enough plants may be ordered, so design objectives may not be achieved
- If there are too many or too few plants, it will not be possible to set out as shown on the plan
- Too many plants could be set out in one location, leading to insufficient numbers for planting in another location
- Insufficient plants could be set out and planted, leading to surplus which cannot be addressed without rearranging those already planted
- Insufficient plants could be set out and planted, leading to design objectives not being achieved
- Incorrect quantities can lead to confusion/ time wasted when setting out
- Client can be given an incorrect estimate if quantities are wrong

Some candidates lost marks because they didn't put their answer in context, i.e., the problems caused by too few or too many plants being ordered.

		MARKS
Q4	a) State ONE benefit of using reclaimed materials for hard landscaping in a garden.	1
	b) Describe how THREE distinct NAMED reclaimed hard landscape materials can be used in a garden.	6
	c) State ONE limitation of EACH reclaimed material named in b). (excluding cost)	3

Q4 a)

This was well answered overall, with nearly every candidate relating reclaimed materials to lower carbon footprint. Other acceptable answers would be reducing waste to landfill or giving an instant sense of age/character, and could fit with style and period of garden and house.

b)

This question was generally well answered. Most candidates named three distinct materials and how they can be used, with many citing reclaimed railway sleepers for raised beds and reclaimed bricks for paths. This was generally well answered with candidates giving detailed answers gaining maximum marks. Some candidates were somewhat vague in their answers and could not be awarded full marks (e.g., 'old scaffold boards can be made into beds' did not offer the expected detail for full marks).

Expected answers included:

- Reclaimed railway sleepers can be used as a retaining wall for a terraced garden OR to construct raised beds or another named feature
- Reclaimed bricks can be used for a garden wall for an older property OR to create terracing OR to create paths, etc.
- Reclaimed York stone can be used for a patio
- Reclaimed street setts can be used for a driveway
- Shredded tyres can be used for a play surface
- Old scaffold boards used to construct wooden planters
- Building rubble from demolitions can be used as base-layer for paths and/or patios

c)

This was well answered with most candidates stating one limitation for each of their named materials. But some candidates didn't interpret the question as the limitation state of the material at point of reclamation or use, opting for answers such as 'cement needed to lay (reclaimed) bricks'

Example answers include:

- Reclaimed sleepers may ooze tar
- Reclaimed bricks may be damaged
- Reclaimed York stone may be stained
- No guarantee over performance of named material
- Reclaimed stone paving may be uneven thickness
- Reclaimed timber: time consuming to prepare – remove nails etc.

- Q5 a)** State **FOUR** distinct contributions that shrub borders can make to the design of a garden.

4

- b) Describe **TWO NAMED** shrubs from different genera to meet the requirements of **ONE** of the contributions stated in a) above, giving reasons for **EACH** choice of shrub by completing the table below:

6

	Shrub example 1	Shrub example 2
Named shrub		
Decorative merit 1:		
Decorative merit 2:		
Season of interest		

- Q5 a)** This was generally well answered by the majority of candidates. Most candidates gave four distinct contributions, with answers covering a wide range of suggestions including provision for wildlife, creating boundaries/compartimentalising the garden, shelter from winds, aesthetic qualities, and contribution to design. A small number of candidates could not gain full marks where their named contributions were not sufficiently distinct.

Expected answers included:

- Aesthetic/sensory effect of flowers, fruit stems
- Aesthetic contrasts/harmonies of the plant associations
- Structure planting; defining spaces within the garden
- Wildlife habitat and food source for birds/insects
- Screening of ugly views
- Provides privacy for users of the garden
- Provides shelter against prevailing winds
- Provides gradation in height between trees and lawn
- Colour of flowers, fruits, leaves, stems
- Seasonality changing flower/leaf from season to season
- Permanent structure (evergreen) presence of evergreen foliage at and above eye level
- Contribution to design principles, space, focalisation, clarity, rhythm, balance

b

-) Most candidates could name two shrubs suitable for a shrub border and describe their decorative merits and season of interest. Some candidates could not gain marks for stating merits such as fragrance, which is not decorative, and a small number stated trees that can be pruned to smaller shapes, but are not shrubs. *Fagus sylvatica* and *Taxus baccata* are not shrubs and therefore could not be awarded marks as the question asked specifically for shrubs.

This part of the question had been printed incorrectly. Many candidates linked the design contributions stated in part a) with their shrub selections in part b) which gained them maximum marks.

However, candidates were not disadvantaged by the formatting of the table as full marks in b) could also be obtained by candidates completing the table with a description of two named shrubs with no link to part a).

- | | | |
|-----------|--|----------|
| Q6 | a) Describe THREE distinct contributions that containers can make to a garden. | 6 |
| | b) Explain how the characteristics of ONE NAMED material contributes to its selection as a sustainable plant container. | 4 |

- Q6 a)** Most candidates could give three distinct contributions, though not all were able to describe in sufficient detail the contribution to the garden. With 'describe' command words it is important to include detail to secure full marks; this often includes exemplifying ideas by naming contributions of specific materials. Most candidates made reference to opportunity for creating unity, focal points, growing plants in specific soil conditions (e.g., ericaceous plants), moving plants for display purposes, growing plants where there is no soil for example in courtyard gardens or on a balcony.

Expected answers included:

- Ornamental properties of the container for example the textured surface of concrete patterned container or warm colour of terra-cotta pot etc.
 - Positioning can create a focal point to draw the eye to a particular point in the garden
 - Making planting moveable to place in prime position during season of interest
 - To grow plants in soil which is not natural to the garden, for example calcifuge plants in ericaceous compost
 - Enable plants to be grown in areas of no soil on a balcony
 - Create barriers between areas such as around the edge of a patio
 - Restrict invasive plants preventing them from becoming a problem in the garden/prevent spread of their rhizomes or root suckers
 - Create pinch points in paths slowing movement down at junctions
 - Unifying materials with other landscape features for example terracotta matching brickwork
 - Providing decorative effect on vertical structures such as hanging basket on wall
 - Can be used to cover unsightly surfaces for improved garden aesthetic
 - Once planted they can help to soften hard landscape environments in an urban courtyard with no in-soil planting
- b)** This was, overall, very well answered with candidates demonstrating strong knowledge of sustainability criteria for different materials and justifying their stated material with a range of relevant reasons. Justifications covered areas of sustainability such as carbon footprint of manufacture, carbon footprint of transport, lifespan of material, ability to recycle, reuse or repurpose material.

Most candidates selected terracotta as the named material. Terracotta, if frost proof, is long lasting and if sourced locally can have a lower carbon footprint than other materials such as concrete. Terracotta can also be reused as a container or sourced second hand, reducing the need for extraction of raw materials and manufacturing carbon footprint.

- | | | |
|-----------|--|----------|
| Q7 | a) Describe THREE distinct ways that play areas may be incorporated aesthetically into the design of a domestic garden. | 6 |
| | b) Identify FOUR potential hazards to children associated with play areas. | 4 |

- Q7 a)** There were mixed responses to this question and not all candidates included three ways. Some suggested that play areas could be hidden from view behind hedges or fences, which is not incorporating them aesthetically into the design of a garden so these suggestions could not gain marks.

Maximum marks were awarded to candidates that detailed their answers to give a clear description.

Example answers included:

- Materials used to build play equipment are chosen to unify with other features e.g., timber climbing frame to match timber decking area
- Smooth paving stone path laid continuously around lawn perimeter can be used as a circuit for bikes and wheeled toys
- Small garden shed decorated and enhanced with climbing plants, and equipped to become play-house or as a place for storing small outdoor toys
- Tree house and climbing equipment can be built into existing mature trees using materials/timber sympathetic to the existing garden style
- Woodland areas can incorporate a range of informal play experiences for older children, separated from the more formal areas of the garden
- Trampolines can be built into a pit to reduce visual impact
- Turf mazes can be incorporated into formal gardens to provide play/recreation space

- b)** Whilst most candidates could name four hazards, many showed some confusion between hazard and risk, with both being included in answers. A hazard is what could cause harm to a person for example, ice on paths, and risk is what harm could be caused to the individual for example slipping over leading to bruises, broken bones, cuts, scrapes.

Expected answers included:

- high climbing equipment
- uncovered sand pit may become contaminated
- soft play surfaces worn or displaced
- turf play areas slippery when wet or frozen
- splinters from wood
- worn equipment breaking

Candidates were credited for identifying hazards specific to play areas, although most candidates answered the question by stating risks caused by named hazards.

Q8

Select **FOUR NAMED** plants from different genera suitable for a rock garden, stating their decorative merits and season of interest by completing the table below:

10

Named plant	Decorative merit 1	Decorative merit 2	Season of interest

Q8

The majority of candidates demonstrated good knowledge of rock garden plants, with nearly all correctly naming plants, stating two decorative merits for each and season of interest. For evergreens the season of interest can be correctly stated as all year. Most candidates gave sufficient detail for full marks. A small number of candidates stated the wrong flower colour or flowering season and could not gain full marks.

Examples of accepted plants suitable for a rock garden included:

Named plant	Decorative merit 1	Decorative merit 2	Season of interest
<i>Pulsatilla vulgaris</i>	Purple flowers	Fluffy autumn seed heads	Spring for flowers
<i>Gentiana acaulis</i>	Deep blue trumpet-shaped flowers	Evergreen, narrowly elliptic leaves	Spring for flowers
<i>Erigeron karvinskianus</i>	White/pink composite flowers	Narrow mid-green, hairy foliage	Summer
<i>Thymus vulgaris</i>	Whorled pink flowers covering plant in summer	Dark green, evergreen leaves forming a dense mound	Summer
<i>Crocus sativus</i>	Goblet shaped purple flowers with bright orange stamen and red stigma	Narrow, needle like green foliage	Autumn
