

RHS Qualifications

Examination: RHS Level 3

Unit: Unit 2 Examination date: Unit 2

General Introductory Comments

Examiners' comments are produced by RHS Qualifications following each examination series.

RHS Qualifications will publish an annual report, to share statistical information relating to candidate performance.

The Examiner's comments included in this report are intended to help candidates and centres to develop an understanding of the requirements of the RHS Level 3 examinations. This is achieved through a review of candidate responses indicating key areas of strength, while also considering areas where candidates demonstrated a weaker understanding of Topic areas, or where there was evidence of gaps in their knowledge.

The RHS Level 3 examination papers are designed to assess the contents of the Qualification Specification according to Ofqual's level descriptors.

At Level 3 these state that candidates should:

- demonstrate factual, procedural, and theoretical knowledge
- be able to interpret, evaluate, and apply information and ideas
- be able to discuss, a range of perspectives and approaches
- demonstrate the ability to resolve complex and non-routine problems
- review how effective methods and actions have been
- demonstrate responsibility for supervising or guiding others.

Candidates who scored high marks in the June 24 Level 3 Unit 2 examination:

- demonstrated factual, procedural, and theoretical knowledge (AO1)
- could interpret, evaluate, and apply information and ideas (AO2)
- could discuss, a range of perspectives and approaches (AO2)
- demonstrated the ability to resolve complex and non-routine problems (AO2/AO3)
- could demonstrate holistic/integrated knowledge of the four Qualification-wide outcomes and the four Topic areas considered in Unit 2.

Overview of Examination

Levels of demand

Questions were set at three levels of demand within this paper.

Questions that require a recall of basic factual, procedural and theoretical knowledge are classified as being **low demand**.

Questions that require the interpretation, evaluation and application of knowledge are classified as **medium demand**.

Questions that require integrated thinking across topics, the resolution of complex and non-routine problems, and discussions on differing perspectives or approaches are classified as **high demand**.

General comments

An analysis of scripts has indicated that strong candidate responses shared many common characteristics:

- demonstrating the ability to read and interpret information
- demonstration of a secure knowledge of legislation as it relates to horticultural practices
- summarised key concepts and ideas as required by the question
- demonstrated the ability to evaluate and apply horticultural practices
- were able to discuss a range of perspectives
- successfully applied knowledge to new scenarios and situations
- provided full, detailed and well-structured long form responses in Section C
- integrated their long form responses into a number of relevant Topics, and Qualification-wide outcomes
- provided responses that were logical
- developed coherent arguments.

An analysis of scripts has indicated that weaker candidate responses also shared many common characteristics:

- were only partially able to read and interpret information
- offered vague responses that lacked technical details
- demonstrating a limited or partial understanding of elements
- did not offer a range of perspectives in their responses
- focusing on one key term in the question, writing as much as possible on this part of the question
- did not integrate their long form responses into relevant Topics, and Qualification-wide outcomes.

Qualification specification and Guidance Document

The Qualification specification outlines the curriculum that candidates will be examined on. A Guidance Document is freely available from Quartz and RHS Qualifications. This document was developed to provide centres with additional guidance with regards to the interpretation of the Assessment Outcomes in terms of breadth and depth that is appropriate to a Level 3 qualification.

It should be noted that the Guidance Document is not intended to be a comprehensive guide to teaching and learning. Instead, it is designed to provide examples of some of the key areas contained within an Assessment Outcome. As an example, where an Assessment Outcome in the Qualification Specification formally lists five areas that should be included, the Guidance Document may only unpack one of these areas as an example. The centre is then expected to apply the same level of breadth and depth provided in the exemplar to the other areas defined in the Assessment Outcome.

The next review of the Guidance Document will be published for the 2024 teaching year during October. The review ensures the currency and validity of horticultural thinking contained in the document.

Section A

Questions 1 - 20

General comments on Section A

Forced answer questions are designed to test candidate's knowledge and understanding of the concepts covered in the four Topics and the four Qualification-wide outcomes that make up this unit.

At Level 3, these questions particularly relate to:

- the assessment of theoretical knowledge
- the ability to read and interpret information
- the ability to recall factual information
- the demonstration of procedural knowledge.

This section was well attempted by the majority of candidates, with a secure level of knowledge being displayed, suggesting that candidates were well prepared on the majority of the topics covered.

Candidates and centres are reminded of good examination technique with regards to forced answer questions:

- Carefully read the question
- Underline any key or important words
- Score through inappropriate answers
- Select the correct answer to be recorded on the response grid.

Section B

Each question is considered separately.

Question 1

The question was designed to assess candidate knowledge and understanding of the management and maintenance of woodland gardens.

In part a) candidates were required to name layers within woodland gardens. Candidates were provided with canopy and herbaceous layers as examples in the question.

Strong candidate responses correctly named layers as:

- sub canopy
- shrub
- ground layer.

Weaker candidates were either not able to correctly name layers or repeated one or more of the examples provided within the question.

In part b) candidates were required to name one suitable plant for each of the layers stated in part a).

Stronger candidate responses correctly named suitable plants, while weaker candidates often named inappropriate plant species, for example naming *Digitalis purpurea* as being a ground layer plant, where it should be classified as being in the herbaceous layer.

In part c) candidates were required to further demonstrate knowledge and understanding by stating two criteria that should be included in maintenance schedules.

Stronger candidate responses included the upkeep of paths through the use of bark mulching, or the lifting and division of bulbs.

Weaker candidate responses often repeated the supporting information contained in the question, for example the clearing of leaves on paths or the control of weeds.

In part d) candidates were required to state two distinct ways that climate resilience can be improved in woodland gardens.

Stronger candidate responses discussed the use of pollarding to improve resilience to high winds, the use of plant material that has a higher resilience, for example to drought and to water logging, or the use of mulching to reduce the impact of drought.

Weaker candidate responses provided vague answers, which were not appropriate at Level 3.

This question was designed to assess candidate knowledge relating to the management and maintenance of ecological gardens.

In part a) candidates were required to define the term ecological garden.

Few candidates were able to provide a formal, or full definition of the term ecological garden. Many candidates provided weak definitions, relating more to wildlife gardens than ecological plantings.

For clarity, several definitions of ecological gardens were accepted, these are included below.

- A community of flora (plants) and fauna (wildlife) to create a balanced biosphere of life both above and below the ground.
- They provide ecological services for example the retention of rainwater or the filtering of pollutants.

In part b) candidates were asked to explain the principles that are used to inform the planting decisions in the creation of ecological gardens.

Stronger candidates were able to demonstrate a basic understanding of the required principles, with candidates providing weaker or incorrect responses to part a) gaining fewer marks.

Candidates were expected to include the following key areas within their responses:

- the core concept is to mimic nature, maintenance decisions should reflect this
- plant selection strategies including site specific factors
- naturalistic planting styles
- plants can be grouped by common habitat, for example, woodland, wetland, steppe
- planting to replicate a natural habitat, e.g. woodland edge.

In part c) of the question candidates were required to explain one principle that informs the maintenance of ecological gardens.

Stronger candidate responses included, for example, the elimination of pesticide usage to ensure that the local ecosystem/soil biota has not been damaged.

Weaker candidate responses were either incorrect, or were too vague to be fully credited with marks.

This question required candidates to explain why, when fertilisers are being withdrawn from general use in horticulture, they are continuing to be used in productive settings.

Stronger candidate responses included reference to:

- crops produced in productive settings often being short lived, and so fail to establish mycorrhizal relationships
- organic based fertilisers can increase yields while maintaining a low carbon footprint
- animal manures, and garden compost can be used in place of synthetic fertilisers to meet nutritional needs
- some growing systems, for example hydroponics, rely on fertiliser inputs
- some crops have high Potassium requirements (e.g. tomato) and so fertiliser usage is appropriate.

Weaker candidate responses often related to off topic (irrelevant) discussions relating to the principles of organic production methods, or the cultivation of large-scale agricultural field crops.

This question related to the management of people within gardens.

Part a) of the question required candidates to name two motivation theories.

Few candidates were able to name two motivation theories, some stronger candidates were able to name one theory. This indicates gaps in candidate knowledge.

Any appropriate motivational theory was credited to include:

- Maslow's theory of hierarchical needs
- Hertzberg's two-factor theory
- McClelland's theory of needs
- Vroom's theory of expectancy.

Part b) of this question required candidates to state the advantages of using motivational theories within the workplace.

Stronger candidate responses clearly stated appropriate advantages of using motivational theories:

- increased productivity
- increased morale
- decreased staff absence
- decreased staff turnover.

Weaker candidates were unable to clearly state advantages offering vague and general answers that were not consistent with the demonstration of knowledge at Level 3.

This question required candidates to outline three techniques that are used to manage the flow of visitors in gardens.

Strong candidate responses:

- demonstrated the application of the Qualification-wide outcome Best Practice by naming gardens
- discussed the use of signage to manage visitor flow, reducing congestion through routing customers through less used paths
- discussed the concept of a hierarchy of paving to manage visitor flow, through wider and narrower paths
- outlined concepts such as dynamic pricing to even out visitor numbers through the day/week/season
- the use of timed tickets
- allow the development of desire lines to inform path locations
- understand how visitors move through gardens, to inform the elimination of pinchpoints.

Weaker candidate responses tended to focus on the use of paths to allow people to move through gardens, which does not directly relate to managing the flow of visitors.

This question required candidates to apply their knowledge of Health and Safety to the task of writing a risk assessment that relates to the management of volunteers in a productive garden.

Part a) of this question required candidates to state two hazards.

Stronger candidate responses stated two appropriate hazards:

- slippery paths
- secateurs

were both popular choices and appropriate hazards.

Part b) of the question required candidates to state one risk associated with each hazard named in part a).

Strong candidate responses identified an appropriate range of risks:

- slippery paths (falls)
- secateurs (cuts).

Weaker candidate responses confused the terms hazard and risk.

In part c) of the question candidates were asked to state two control measures to be put in place to control one of the risks identified in b).

Strong candidate responses identified an appropriate range of control measures:

- falls
 (removal of algae or mud)
 (wearing of non-slip/cleated footwear)
- cuts
 (training in secateur usage)
 (maintenance, safe storage and safe transport of secateurs).

This question required the candidate to describe the techniques that can be used by gardens to engage with their local communities to increase inclusion and diversity.

Candidates were expected, at Level 3, to develop highly detailed, comprehensive and fully developed responses that addressed all key aspects of the question.

Strong candidate responses gave an excellent analysis discussing:

- established models or approaches
- analysing the local demography
- targeting groups not engaging with the garden
- the use of food-based events to celebrate culture
- the use of food-based events to promote healthy lifestyle choices
- the use of street food events.

Weaker candidate responses did not address the requirements of the question, discussing the basic approach that can be taken in marketing the garden. Weaker responses demonstrated a lack of knowledge/or consideration of Equality, Diversity, Inclusion (EDI) principles.

This question required candidates to demonstrate their knowledge of how horticultural research and development can be applied to inform the development of maintenance plans and schedules.

Candidates were expected, at Level 3, to develop highly detailed, comprehensive and fully developed responses that addressed all key aspects of the question.

There were few strong responses to this question, demonstrating a lack of knowledge in this area.

Candidates were expected to be able to name areas of research that have been undertaken by credible organisations and then to be able to discuss how this research has impacted on maintenance plans and schedules.

An example could be the work that the charity Plantlife has carried out on the impact of mowing heights and frequency on the growth of wildflowers in cultivated turf. The impact of this research on maintenance plans and schedules is a move in appropriate areas to higher cutting at 50mm and monthly cutting which has been proven to benefit key wildflower species that grow within turf.

Section C

Section C candidate responses are graded against the assessment ladder, which is on the next page of this report. (This is the same ladder that is used in the Level 2 examinations.) Candidates and centres are advised to review the ladder as this indicates how the assessment decisions are made, when grading long form responses.

Candidate performance in Section C ranges from those candidates who:

- demonstrated their factual, procedural and theoretical knowledge
- were able to interpret, evaluate and apply relevant information and ideas
- were prepared to produce long form responses
- could discuss relevant points from a range of perspectives if required
- could discuss a range of approaches if applicable
- approached the question logically
- demonstrated a full and holistic knowledge of the topic areas and Qualification-wide outcomes.

through to candidates who:

- produced brief responses which lacked the required level of detail
- provided responses which were unplanned and unstructured
- provided responses that gave a framework, but which did not provide the required level of detail
- picked up on certain words in the question, and wrote all they knew about these words, rather than answering the question.

In addition to the assessment ladder, candidate responses are also reviewed against the criteria set out below:

Indicative content

- Strength of response
- Integration
- Horticultural knowledge.

Strength of response:

Strong candidate responses:

- developed a logical argument to answer the question
- drew on reliable information sources
- were relevant to the question
- expressed clarity of thought
- demonstrated knowledge of horticultural practices.

Integration:

Candidate responses should integrate with other relevant areas of the syllabus.

Assessment ladder (for information)

Band	Mark range	Summary	Description
4	-	Fully developed (Total)	A highly detailed, comprehensive, fully relevant response, addressing all aspects of the question No irrelevant or incorrect material or observations at the top end of the mark range: otherwise only very minor errors/omissions (which do not detract from an otherwise strong response) Full integration/clear links demonstrated with other appropriate topics as required: a holistic approach
			Advanced current professional horticultural knowledge/principles demonstrated (and evidence of advanced material beyond the specification at the top end of mark range) Consistent use of correct and appropriate technical language.
3	9 -11	Mainly developed (Solid)	A reasonably detailed and fairly comprehensive response, with mostly relevant observations, addressing most of the key elements of the question
			Some minor evidence of irrelevant or incorrect material or observations (in what is otherwise a good response), with occasional lack of detail/omissions at times
			Secure evidence of some appropriate integration with other topics but some linked topic areas are occasionally overlooked or incorrect associations are made: a partially holistic approach
			Current professional horticultural knowledge/principles demonstrated most of the time, with occasional errors, but largely appropriate explanations and application
			Correct and appropriate technical language demonstrated most of the time, with some minor errors.
2	6 - 8	Rudimentary (Basic)	A largely basic response with some relevant observations, addressing some key elements of the question
			Some significant evidence of irrelevant or incorrect material and frequent lack of detail, with some key areas overlooked
			Occasional evidence of correct integration with other topics, but many areas are overlooked and incorrect associations made: little evidence of a holistic approach
			Current professional horticultural knowledge/principles demonstrated some of the time, but with frequent errors, and only basic explanations or application
			Correct and appropriate technical language only partially demonstrated but limited. Some key errors.
			A largely poor response with few relevant observations, addressing few of the key elements of the question
			Material is largely irrelevant or incorrect and lacking in any detail, with many key areas overlooked
1	0 - 5	Undeveloped (Unsatisfactory)	No, or very little evidence of correct integration with other topics, with many areas overlooked and incorrect associations made: no evidence of a holistic approach
			No or little evidence of current professional horticultural knowledge/principles demonstrated, with poor or incorrect explanations or application
			Little (if any) technical language demonstrated. Often incorrect. Key errors.

This question required candidates to discuss how garden managers obtain feedback for staff, volunteers, garden users and stakeholders to inform the setting and monitoring of standards in a range of garden settings.

Many candidates were able to identify a range of stakeholders, and discuss information sources for feedback, for example, Trip Advisor.

Fewer candidates were able to fulfil the requirements of the question at Level 3.

Anticipated candidate responses included:

- the collection of feedback with reference to established professional models and practices
- a definition of the term 'feedback'
- demonstration of knowledge relating to formal and informal sources of feedback, with appropriate examples for each
- identifying techniques to collect feedback for example surveys of volunteers
- evaluating feedback to produce reports using a range of models
- the concept of benchmarking feedback with other gardens for example measuring satisfaction scores could be considered
- ensuring feedback is from all parties, surveys in additional languages to ensure EDI should be considered
- the importance of asking the right questions to get meaningful responses.

The concept of setting standards is discussed with reference to established professional models and practices.

- the concept that garden managers will set differing standards depending on function, design and client expectations.
- the interpretation of feedback to inform actions.
- the use of feedback to measure quality and standards in the maintenance of different garden areas.

It is recommended that candidates practice answering questions of this nature.

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In this question candidates were required to compare and contrast two distinctly different growing systems that can be used in the production of a range of named crops.

This was a popular question with candidates choosing to compare and contrast:

- permaculture
- hydroponics
- minimum cultivation
- square foot gardening.

Stronger candidates were able to carry out a detailed comparison of their two named systems with reference to seeding/planting, plant establishment, crop husbandry, crop spacings, and plant health.

Weaker candidate responses did not compare and contrast. Instead demonstrating a basic knowledge of one system and a vague, over simplified understanding of the other system which was not consistent with the requirements of Level 3.

It is recommended that candidates practice answering questions of this nature.

This question, which was popular with candidates used a quotation to set a scenario relating to garden style, sustainability and the balanced use of virgin, recycled and repurposed materials.

Stronger candidate responses clearly named a garden style, with arts and crafts being a popular choice.

Their responses then discussed the ethics of transported stone, for example the reported use of child labour in the quarrying of Indian sandstone, the use of local materials in arts and crafts gardens, along with the consideration of using reclaimed materials.

Few candidates provided secure answers, with key areas such as sustainability, or the impact of reclaimed materials, the importance of balance, the identification of best practice through reference to named gardens or the identification of issues with warranties for hard landscaped work being considered.

Weaker candidates often provided a basic description of hard landscape features or principles.

This question required candidates to review the findings from a range of studies that inform the use of gardens and green spaces in the enhancement of wellbeing.

Stronger candidate responses fully met the requirements of the question. These responses referenced a wide range of studies with full and secure explanations of the key findings of these studies along with how these findings inform the use of gardens and green spaces.

Weaker candidate responses tended to discuss the link between green spaces and wellbeing, but did not reference studies to demonstrate a depth of knowledge appropriate to Level 3.