



RHS Qualifications

Examination:	RHS Level 3
Unit:	Unit 1
Examination date:	February 24

General Introductory Comments

This is the first examination series for the new RHS Level 3 Certificate in the Principles of Plant Growth, Garden Planning, and Applied Propagation.

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

These Examiners' comments 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.

Candidates who scored high marks in this Level 3 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
- could demonstrate holistic/integrated knowledge of the 4 Qualification-wide outcomes and the 4 Topic areas considered in Unit 1.

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:

- exhibited strong time management
- provided concise, detailed well argued responses
- 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
- evidenced planning of responses in long form answers
- integrated their long form responses into a number of relevant Topics, and Qualification-wide outcomes
- Provided responses that were logical, developing coherent arguments.

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

- offered partial responses to some questions, consistent with poor time management
- demonstrated a limited or partial understanding
- were not able to bring a range of perspectives into their responses
- responses often related to candidates focusing on one key term in the question, and then 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

Centres and candidates are reminded that the Qualification Specification follows current best practice. The Assessment Outcomes are written at AO1, AO2 and AO3, with broad descriptors.

The Guidance Document was developed to provide guidance with regards to the interpretation of these 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 5 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 level of breadth and depth given in the exemplar to the other areas defined in the Assessment Outcome.

Questions may therefore be set on areas that are not explicitly stated in the guidance document. All questions set, fully reflect the aims of the Assessment Outcomes, and the examples of breadth and depth given within the guidance document.

The next full review of the Guidance Document will be published for the teaching year commencing September 2024.

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 4 Topics and the 4 Qualification-wide outcomes that make up this unit.

At Level 3, these questions particularly relate to:

- recall of factual information
- demonstration of procedural knowledge
- assessment of theoretical 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. Questions that related to the research, communication and use of plant information, to include the botanical descriptions (Topic 2, element 3) proved to be good discriminators, challenging candidates, and allowing strong candidates to demonstrate their knowledge in these areas.

Section B

Each question is considered separately.

Question 1

This question required the candidate to demonstrate their procedural knowledge relating to the Qualification-wide outcome Health and Safety.

The first part of this question required the candidate to name the piece of legislation that covers working with step ladders.

Strong candidate responses stated the working at height regulations 2005 as the correct piece of legislation.

The second part of this question required the candidate to demonstrate their procedural knowledge with regard to safely working above ground.

Strong candidate responses shared the procedure advocated on the Health and Safety Executive website:

- Can the working at height be avoided?
- Can falls be prevented?
- Can the consequences of a fall be minimised?

Some candidates stated the importance of risk assessments, which were credited as they can be used as tools to prevent, or reduce the risk of falls.

Weaker responses suggested a range of measures that could be taken when working above ground level, including whether the person feels well, or has passed a medical to allow working at heights.

Question 2

This question required candidates to apply their plant knowledge to a range of scenarios, for example suggesting plants that can provide climate resilience, or create focal points within gardens. Candidates were also required to evaluate their responses by describing the characteristic that makes the named plant suitable for its use in climate resilience or in creating a focal point.

Strong candidate responses correctly proposed plants for climate resilience, and focal points. Strong candidates stated specific characteristics that made the specified plant appropriate, for example *Alnus glutinosa* tolerating flooding and waterlogged sites, or *Lavendula angustifolia* having fine silvery leaves, to reduce water loss in drought conditions.

With reference to focal points strong candidate responses included a description of the characteristic of the proposed plant, for example *Cornus controversa* for its distinctive form and shape.

Errors and poorly considered candidate responses stated inappropriate plants, (for example *Agapanthus* 'Twister' as suitable for use as a focal point), with bold flowers form and colour during season of interest, or tall, interesting inflorescences with seedheads for winter interest as the characteristic that makes *Agapanthus* suitable for use as a focal point.

Focal points can be defined as 'where the eye rests at the end of a vista'. In this context *Agapanthus* would be a poor plant to select. The characteristics stated, tall, interesting inflorescences for example are not specific characteristics of *Agapanthus*.

The evaluative nature of this question, requiring the plant selection to be justified added academic rigour to the question, appropriate to Level 3, challenging candidates, and allowing strong candidates to demonstrate their plant knowledge.

Question 3

Part a) of this question stated that a local planning authority has designated an area of requiring management and protection for special architectural and historic interest.

Strong candidates correctly identified this as a Conservation area.

Incorrect candidate responses included suggesting this was a description of the organisation Historic England, or that the statement described the listing of a property or garden.

Part b) required candidates to state four sources of information.

Many candidates were not able to provide four sources of information, which reduced the mark that could be awarded.

Correct candidate responses listed factually correct, specific sources of information to include:

- local record office for maps, plans, estate lists
- old photographs of the garden
- relevant artefacts found on site
- historic plans of the garden
- records of plant purchases
- old paintings of the garden
- publications of other gardens of the time/era

Poor candidate responses were either incorrect or lacked the specific detail required, for example:

- literature of the time
- the Lindley Library

These responses were too general, the literature of the time may have no relevance to gardens, or the heritage garden under evaluation, the Lindley Library as a source of information is again too general, as the specific resources within the library have not been identified.

Question 4

This question required candidates to demonstrate their applied knowledge of the Qualification-wide outcome Sustainability.

The majority of candidates were able to name the Economic and Environmental pillars of sustainability.

A high proportion of candidates struggled to suggest the actions that gardens can take with relation to the economic pillar of sustainability.

Incorrect and weak candidates stated unsatisfactory principles, for example reducing costs, with expenditure linked to wildlife existence, or reducing spend on bedding plants. These responses lack the required level of factual knowledge required at Level 3. These responses indicate a lack of candidate knowledge/gaps in teaching.

Stronger candidate responses included, the principle of spending money locally to benefit the local economy, strong governance to ensure financial stability, the employment of local artisans, artists and other local people.

Question 5

This five part question required candidates to share factual and procedural knowledge prior to demonstrating the ability to resolve problems.

The first part of the question required the candidate to explain what is meant by the term scarification. Strong candidate responses included the key points that this term defines the process where the seed coat is weakened, or opened to encourage germination.

Candidates then went on, in part b) to name a plant that requires scarification to overcome seed dormancy. Popular choices included *Lathyrus odoratus*.

Part c) of the question required candidates to describe the specific method of propagation that would be required to overcome the dormancy mechanism in the plant species named in b)

Stronger candidate responses correctly named a suitable technique, for example, abrasion, before moving on to describe the process of abrasion, for example rubbing the seed on a sanding block.

The candidate knowledge of Health and Safety was then integrated into the question in part d) where candidates were asked to state the hazards associated with the scarification technique they described.

Strong candidate responses included the hazards associated with hot water treatments, chemical contamination, toxic seed coats and lacerations/abrasions.

Weaker candidate responses contained very general statements such as wearing gloves to protect hands.

The final part of the question required candidates to explain what actions should be included in risk assessments to reduce the likelihood of accidents while scarifying seed.

Stronger candidates gave specific, reasoned and realistic controls to include cutting away from ones body with blades, and training.

Weaker candidates stated that appropriate PPE should be worn, without expanding on the work appropriate. These responses did not convey the level of detail required at Level 3.

Question 6

This question was written to assess the candidate's applied knowledge of the Qualification-wide outcome Best Practice.

Candidates were required to state one example of how plant information sources can be used to inform Best Practice in the management of plant collections.

Strong candidate responses stated uses such as, to inform propagation protocols, to inform cultural practices and to inform plant selection.

Weaker candidate responses included incorrect information, for example the Historic England Register (HER), which does not fulfil the requirements of the question.

Parts b) and c) were well answered by candidates who cited appropriate sources of information.

Part d) of the question required candidates to state how information from the sources identified in b) and c) could be used in the development of best practice.

Strong candidates discussed the review and evaluation of information to ensure it is accurate, along with the trialling of horticultural techniques.

Weaker candidate responses contained generic statements, for example the information can be used to formulate a plan.

Question 7

This question proved to be an effective discriminator, challenging candidates, and allowing strong candidates to demonstrate their applied knowledge in this area.

An example candidate response was provided to indicate depth and breadth.

Stronger candidates were able to define each of the design principles and provide relevant examples of how the design principle can be applied within a garden setting.

Weaker candidates were unable to provide definitions or examples for balance, rhythm, or unity indicating significant gaps in candidate knowledge.

Question 8

This question related to the management of National Plant Collections®.

Part a) required candidates to name two details that should be recorded in an accessioned plant list.

This part of the question was well answered with candidates correctly suggesting the full scientific name of the plant, the accession number, date of acquisition or source.

Part b) provided greater challenge to candidates, with stronger candidates demonstrating a knowledge of accession policies and suggesting their role in stating the scope of the collection, informing replacement strategies, and informing procurement strategies.

Weaker candidate responses stated that collections can be large and so it would be impractical to retain details without records. Some candidates failed to provide responses for this part of the question demonstrating gaps in candidate knowledge.

Finally in part c) candidates were expected to be able to recall the National Plant Collections® guidance that double labelling should be applied to mitigate for the potential loss of labels. Marks were awarded for other techniques such as the use of GPS data in digital plant records or the use of accurate plans of the garden area.

Few candidates were able to supply this information again demonstrating gaps in candidate knowledge.

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	12 - 15	Fully developed (Total)	<p>A highly detailed, comprehensive, fully relevant response, addressing all aspects of the question</p> <ul style="list-style-type: none"> <input type="checkbox"/> 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) <input type="checkbox"/> Full integration/clear links demonstrated with other appropriate topics as required: a holistic approach <input type="checkbox"/> Advanced current professional horticultural knowledge/principles demonstrated (and evidence of advanced material beyond the specification at the top end of mark range) <input type="checkbox"/> Consistent use of correct and appropriate technical language.
3	9 - 11	Mainly developed (Solid)	<p>A reasonably detailed and fairly comprehensive response, with mostly relevant observations, addressing most of the key elements of the question</p> <ul style="list-style-type: none"> <input type="checkbox"/> 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 <input type="checkbox"/> 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 <input type="checkbox"/> Current professional horticultural knowledge/principles demonstrated most of the time, with occasional errors, but largely appropriate explanations and application <input type="checkbox"/> Correct and appropriate technical language demonstrated most of the time, with some minor errors.
2	6 - 8	Rudimentary (Basic)	<p>A largely basic response with some relevant observations, addressing some key elements of the question</p> <ul style="list-style-type: none"> <input type="checkbox"/> Some significant evidence of irrelevant or incorrect material and frequent lack of detail, with some key areas overlooked <input type="checkbox"/> Occasional evidence of correct integration with other topics, but many areas are overlooked and incorrect associations made: little evidence of a holistic approach <input type="checkbox"/> Current professional horticultural knowledge/principles demonstrated some of the time, but with frequent errors, and only basic explanations or application <input type="checkbox"/> Correct and appropriate technical language only partially demonstrated but limited. Some key errors.
1	0 - 5	Undeveloped (Unsatisfactory)	<p>A largely poor response with few relevant observations, addressing few of the key elements of the question</p> <ul style="list-style-type: none"> <input type="checkbox"/> Material is largely irrelevant or incorrect and lacking in any detail, with many key areas overlooked <input type="checkbox"/> 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 <input type="checkbox"/> No or little evidence of current professional horticultural knowledge/principles demonstrated, with poor or incorrect explanations or application <input type="checkbox"/> Little (if any) technical language demonstrated. Often incorrect. Key errors.

Question 1

This question required candidates to discuss the impact of plant species requirements in the development of a propagation facility within a public garden.

This was a popular question, however many candidates failed to embrace the opportunity the question offered to demonstrate their knowledge of plant species requirements, and how these would impact on the development of a propagation facility.

The majority of candidate responses lacked the required level of detail, for example stating that many plants are propagated by seed, without providing named examples, or discussing the germination requirements required for seed, for example the use of heated benches.

Some candidates were able to provide basic frameworks for their answers, but failed to provide the additional information to develop this framework into a strong response.

Question 2

This question required the candidate to evaluate the importance and use of reliable named information sources in the management of plant collections in heritage gardens.

Candidates who scored marks in higher bands evaluated, discussed and named reliable information sources relating to the verification of plant names, for example RHS Plant Finder, wild collection codes, the retention of plant passport information.

Other key areas included in candidate responses graded as being in the higher bands included links between reliable information sources and plant hardiness, maintenance interventions, the seed collected and distributed to other gardens, historical records, and health status and risks.

Candidate responses graded in the lower bands discussed the importance of heritage gardens, the differences between heritage and botanical gardens. Weaker candidates did not discuss the use of reliable information sources, which was a core requirement of the question, and provided limited or no holistic knowledge across topic areas.

Question 3

This question required candidates to discuss how 'Spirit of the Age' influenced the development of the English Landscape Garden Style.

Candidates who were graded in the higher bands were able to define Spirit of the Age, and discuss the factors that impacted on the development of the English Landscape Garden. Candidates in the higher bands discussed concepts including:

- the influence of politics, society, and common values
- the impact of exploration and trade on style and plant ranges available
- evolving concepts of the garden
- the impacts of religion/belief art and architectural style
- the role of the grand tour
- the role of art in creating the format for the perfect landscape with classical features, such as winding paths, temples and classical statuary.

Candidates who were graded in the lower bands, could often discuss the English Landscape Garden Style, but either confused Spirit of the Age with Spirit of Place, or did not attempt to discuss how Spirit of the Age impacted on the development of the English Landscape Garden Style.

Question 4

This question required candidates to apply their knowledge of plant specifications to a given scenario.

Candidates who scored marks in the higher bands considered factors including:

- plant sizes (pot or tree sizes, i.e. heavy standard)
- production system (bare root/undercut etc.)
- provenance
- sustainability (locally grown/peat free, reduced use of plastics)
- biosecurity to include origin of plants, supplier reputation, compliance with legislation, phytosanitary certificates
- plant quality, labelling
- lead times
- minimum order quantities
- minimum order for free delivery
- British standards, with appropriate examples
- timing of supply/seasonality

Candidates who scored marks in the lower bands gave responses that were general and often lacking in detail. Some candidates produced a bullet list of considerations but did not include a discussion. Other candidates latched onto key words within the question and wrote what they knew, rather than tailoring their answer to the requirement of the question, for example discussing the process of plant selection, the implications of right plant right place and other factors.

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