# RHS Qualifications
# Examiner Comments

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| Examination: | RHS Level 2 |
| Unit: | Unit 1 |
| Examination date: | February 2026 |

## General Introductory Comments

Examiners' comments are produced by RHS Qualifications following each examination series. They are intended to help students to prepare for RHS examinations by having a better understanding of the requirements of the paper. These comments are also intended to help tutors to understand the challenges that candidates may have in developing their responses to the questions.

There have now been multiple papers for the Level 2 examinations, and all stakeholders are now familiar with the format, structure and demand of the papers.

The RHS Level 2 examination papers are designed to assess the contents of the Qualification Specification according to Ofqual's level descriptors.

At Level 2 these state that candidates should:

- possess a knowledge and understanding of facts, procedures and ideas within the field of horticulture
- be able to complete well defined tasks and address straightforward problems
- be aware of a range of information that is relevant to horticulture and demonstrate an ability to interpret and use relevant information and ideas to inform actions
- be able to apply knowledge, both to unfamiliar situations and by exploring links within and across Topics and Elements.

## 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 knowledge are classified as being low demand.

Questions that require the recall of more technical concepts or the application of knowledge are classified as medium demand.

Questions that require the recall of advanced technical concepts; and which require the application of knowledge, both to unfamiliar situations and by exploring links within and across Topics and Elements are classified as high demand.

### General comments

As with previous examination series candidate performance was impacted by two key factors.

The amount of preparation the candidate had undertaken for the examination.
The application of examination technique in each of the three sections of the examination.

Candidates who were well prepared and who applied effective examination technique by tailoring their responses to the specific requirements of the question were able to achieve higher marks. These candidates demonstrated secure horticultural knowledge and were able to state relevant facts and principles, apply these through appropriate examples, and link key factors and influences to show integrated understanding.

Some candidates demonstrated strong horticultural knowledge and were able to state facts and principles, provide examples, and show understanding of key influences. However, these candidates did not sufficiently link their knowledge to the requirements of the question. As a result, responses often demonstrated what candidates knew about the topic, rather than addressing the question directly, which limited the marks that could be awarded.

Other candidates demonstrated gaps in knowledge, either by omitting parts of the question or by providing responses that were brief and undeveloped. Responses that achieved lower marks often lacked the technical depth required for this examination. These responses typically named or described a horticultural concept, but did not demonstrate the knowledge required by a horticultural practitioner. The responses were often vague, lacked detail or evidence of understanding.

In contrast, responses demonstrating advanced technical knowledge explained underlying processes and principles, used accurate subject-specific language, and applied this knowledge directly to the question. Stronger answers showed clear links between facts, examples, and outcomes, demonstrating understanding rather than simple recall.
Candidates and centres are reminded that a key factor in examination success is a clear understanding of the command verbs. Candidates and centres are strongly advised to fully familiarise themselves with these terms, as they indicate the type and depth of response required.

### For example:

State: provide a brief descriptive point.

Explain: give a clear, short, reasoned statement, often outlining a process or factor.

Justify: support an answer with evidence.

The full table of command verbs for RHS Level 2 qualifications is provided below.

| Command verb | Definition |
|---|---|
| Annotate | Learners should be able to apply labels and supporting information on diagrams |
| Assess | Learners are required to give a statement relating to the overall quality of the issue being considered. This could include an argument about an issue (for and against). The statement should provide evidence, with appropriate use of examples, and express an opinion about the merits of each side considered |
| Calculate | Learners should be able to carry out basic calculations, or estimate quantities of materials |
| Choose | Learners should be able to select from a range of alternatives |
| Compare | Provide a response that identifies similarities between things |
| Compare and contrast | Provide a response that both identifies similarities and identifies and evaluates differences between things |
| Complete | Learners should be able to provide short responses, or complete statements and tables |
| Deduce | Come to a decision based on information provided in the question |
| Define | Learners should be able to state formal definitions |
| Describe | Learners should be able to recall facts or applied processes in an accurate way |
| Discuss | Identify key points, explore all aspects, provide a conclusion |
| Evaluate | Learners should be able to use information supplied, as well as their own knowledge and understanding, to consider evidence for and against when making basic decisions |
| Estimate | Roughly calculate or judge the value, number, quantity, or extent of |
| Explain | Learners should be able to make clear, short, reasoned statement to explain a process or similar factor |
| Explain how and why | Learners should be able to make clear, short, reasoned statement to explain a process or similar factor<br>The 'how' asks about the procedure or process<br>The 'why' asks about the purpose of something |
| Give (a reason) | Learners should be able to clearly state reasons (facts) as directed |
| Identify | Name or characterise, for example the identification of type of plant tissue, or floral part of a plant |
| Justify | Learners should be able to provide evidence to support an answer |
| Label | Apply information to diagrams |
| List | Learners provide single word, or short phrase answers |
| Name | Learners should be able to provide a single word or short phrase answer |
| Outline | Learners should be able to provide short descriptions, for example the stages that make up a task |
| Predict | State what you think will happen, based on a given scenario and your own knowledge |
| Show that | Prove the statement in the question is correct |
| State | Learners should be able to provide brief descriptive points |

| Command verb | Definition |
|---|---|
| State and explain | Make a point, and then explain or justify key aspects |
| Suggest | Learners should be able to apply their knowledge and understanding to make recommendations for actions |
| Summarise | Learners should be able to provide a brief account of the main points with regards to a topic, focussing their response on the most essential ideas. |
| Use | Learners should be able to use information provided within the question, sometimes in conjunction with their own knowledge, to carry out a task |
| Write | Learners should be able to provide a short answer as directed |

Qualification Specification and Guidance Document

The Qualification Specification sets out the curriculum content on which candidates will be examined.

To support delivery, the 2025 Guidance Document (Version 5 of which is available from RHS Qualifications and downloadable from Quartz) provides centres with additional clarification on how to interpret the Assessment Outcomes at the breadth and depth appropriate for a Level 2 qualification.

It is important to note that the Guidance Document is not a comprehensive teaching manual. Instead, it highlights examples of key areas within each Assessment Outcome.
For example, if an Assessment Outcome in the Specification lists five areas, the Guidance Document may only expand on one area as an illustration. Centres and candidates are then expected to apply the same level of depth and breadth to the remaining areas.

# Section A

Questions 1 – 20

General comments on Section A

Multiple Choice Questions (MCQs) are designed to assess candidate's knowledge and understanding of the concepts covered in the 4 Topics and the 4 Qualification-wide outcomes that make up this unit.

Candidate performance varies across the three sections of the examination: with many candidates performing more strongly in Section A, than Section B and C.

In this examination series candidates generally scored strongly in Section A.

Candidates and centres are reminded of good examination technique with regards to MCQs Candidates should:

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

# Section B

Each question is considered separately.

## Question 1

This question assessed candidates' knowledge and understanding of growing media, with specific reference to peat use and sustainable alternatives.

The first part of the question required candidates to state one negative impact on wildlife resulting from peat extraction. The command verb 'state' provide brief descriptive points.

Stronger responses:

- clearly identified that peat extraction leads to the destruction or removal of valuable wildlife habitats
- recognised the permanent loss of specialised ecosystems
- referred to the disruption of nesting areas for certain wildlife

Weaker responses:

- repeated the wording of the question without specifying the impact on wildlife
- referred generally to "negative environmental impacts" without further detail
- made broad or unrelated statements not clearly linked to wildlife

The second part of the question required candidates to state one negative impact on the climate resulting from peat extraction.

Stronger responses:

- clearly stated that peat extraction releases carbon dioxide into the atmosphere
- clearly stated that peat extraction prevents carbon dioxide sequestration into the bog

Weaker responses:

- provided vague or incomplete statements, referring only to "carbon" or "gases"
- lacked clarity and scientific accuracy

Candidates were then required to name one peat-free bulk ingredient suitable for use in growing media.

Stronger responses:

- identified appropriate materials such as coir, bark, forest by-products (brash), bracken and perlite

Weaker responses:

- named incorrect or inappropriate materials, including peat-based composts, biochar, farmyard manure and humus
- demonstrated confusion regarding the definition of a bulk ingredient within growing media

Candidates were then required to state two characteristics of the named bulk ingredient when used in growing media.

Stronger responses:

- identified relevant characteristics such as moisture retention and nutrient retention
- recognised free-draining properties and high air-filled porosity
- referred to horticultural sterility and influence on pH

Weaker responses:

- confused growing media with soil, describing improvements to soil structure or drainage
- made inaccurate statements, for example suggesting coir has a high nutrient-holding capacity
- provided general comments such as being natural or high in organic matter without linking to functional characteristics

The final part of the question required candidates to outline the environmental footprint of the named bulk ingredient.

Stronger responses:

- provided detailed and developed answers, often using coir as an example
- discussed environmental impacts of washing coir, including fresh water use and saline runoff affecting ecosystems
- considered the carbon footprint associated with transport
- offered balanced responses, including alternative impacts such as burning if not used

Weaker responses:

- were vague or descriptive without clear explanation
- identified factors without indicating whether they were positive or negative environmental impacts

Closing comments:

This question was generally well attempted, particularly in the earlier sections. However, weaker responses highlighted a basic confusion between growing media and soil, which limited candidate's ability to access marks in parts relating to material characteristics. Candidates are advised to clearly understand the difference between a growing media and soil. Candidates are also advised to develop a clear understanding of growing media components and their properties, and to ensure that responses are accurately focused on the context given in the question.

## Question 2

This question assessed candidate's knowledge and understanding of tree planting, with specific reference to planting depth and post-planting practices.

The first part of the question required candidates to explain one impact of planting a tree at an incorrect depth. The command verb 'explain' required a clear, short, reasoned statement to explain a process or similar factor.

Stronger responses:

- clearly explained that planting too deeply can result in the buried section of the trunk becoming prone to rot, leading to decline or plant failure
- clearly explained that shallow planting reduces stability, with roots positioned close to the soil surface, increasing the risk of drying out and poor establishment

Weaker responses:

- failed to specify whether the impact related to planting too deeply or too shallowly
- made vague or generalised statements without clear explanation
- focused only on extreme scenarios (stating the plant will die) rather than considering impacts on establishment and early growth

The second part of the question required candidates to explain three reasons why soil is firmed when planting trees.

Stronger responses:

- explained that firming brings roots into close contact with the soil, improving water and nutrient uptake
- identified the removal of large air pockets that would otherwise limit root establishment and foraging
- recognised that firming helps prevent soil slumping after planting
- explained that firming provides anchorage, reducing wind rock and preventing root tearing, which supports successful establishment

Weaker responses:

- were vague, undeveloped or contained inaccuracies
- suggested that firming improves soil texture
- incorrectly linked air pockets to frost pockets or flooding
- suggested that firming is used to deter animals from digging around the root system

Closing comments

Many candidates demonstrated a basic understanding of tree planting practices, particularly in relation to firming soil. However, weaker responses often lacked precision and did not fully address the requirement to explain cause and effect. There was also some confusion around soil processes and the function of firming during planting.

Future candidates are advised to:

- ensure that responses clearly address the command verb, particularly when required to explain processes
- distinguish clearly between different planting scenarios, such as planting too deeply or too shallowly
- develop an understanding of the principles of tree establishment, including root–soil interactions and anchorage
- avoid vague or generalised statements and instead provide clear, accurate and applied horticultural explanations

## Question 3

This question assessed candidates' knowledge and understanding of frost damage and plant hardiness.

The first part of the question required candidates to describe one symptom of frost damage to plants.

Stronger responses:

- provided accurate and clearly described symptoms, including scorching of leaves
- described discolouration of flowers
- identified flower buds turning black
- explained wilting of foliage, particularly in the morning following a frost

Weaker responses:

- were vague, incomplete or incorrect
- failed to describe a specific symptom of frost damage
- named hardy plants that are not typically affected by frost
- discussed the visual impact of frost on seedheads, rather than damage to plant tissues
- simply stated a colour, such as black or brown, without further development

The second part of the question required candidates to suggest two methods to reduce the risk of frost in a garden.

It should be noted that the original intent of this question was to assess candidate's understanding of how horticulturists can reduce the likelihood of frost occurring within a garden. This includes approaches such as enabling cold air drainage on sloping sites, for example by allowing gaps beneath fencing.

During standardisation, it became clear that many candidates interpreted the question as referring to methods used to protect plants from frost damage, rather than reducing frost occurrence. It was therefore agreed to broaden the mark scheme to accept a wider range of valid responses relating to frost protection to ensure the marking process was fair to candidates.

As a result, the majority of candidates achieved high marks.

Stronger responses:

- suggested the use of protective fleece or mulches
- identified the use of cloches or cold frames
- recommended moving frost-sensitive plants into protected environments, such as conservatories or cold greenhouses

Weaker responses:

- were vague and lacked development, for example stating "protect the plant" without explanation
- suggested replacing susceptible plants with cold-hardy species, which did not address the requirement of the question

The final part of the question required candidates to explain what a hardiness rating measures.

Stronger responses:

- correctly stated that a hardiness rating indicates the lowest temperature a plant can tolerate or survive

Weaker responses:

- provided examples of plants with hardiness ratings without explaining what the rating measures
- demonstrated some horticultural knowledge but did not address the question requirement, indicating a gap in understanding of key terminology

Closing comments:

While many candidates performed well on the frost protection section, fewer demonstrated a secure understanding of the underlying concepts, particularly in relation to hardiness ratings. This highlights a need for greater emphasis on core definitions and terminology.

Future candidates are advised to:

- ensure they are able to define key horticultural terms accurately
- read questions carefully to ensure they respond to the specific requirement
- avoid providing general knowledge that does not directly answer the question
- support responses with clear explanations rather than brief or undeveloped statements

## Question 4

This question assessed candidates' knowledge and understanding of plant passporting as part of the biosecurity measures used to protect gardens from the introduction of pests and pathogens.

The first part of the question required candidates to explain the role of a plant passport.

Stronger responses:

- clearly identified traceability through the supply chain as the key role of a plant passport
- explained that, in the event of a pest or disease outbreak, a plant passport can be used to identify the grower or supplier
- recognised that plant passports support the tracking of other batches of plants sold by the same grower or supplier

Weaker responses:

- incorrectly stated that plant passports are used to confirm plant identity, ensure plants are true to type, or determine provenance
- confused plant passports with phytosanitary certificates
- provided vague responses that did not explain their role in traceability or biosecurity
- The second part of the question required candidates to describe biosecurity measures, other than plant passports, used to protect a garden from the introduction of pests and diseases.

Stronger responses:

- described the quarantine of new plants on arrival
- explained the importance of regular monitoring of plants during quarantine
- described cleaning and sterilising tools and equipment
- referred to the use of footbaths or foot-wash stations containing appropriate disinfectant

Weaker responses:

- were vague and lacked the detail required by the question
- often suggested only one biosecurity measure, most commonly cleaning tools
- did not develop responses sufficiently to show how the measure would reduce the risk of introducing pests or diseases

Future candidates are advised to:

- ensure they understand the primary function of plant passports as a traceability tool within the supply chain
- be clear on the distinction between plant passports and phytosanitary certificates
- revise a range of practical biosecurity measures used in gardens, and be prepared to describe how these reduce the risk of pest and disease introduction
- fully understand the requirements of the command verb used in the question, or parts of the question
- read each question carefully to ensure all parts are addressed with sufficient detail.

## Question 5

This question was designed to assess candidates' knowledge of the internal and external structures of plant stems.

The first part of the question required candidates to name one woody perennial and one herbaceous perennial.

The information shown below is taken from the mark scheme, to share the protocols used at Level 2, where a question requires a candidate to state a plant name:

*RHS Qualifications, marking of named plant examples.*

*Where a question requires a named plant example in a Level 2 theory examination the following marking conventions should be followed:*

*Genus, ½ mark*

*Species, ½ mark*

*If only the genus is stated in the answer the ½ mark can only be applied if the characteristic is exhibited within all species in that genus*

*Marks are not allocated to cultivar, variety or grower designates, unless specifically asked for in the question*

*Common name, ½ mark for a recognised common name.*

*Note:*
*Where the named plant is a productive crop, award 1 mark for an accurate common name*

*Spelling is not assessed, as this is not a formal plant identification test, however spelling should be recognisable, identifying the plant to the examiner*

Stronger responses:

- correctly named one woody perennial and one herbaceous perennial in line with the requirements of the question
- demonstrated an understanding of the distinction between woody and herbaceous growth habits

Weaker responses:

- confused herbaceous and woody perennials
- named genera that contain both woody and herbaceous species (for example Salvia spp.), without clear qualification
- provided inappropriate or ambiguous examples that could not be credited

The second part of the question required candidates to compare the stems of woody and herbaceous perennials.
Stronger responses included:

- clear comparisons between the two stem types, rather than separate descriptions
- reference to the absence of secondary thickening in herbaceous perennials and its presence in woody perennials
- reference to seasonal persistence, noting that woody stems remain above ground over winter, while herbaceous stems die back and regrow in spring

Weaker responses:

- were often descriptive rather than comparative
- focused on only one stem type, and therefore did not meet the command word 'compare'
- confused woody and herbaceous characteristics with monocotyledonous and eudicotyledonous growth patterns

The final part of this question required candidates to explain how gases enter and leave the stems of woody perennials.

Stronger responses:

- correctly identified lenticels as the structures responsible for gas exchange in woody stems
- explained that gases diffuse into and out of the stem through lenticels

Weaker responses:

- confused lenticels with stomata or pneumatophores
- referred incorrectly to aerenchyma tissue as internal oxygen transport, demonstrating an insecure understanding of plant anatomy and physiology

Summary

Performance on this question was mixed. While many candidates were able to provide suitable plant examples, a significant number demonstrated uncertainty in distinguishing between woody and herbaceous perennials. Responses to the comparative element were often limited by a lack of understanding of the command verb, and knowledge of stem structure, particularly gas exchange in woody plants, was frequently insecure.

Future candidates are advised to:

- develop a clear understanding of the differences between woody and herbaceous perennials, supported by accurate plant examples
- revise key aspects of plant stem structure and function, including secondary thickening and seasonal growth patterns
- practise responding to command verb such as 'compare', ensuring that similarities and differences are explicitly stated
- gain a basic understanding of plant anatomy, including structures involved in gas exchange such as lenticels

## Question 6

This question was designed to assess candidates' knowledge of juvenile growth in plants.

The first part of the question required candidates to define the term juvenile growth.

Stronger responses:

- demonstrated secure knowledge by stating that juvenile growth is the early phase of plant development, from germination through to the point at which the plant is capable of sexual reproduction
- clearly linked juvenile growth to physiological immaturity, meaning the plant is incapable of flowering or producing viable reproductive structures, even under favourable conditions

Weaker responses:

- confused the concept of juvenility with differences between monocotyledonous and eudicotyledonous plants
- referred to seed leaves and true leaves without addressing the developmental phase of the plant
- provided vague statements, such as describing juvenile growth simply as the growth that occurs when a plant is young, without further clarification

Part (b) of the question required candidates to provide three distinct examples of how juvenile growth differs from adult growth in plants.

Stronger responses:

- identified that juvenile leaves may differ in shape or form from adult leaves, for example in *Eucalyptus gunnii*
- stated that juvenile plants are unable to produce flowers, whereas adult plants are capable of reproduction
- provided a range of valid, distinct examples, including:
- higher levels of growth hormones in juvenile tissue, enhancing rooting ability
- juvenile growth being restricted to vegetative development, while adult growth includes both vegetative and reproductive phases

Weaker responses:

- struggled to provide three distinct examples
- repeated the same core idea in different ways (e.g. no flowers, no seeds, no fruit), which could not be credited as separate points
- provided responses that did not make a comparison with adult growth
- made unsupported or irrelevant statements, such as juvenile growth being more prone to pests and diseases, without a comparative context

Summary

This question was not well answered by many candidates. A lack of secure understanding of the definition of juvenile growth often limited performance in the second part of the question. In particular, many candidates struggled to provide three distinct and comparative examples, as required.

Future candidates are advised to:

- develop a secure understanding of key plant science terminology, including clearly defined developmental stages
- practise applying definitions to extended responses, particularly where further explanation or examples are required
- ensure that multiple examples are distinct and not repetitive
- read command verbs carefully, ensuring that comparisons are explicit where required

## Question 7

This question assessed candidates' knowledge and understanding of plant nutrition.

Candidates were required to name one plant nutrient that promotes flowers, one plant nutrient that promotes leaves, and one plant nutrient that promotes roots.

Stronger responses:

- clearly stated the plant nutrient that promotes flowers as Potassium
- clearly stated the plant nutrient that promotes roots as Phosphorus
- clearly stated the plant nutrient that promotes leaves as Nitrogen

Weaker responses:

- often stated Potassium, Phosphorus and Nitrogen, but against an incorrect type of growth
- Candidates were then required to describe one symptom caused by a deficiency of Iron in plants.

Stronger responses:

- gave clear and precise deficiency symptoms, for example interveinal chlorosis on younger leaves. Other candidates stated pale, cream, almost white growth

Weaker responses:

- often discussed the role of iron within the plant, rather than clearly stating a deficiency symptom
- gave imprecise responses, for example the leaves are pale, or discussed that the plant would have slow and stunted growth and be more prone to pest and pathogen attack
- other candidates stated chlorosis rather than interveinal chlorosis, or stated the location of the deficiency as being on lower (older) leaves
- The final part of the question required candidates to describe one plant disorder caused by a deficiency of calcium in plants.

Stronger responses:

- stated the presence of blossom end rot in tomatoes
- stated the presence of bitter pit in apples

Weaker responses:

- stated poor/slow/stunted growth
- described a deficiency symptom for calcium rather than a plant disorder
- stated club root as a deficiency of calcium

Summary

Candidates should be prepared to demonstrate knowledge of both macro- and micronutrients, including their specific roles and associated deficiency symptoms or disorders. A common issue was that candidates did not apply their knowledge accurately to the question asked, instead providing generalised or unrelated information.
Future candidates are advised to:

- read the question carefully to ensure that each part is answered precisely (e.g. nutrient linked to the correct type of growth)

- revise the specific functions of key nutrients (e.g. N, P, K) and be able to match them accurately to plant processes
- distinguish clearly between deficiency symptoms (e.g. interveinal chlorosis) and named disorders (e.g. blossom end rot)
- include detail and precision in responses, particularly where location (e.g. young vs. old leaves) is important
- avoid writing general knowledge about nutrients unless it directly answers the question

# Section C

Candidate responses in Section C are graded against the assessment ladder, shown on the following page. Centres and candidates are advised to review this carefully, as it illustrates how assessment decisions are made when grading long-form responses.

To further support understanding of the assessment process, this report includes examples of candidate responses accompanied by examiner commentary explaining how decisions were reached.

Performance in Section C ranged from stronger candidates who:

- provided detailed responses
- demonstrated a strong level of technical horticultural knowledge
- produced concise, logical, and well-structured responses
- integrated knowledge from different relevant topic areas to provide holistic answers
- fully met the requirements of the question without including irrelevant material or omitting essential points.

By contrast, weaker responses often:

- provided responses based on their knowledge of the topic rather than the requirement of the question
- provided undeveloped, vague or inaccurate responses

In addition to horticultural knowledge, responses are reviewed against the following criteria:

- Indicative content
- Strength of response
- Integration

Strength of response

Stronger responses:

- developed a logical argument directly addressing the question
- drew upon reliable information sources
- remained consistently relevant
- expressed clarity of thought
- demonstrated sound knowledge of horticultural practices.

Assessment ladder (for information)

| Band | Mark range | Summary | Description |
|---|---|---|---|
| 4 | 12 - 15 | Fully developed (Total) | **A highly detailed, comprehensive, fully relevant response, addressing all aspects of the question**<br>☐ 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)<br>☐ Full integration/clear links demonstrated with other appropriate topics as required: a holistic approach<br>☐ Advanced current professional horticultural knowledge/principles demonstrated (and evidence of advanced material beyond the specification at the top end of mark range)<br>☐ 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**<br>☐ 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<br>☐ 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<br>☐ Current professional horticultural knowledge/principles demonstrated most of the time, with occasional errors, but largely appropriate explanations and application<br>☐ 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**<br>☐ Some significant evidence of irrelevant or incorrect material and frequent lack of detail, with some key areas overlooked<br>☐ Occasional evidence of correct integration with other topics, but many areas are overlooked and incorrect associations made: little evidence of a holistic approach<br>☐ Current professional horticultural knowledge/principles demonstrated some of the time, but with frequent errors, and only basic explanations or application<br>☐ Correct and appropriate technical language only partially demonstrated but limited. Some key errors. |
| 1 | 0 - 5 | Undeveloped (Unsatisfactory) | **A largely poor response with few relevant observations, addressing few of the key elements of the question**<br>☐ Material is largely irrelevant or incorrect and lacking in any detail, with many key areas overlooked<br>☐ 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<br>☐ No or little evidence of current professional horticultural knowledge/principles demonstrated, with poor or incorrect explanations or application<br>☐ Little (if any) technical language demonstrated. Often incorrect. Key errors. |

## Question 1

This question required candidates to explain the concept of right plant right place, using named plant examples.

Stronger responses:

- clearly defined the concept of right plant right place, linking plant selection to environmental suitability
- identified a wide range of key factors influencing plant selection, including:
    - soil type
    - soil pH
    - microclimates
    - aspect
    - soil moisture levels
    - light intensity
    - presence of frost pockets
    - nutrient availability
    - exposure to wind
- demonstrated understanding of how these factors influence plant growth and performance, for example linking free-draining soils to drought-tolerant species or shade to woodland plants
- provided appropriate and accurate named plant examples to illustrate these relationships, for example:
    - *Lavandula angustifolia* in free-draining, sunny conditions
    - *Hosta* spp. in shaded, moist environments
    - *Cornus alba* in moist soils
- used scientific plant names accurately and appropriately

Weaker responses:

- were able to state or partially describe the concept of right plant right place
- failed to fully develop the concept of the 'right plant', with limited understanding of plant requirements
- failed to develop the concept of the 'right place', often omitting key environmental factors
- many candidates did not provide named plant examples
- failed to use scientific plant names, or used them inaccurately

Closing comments:

This was a popular question, however many candidates failed to score marks in the higher bands, due to demonstrating basic knowledge, or relying on simplistic or generalised statements. There was limited evidence of the solid depth of understanding expected at Level 2, particularly in linking environmental factors to plant choice. A number of responses were undeveloped, suggesting that plants would simply "live or die," rather than recognising the range of impacts on plant performance, health, and ornamental value.

Future candidates are advised to:

- develop a secure understanding of both plant requirements and site conditions, and how these interact
- use specific, named plant examples to support explanations
- use scientific plant names where appropriate
- move beyond simplistic statements and demonstrate applied horticultural understanding
- explain why a plant is suitable for a location, not just that it is suitable

## Question 2

This question required candidates to discuss the impact of a range of abiotic factors on photosynthesis.

Stronger responses:

- correctly defined the term abiotic as non-living environmental factors
- identified a broad range of relevant abiotic factors, including:
    - light intensity
    - wind
    - temperature
    - frost
    - soil nutrients
    - water availability
- explained how each factor influences the rate of photosynthesis, for example:
- increasing light intensity increases the rate of photosynthesis up to a saturation point
- low temperatures reduce enzyme activity, slowing photosynthesis
- high wind speeds can increase transpiration, leading to stomatal closure and reduced carbon dioxide uptake
- demonstrated understanding of the Law of Limiting Factors, explaining that photosynthesis is controlled by the factor in shortest supply
- considered the interrelationship between factors, for example linking water stress, stomatal closure, reduced carbon dioxide diffusion, and decreased photosynthetic rate
- in some cases, extended knowledge beyond the specification, for example:
- explaining the role of enzymes in photosynthesis and the effect of temperature on enzyme activity
- recognising that very high temperatures can denature enzymes and reduce photosynthetic efficiency

Weaker responses:

- focused on describing the process of photosynthesis (e.g. word equations), rather than addressing the impact of abiotic factors
- identified only a limited range of factors, often focusing solely on light or temperature
- failed to link factors such as light intensity, temperature, or stomatal opening to their effect on the rate of photosynthesis
- made generalised statements without explanation, for example “light affects photosynthesis” without further development
- considered photosynthesis to be a process that is either turned on, or turned off, failing to appreciate that the rate of the reaction can vary considerably as a result of abiotic conditions

Summary

Many candidates demonstrated only partial knowledge but did not apply this knowledge effectively to the question. A common issue was a tendency to describe the process of photosynthesis rather than consider how environmental factors influence its rate. Stronger responses were characterised by clear links between abiotic factors and physiological processes within the plant.

Future candidates are advised to:

- read the command verb ‘discuss’ carefully and ensure that responses include explanation and development, not just description
- focus specifically on how abiotic factors influence the rate of photosynthesis
- review a wide range of abiotic factors and be prepared to explain their individual and combined effects
- develop an understanding of limiting factors

## Question 3

This question required candidates to evaluate the impact of weeds in gardens.
Candidates were further instructed to consider both positive and negative impacts of weeds.

Stronger responses:

- demonstrated a clear understanding of the term evaluate by presenting both advantages and disadvantages, often reaching a balanced judgement
- identified a wide range of negative impacts, including:
    - competition with cultivated plants for light, water, and nutrients
    - reduction in crop yield and ornamental quality
    - harbouring pests and diseases
    - increased maintenance time and costs
    - the aesthetic impact of weeds in more formal garden settings
- supported these points with relevant examples, for instance:
    - *Taraxacum officinale* competing for nutrients in lawns and borders
    - *Ranunculus repens* spreading aggressively in poorly drained soils
- recognised and developed positive impacts of weeds, including:
    - providing nectar and pollen for pollinators
    - supporting biodiversity with particular reference to the provision of nectar and pollen
    - acting as indicator species for soil conditions
    - contributing to soil protection and reduced erosion
    - provided examples to support positive roles, for example:
        - *Bellis perennis* supporting pollinators in lawns
        - *Trifolium repens* fixing nitrogen and improving soil fertility
        - *Taraxacum officinale* bringing nutrients from deeper in the soil, to its leaves, which when they decay, release these nutrients to surface rooted plants.

In stronger responses, candidates made informed judgements, for example recognising that the impact of weeds depends on context, such as in wildlife-friendly gardens versus formal ornamental settings. Stronger responses also recognised the role of the horticulturist in maintaining balance, and in considering a number of factors including the rate of spread when determining weed control strategies.

Weaker responses:

- focused solely on the negative impacts of weeds, often describing them simply as plants growing in the wrong place, and failing to consider more recent thinking on weeds and their roles in gardens
- provided limited or no evaluation
- made generalised statements, without explanation, for example relating to weeds always being unsightly, rather than considering the visual impact of weeds as depending on the garden setting, for example, the impact of weeds in a formal lawn, as opposed to a woodland garden
- failed to provide named examples, or used only common names
- did not consider any ecological or environmental benefits of weeds
- confused weeds with pests or diseases in some cases
- made incorrect statements with regards to deep rooted weeds bringing up water for surrounding shallow rooted weeds

Summary

Overall, responses were often unbalanced, with many candidates focusing only on the negative or the positive impacts of weeds.

Stronger responses demonstrated the ability to evaluate by considering both positive and negative aspects and applying this understanding to different garden contexts. There was limited use of examples in weaker responses, which restricted the depth of explanation.

Future candidates are advised to:

- read command verbs carefully and ensure that evaluate responses include both the positive and negative impacts, supported by a reasoned judgement
- review the ecological roles of weeds, as well as their horticultural implications
- use specific, named plant examples to support points
- avoid overly simplistic or one-sided responses
- consider how the impact of weeds may vary depending on garden style, management approach, and intended outcomes

## Question 4

This less popular question assessed candidates' knowledge and understanding of soil structure and soil texture.

Candidates were required to explain how soil texture and soil structure influence plant roots.

Stronger responses:

- clearly distinguished between soil texture (the proportion of sand, silt and clay particles) and soil structure (the arrangement of soil particles into aggregates)
- explained how soil texture influences root growth, for example:
    - sandy soils allow rapid root penetration but may offer reduced water and nutrient availability
    - clay soils can restrict root growth due to compaction and poor aeration, while providing a greater nutrient availability
    - loamy soils provide a balance of drainage, aeration, and nutrient retention supporting healthy root development
- explained how soil structure affects root growth, including:
    - well-structured, soils with strong aggregation promote root penetration, aeration, and microbial activity
    - compacted or poorly structured soils restricting root growth, reducing oxygen availability, and limiting water infiltration
    - well-structured soils containing a higher proportion of macropores, with mesopores being contained in the soil crumbs, and micropores being present in soils which are made up of smaller particle sizes
    - linked the concept of macropores, mesopores and micropores to drainage characteristics of the soil. Oxygen supply to plant roots, and soil water availability
- made clear links between soil conditions and root function, for example:
    - poor aeration leading to reduced root respiration
    - waterlogged soils causing root death due to anaerobic conditions
- in stronger responses, candidates integrated these concepts, explaining how texture and structure interact to influence root development and overall plant health

Weaker responses:

- failed to distinguish clearly between soil texture and soil structure
- confused soil texture and soil structure
- defined one term only, or gave inaccurate definitions
- provided descriptive statements about soil types without linking their response to root growth
- made generalised comments without explanation
- did not explain the mechanisms by which soil conditions influence roots (e.g. aeration, water availability, resistance to penetration)

Closing comments:

Many candidates failed to gain marks in the upper bands due to the lack of technical soils knowledge demonstrated in their responses. These candidates demonstrated only superficial understanding and were unable to apply their knowledge to explain how soil properties influence root growth. Stronger responses were characterised by clear definitions, accurate use of terminology, and explicit links between soil conditions and root function.
Future candidates are advised to:

- revise and be able to clearly distinguish between soil texture and soil structure
- develop explanations that link soil properties directly to root growth and function
- use appropriate terminology, such as aeration, drainage, compaction, aggregation, micropore, mesopore, and macropores
- avoid vague or descriptive statements and instead provide clear, reasoned explanations
- practise applying knowledge to plant processes, rather than recalling isolated facts