# RHS Qualifications
# Examiner Comments

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| **Examination:** | RHS Level 2 |
| **Unit:** | Unit 2 |
| **Examination date:** | February 2025 |

## 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

Many candidates failed to get the marks that reflected their horticultural knowledge due to poor examination technique, for example through missing or ignoring key demands within questions. These responses often contained advanced horticultural knowledge and concepts, which were however, outside the scope of the question, and so marks could not be awarded.

To further support candidates this report discusses and identifies good examination technique, to help future candidates to secure marks that more accurately reflect their horticultural capabilities.

| Candidates scoring high marks on this paper: | Candidates scoring lower marks on this paper: |
|---|---|
| ▪ demonstrated that they had prepared well for the paper and were able to write with confidence to meet the theme and demand of the question<br>▪ used appropriate and correct technical language<br>▪ demonstrated sound knowledge of horticultural principles and practices<br>▪ gave the appropriate number of responses as required in the question<br>▪ provided responses that contained significant detail, which was relevant to the theme and demand of the question<br>▪ brought their own knowledge and understanding to the paper<br>▪ produced sustained lines of reasoning. | ▪ found it difficult to apply what they had learnt to the theme and demand of the question<br>▪ produced responses that were undeveloped, lacked depth, or which did not respond to the command word* within the question<br>▪ produced responses that simply repeated information contained in the stem of the question<br>▪ demonstrated a lack of underpinning scientific knowledge or understanding<br>▪ were unable to explain or define terms<br>▪ stated common, or incorrect names, when providing plant examples<br>▪ failed to respond to the full requirements of the question. |

*RHS Qualifications shared the list of approved command words for Level 2 examinations in the Qualification Guidance Document. This list is shown in the table below to help candidates to prepare for future examinations.

| Command word | 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 |

| Command word | Definition |
|---|---|
| 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 |
| 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 |
| 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 |

Guide to terminology used within questions:

| Term | Explanation |
|---|---|
| Horticultural situation | Candidates may be required to state a horticultural situation, for example the planting of whips, the pruning of fruit trees*. This allows the candidate to focus their response to the situation and allows the examiner to calibrate their thinking. |
| Horticultural setting | Candidates may be required to state a horticultural setting, this would include garden areas, for example a productive garden, or an herbaceous border. This allows the candidate to focus their response to the setting and allows the examiner to calibrate their thinking. |
| Growing system | Candidates may be required to state different growing systems to add context to their responses. Growing systems can be traditional, raised beds, container growing, organic, biodynamic as appropriate. |

*This example relates to edible landscapes.

## Qualification Specification and Guidance Document

The Qualification Specification outlines the curriculum that candidates will be examined on. The Guidance Document (which is freely available from RHS Qualifications and can be downloaded from Quartz) 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 2 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.

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 candidate/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.

## 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.

Many candidates were able to score high marks in Section A, indicating a sound grasp of horticultural knowledge, and the application of good examination technique.

Some centres have asked for the correct answers for Section A questions to be made available. As all Section A questions are part of a bank of questions, which may be used in future examination series it is not appropriate to publish the correct answers.

Candidates and centres are reminded of good examination technique with regards to forced answer questions. 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 required candidates to name three distinct growth adaptations that assist plants in overcoming adverse winter conditions. Candidates were further required to state the advantage of each adaptation to the plant.

Please note that the word distinct in this question is included to guide candidate responses to ensure a broader range of growth adaptations are considered.

The rubric at the start of the examination contains instruction relating to the use of the word distinct (see point vi) below)

**Please note:**

| | |
|---|---|
| i) | The duration of this paper is **120** minutes. |
| ii) | Write all answers legibly in the spaces provided and use black or blue ink only. |
| iii) | Use **METRIC** measurements only. |
| iv) | Where plant names are required, they should include genus, species and where appropriate, cultivar. |
| v) | Where a question requires a specific number of answers, only the first answers given will be marked regardless of the number of answers offered. |
| vi) | Please note, when the word **'distinct'** is used within a question, it means that the items have different characteristics or features. |

Stronger candidate responses included, clearly naming distinct growth adaptations, for example stem tubers, rhizomes, bulbs, resins in stems, leaves being reduced to needles and seeds with a winter dormancy mechanism.

These candidates went on to explain the advantage of each adaptation for example: stem tubers, rhizomes, bulbs, herbaceous growth habit, advantage - the storage of carbohydrate, being out of the reach of frost etc.

Deciduous leaves, advantage - to reduce the sail effect
leaves being reduced to needles, advantage - to prevent water loss over winter etc.

resins in stems, advantage - to prevent water within the stem from freezing, acting as an antifreeze etc.

Seeds with a winter dormancy mechanism, advantage – requirement of cold stratification to germinate to overcome adverse winter conditions.

Drooping branches advantage - to shed snow to reduce loading on branches, and prevent physical damage.

Weaker candidate responses often did not comply with the requirement of the question with regards to distinct, with for example stem and root tubers being considered, where both are tubers, and both are underground storage mechanisms.

Weaker candidate responses often gave named plant examples rather than stating the advantage of the adaptation.

Weaker candidate responses often used inappropriate technical language for a Level 2 qualification, for example stating the advantage of a rhizome as being containing food, rather than carbohydrate.

Question 2

This question required candidates to share their knowledge and understanding relating to the Victorian era, when plant collections became fashionable for grand estates.

Part a) of this question required candidates to give two reasons why plant collections were developed during this time.

This part of the question was well answered, with stronger candidate responses clearly stating two reasons why plant collection became popular in the Victorian era. Key reasons included the development of greenhouses to house tender plant collections, along with the increase in travel during this time to see plants in situation, for examples ferns growing in the wild. Many candidates mentioned the smashing of the glass tax (!), which made glasshouse growing more affordable. Some candidates also stated that there was an increase in the availability of new plants, due to plant hunting expeditions.

Part b) of this question required candidates to name two plants that were planted for the first time during this period.

Stronger candidate responses named suitable plants that were introduced in this period using scientific plant names, for example *Canna indica*.

Weaker candidate responses used common names of plants. Some candidates suggested water lily. There is a native water lily and so these responses were marked incorrect, highlighting the problem with using common names of plants. Other candidates suggested *Salvia rosmarinus*, which was introduced to the UK by the Romans, rather than the Victorians.

Part c) of this question required the candidate to give one lasting impact of Victorian plant collections on the landscape.

Stronger candidate responses discussed impacts of introducing invasive species, the presence of ferneries and pinetums in the landscape today.

Weaker candidate responses suggested that the colour of the landscape changed away from only green, while other candidates provided statements which while true, were not answers to the question set, for example Botanic Gardens have been doing extensive work to try and preserve and repopulate any species that have become endangered from this plant collecting.

Question 3

This question required candidates to review an image of a garden area. Candidates were required to explain three characteristics that make this garden resilient to a changing climate.

Stronger candidate responses included:

- The image shows multiple layered canopy levels, creating shade in increasingly warm summers
- The porous path, which allows for the percolation of rainfall in periods of increasingly high rainfall
- The trees are deciduous and so create an annual mulch of fallen leaves which shade the soil and assist with moisture retention in increasingly dry summers.

Weaker candidate responses included:

- The confusion of climate mitigation with climate resilience, for example trees being planted to absorb carbon through photosynthesis
- Responses not being related to the question, for example the types of plants in the garden are flowering shrubs which will flower at different times to provide food for insects through the year
- Responses which were vague or unfocused, for example the diversity of the planting provides stronger, more stable ecosystems.

Question 4

Many candidates did not attempt this question and so lost a potential 8 marks.

Part a) of this question required the candidate to define the term 'phenology'.

**Helpful hint**

Candidates are advised that they should be able to provide formal definitions of key terms included in the qualification specification.

Candidates who were able to accurately and fully define the term phenology were awarded full marks.

Part b) of the question required candidates to describe three specific impacts on phenology that may be caused by climate change.

Stronger candidate responses included:

- The impact of changing seasons meaning that pollen and nectar may no longer be available to pollinators at key times when they are required
- That insects with monophagous relationships with plants may die out if the plant is not available at required times within its life cycle
- The impact of plant and pollinator being out of synchronisation, reducing the pollination and fertilisation rates, and so limiting the formation of seed for future generations.

Weaker candidate responses often contained a correct impact, for example, cherry blossom flowering earlier, birds migrating later and animals coming out of hibernation earlier with no explanation, limiting the marks that could be awarded. Some candidates confused the terms phenology with pheromone, leading to incorrect responses.

Other weaker responses did not reflect the demand of the question discussing warmer winters, leading to increased seasonal interest in the border.

Question 5

Part a) of this question required candidates to define the term 'therapeutic horticulture'.

Candidates who were able to accurately and fully define the term 'therapeutic horticulture' were awarded full marks.

In part b) of the question candidates were required to demonstrate a deeper knowledge and understanding of the subject, by explaining horticultural practices that benefit cognitive function, motor skills and physical ability.

Stronger candidate responses stated:

Cognitive function, this includes the counting of propagules, the calculation of pots required for potting, working out seedling density, having to remember spacings and plant names, being able to identify horticultural tools by name.

Motor skills, this includes gardening activities that involve the use of a range of fine movements, for example seed sowing, pricking out, picking up a seed label, writing a seed label. Other correct candidate answers included moving loads in a wheelbarrow, or mowing as these are gross motor skills.

Physical ability, this includes gardening activities that use and strengthen core muscle groups for example single digging.

Weaker candidate responses:

- confused cognitive function and mindfulness
- incorrectly suggested monitoring plants for pests and diseases for motor skills
- incorrectly suggested working together with other people, developing self-confidence, and relieving stress as being examples of horticultural practices to benefit physical ability
- gave two examples of horticultural practices, for example mowing the lawn or pruning plants for physical ability. Only one was required and so no mark could be awarded for the second response.
- were too vague, for example, participating in growing vegetables
- were off topic discussing for example accessibility principles for those with limited mobility.

Question 6

Part a) of this question required candidates to state three distinct leaf adaptations that reduce the surface area to avoid excessive water loss.

Stronger candidate responses included:

- having a thick layer of hairs over the leaves
- have stomata on the underside of the leaf
- have needles with sunken stomata
- have leaves with a silver or white colouration
- have reduced leaves or spines
- have rolled leaves.

Weaker candidate responses were either incorrect of lacking in detail to include:

- have oily leaves
- leaves that droop and shrivel
- create holes in the leaves so water can drip through
- having a swollen stem.

Candidates who gave correct plant examples using scientific plant names, gained full marks in part b) of this question.

Question 7

Part a) of this question required candidates to name three distinct stem adaptations that are used for plant support.

Stronger candidate responses included:

- stem tendrils
- secondary thickening
- twining stems
- prickles
- thorns.

Weaker candidate responses often included:

- leaf adaptations
- barbs
- stolons
- lignin
- prop roots
- backward curving growths of epidermis
- adventitious growth
- elongation.

Part b) of this question required candidates to provide one named plant example for each plant adaptation.

Candidates who gave correct plant examples using scientific plant names, gained full marks in part b) of this question.

Weaker candidate responses often included incorrect plants, for example those with leaf tendrils, rather than stem tendrils.

Question 8

This question required candidates to identify five advantages of inclusive cultures within a workplace.

Candidates who correctly identified the benefits of inclusive cultures scored high marks in this question.

Correct responses included:

- increased availability of staff
- increased creativity
- increased innovation
- increased staff retention
- increased motivation
- being a first-choice employer
- staff feel secure.

Incorrect responses included:

- improved diversity
- enhances teamwork
- creates a healthy working environment
- ensures compliance with employment law
- a happy working environment.

Some candidates confused the requirement to 'identify five advantages', with 'explain how to promote inclusive cultures within an organisation', and so provided responses which were outside the scope of the question.

Section C

Section C candidate responses are graded against the assessment ladder, which is on the next page of this report. Candidates and centres are advised to review the ladder as this indicates how the assessment decisions are made, when grading long form responses.

To further inform candidates and centres in the assessment process this report includes examples of candidate responses, with a narrative that explains the assessment decisions that were made.

Candidate performance in Section C ranges from those candidates who:

- carefully read and responded to the key requirements of the question
- provided concise, logical responses that answered the question
- provided detailed responses that demonstrated an advanced level of current understanding
- were able to relate relevant information from different topic areas to provide holistic responses
- produced responses that fully met the requirement of the question, avoiding the inclusion of irrelevant information, or the omission of key information.

Weaker candidate responses:

- produced very short answers which did not provide the required level of depth and breadth
- picked up on certain words in the question, and wrote all they knew about these words, rather than answering the question.
- provided responses which were either basic or lacking in technical content.

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) | **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 describe the principles of an organic growing system, and how they are applied with reference to an edible landscape.

Some centres have contacted RHS Qualifications to ask for clarification as to how section C answers are marked, along with examples of strong candidate responses. An example of a strong candidate response (based on several responses to maintain anonymity) is shown below:

*Organic was a term coined by Lord Northbourne and was adopted by the nascent Soil Association founded by Lady Eve Balfour. It was a reaction against the birth of industrial agriculture with its emphasis on chemicals and promoted the health of the "living soil". The argument remains that a healthy soil created healthy food, healthy animals, and promoted health in those people eating these plants and animals.*

*Edible landscapes is the term which the RHS uses to describe growing food in anything other than an large-scale agricultural setting. It applies to market gardening, allotments, gardens, as well as initiatives of urban food growing.*

*If a growing site is currently using a "conventional" non-organic growing system - with the use of chemical pesticides, herbicides (like the translocated herbicide Glyphosate), and fertliisers (like for instance Growmore) - they can't be certified organic immediately. Even if they switch to using organic pesticides like Pyrethrum, organic fertilisers (like well-composted cow manure - currently not needing to be organically reared cattle), or organic-approved soil improvers like lime, it is necessary for the site to wait two years before Soil Association inspectors will approve their certification.*

*Not using chemicals to either promote plant growth (NPK) or to protect plants from pests and disease means that in that plant growth is slower (if more robust and not sappy like the use of too much Nitrogen can cause) and also that other methods of controlling pests are necessary. Organic growers encourage biodiversity so that natural predators (like Blue tits or European hedgehogs) can eat pests like slugs and caterpillars. With organic edible landscapes there can be a degree of financial loss to these pests and diseases but usually this is within financially acceptable parameters, and the general health of the plants protects them from disease and pests which Sir Albert Howard called "nature's censors". An organic grower like Eliot Coleman often remarks that the health of the plant usually means none of these expensive chemical amendments are necessary.*

*Along with the abstinence from the use of chemicals - organic growing places (and has always historically placed) huge emphasis on the process of composting. An edible landscape, if it doesn't already have one, would need to set up at least two large, sheltered compost bays (by which means to keep a constant pile in operation). These would be receptacles for the garden's own waste (vegetable offcuts, weeds, lawn cuttings, wood chip) but also for green (nitrogenous) and brown (carboniferous) material from off the site (like cow or horse manure,*

*wood mulch). This would be used to create compost for the site which would be used to build nutrition, biological fertility, and to improve soil structure.*

*Traditionally organic growers would use a home-made compost as a base dressing (dug into the soil and mixed with the topsoil) as well as a top dressing (as a surface mulch) - organic is not a "No dig system" like that practiced by growers such as Charles Dowding, however many (if not all) No dig growers are also organic. It's a mistake to assume that just because a compost is made from organic material that it is not capable of causing eutrophication in bodies of water. Organic growers also need to take care not to apply compost before heavy rain events and to protect compost bays from leaching into water courses.*

RHS markers reviewed this piece of work against a mark scheme, which indicates the key points that candidates may bring to their answer. The list is not exhaustive, nor is it expected that candidates include all points in their response.

State the principles of organic growing
(Source Ifoam, Soil Assoc, or any other organic organisation)
Definition of Edible Landscape
(Source Edible Landscapes, etc.)
Can include reference to Permaculture/Biodynamics

Should include links to

- Design and planning
- Choice of site
- Plant selection
- Soil amelioration
- Plant protection and health
- Water use and conservation
- Harvesting and distribution
- Recycling and re-use
- Habitat creation and supporting wildlife
- Reduced resource use.

Community links for

- Volunteering
- Involvement
- Skills
- Socialising
- Inclusion
- Healthy and affordable food
- Biophilia
- Exercise
- Mental and physical well-being.

Core Principles
Health (sustain and enhance)

- Soil
- Plants
- Animal
- Human
- Planet as one and indivisible.

Ecology

- Based on living ecological systems and cycles
- Work with them
- Emulate them
- Help sustain them.

Fairness

- Build on relationships that
- Ensure fairness with regard to the common environment and life opportunities.

Care

- a precautionary and responsible manner
- to protect the health and well-being of current and future generations and the environment.

RHS Markers then review the candidate response against the assessment ladder.

The marker highlights areas of strength (green highlight) and areas of weakness in the response (pink highlight), for example irrelevance, or key omissions, and areas of advanced technical knowledge.

*Organic was a term coined by Lord Northbourne and was adopted by the nascent Soil Association founded by Lady Eve Balfour. It was a reaction against the birth of industrial agriculture with its emphasis on chemicals and promoted the health of the "living soil". The argument remains that a healthy soil created healthy food, healthy animals, and promoted health in those people eating these plants and animals.*

*Edible landscapes is the term which the RHS uses to describe growing food in anything other than an large-scale agricultural setting. It applies to market gardening, allotments, gardens, as well as initiatives of urban food growing.*

A very basic response, Edible Landscapes is not an RHS term. A more accurate definition of the term would include the concept that Edible Landscapes integrate food-producing plants within a decorative garden setting.

The term chemical is problematic here. Natural, synthetic, organic pesticides are chemicals.

*If a growi[illegible] currently using a "conventional" non-organic growing system - with the use of chemical pesticides, herbicides (like the translocated herbicide Glyphosate), and fertliisers (like for instance Growmore) - they can't be certified organic immediately. Even if they switch to using organic pesticides like Pyrethrum, organic fertilisers (like well-composted cow manure - currently not needing to be organically reared cattle), or organic-approved soil improvers like lime, it is necessary for the site to wait two years before Soil Association inspectors will approve their certification.*

*Not using chemicals to either promote plant growth (NPK) or to protect plants from pests and disease means that in that plant growth is slower (if more robust and not sappy like the use of too much Nitrogen can cause) and also that other methods of controlling pests are necessary. Organic growers encourage biodiversity so that natural predators (like Blue tits or European hedgehogs) can eat pests like slugs and caterpillars. With organic edible landscapes there can be a degree of financial loss to these pests and diseases but usually this is within financially acceptable parameters, and the general health of the plants protects them from disease and pests which Sir Albert Howard called "nature's censors". An organic grower like Eliot Coleman often remarks that the health of the plant usually means none of these expensive chemical amendments are necessary.*

*Along with the abstinence from the use of chemicals - organic growing places (and has always historically placed) huge emphasis on the process of composting. An edible landscape, if it doesn't already have one, would need to set up at least two large, sheltered compost bays (by which means to keep a constant pile in operation). These would be receptacles for the garden's own waste (vegetable offcuts, weeds, lawn cuttings, wood chip) but also for green (nitrogenous) and brown (carboniferous) material from off the site (like cow or horse manure, wood mulch). This would be used to create compost for the site which would be used to build nutrition, biological fertility, and to improve soil structure.*

*Traditionally organic growers would use a home-made compost as a base dressing (dug into the soil and mixed with the topsoil) as well as a top dressing (as a surface mulch) - organic is not a "No dig system" like that practiced by growers such as Charles Dowding, however many (if not all) No dig growers are also organic. It's a mistake to assume that just because a compost is made from organic material that it is not capable of causing eutrophi[illegible] in bodies of water. Organic growers also need to take care not to apply co[illegible]e heavy rain events and to protect compost bays from leaching into wat[illegible]*

The examiner was not able to verify the validity of this comment

The marker having marked up areas of strength and weakness then reviews the assessment ladder, and starts at the bottom of the ladder…

Does this response match or exceed the descriptor for Band 1, 'A largely poor response with few relevant observations, addressing few of the key elements of the question'.

As the response exceeds Band 1, the examiner moves to Band 2, 'A largely basic response with some relevant observations, addressing some key aspects of the question'.

As the response exceeds Band 2 the examiner moves to Band 3, 'A reasonably detailed and fairly comprehensive response with mostly relevant observations, addressing most of the key elements of the question'.

On review, and considering the qualities in the candidate response, the length of time available to the candidate and the level of the qualification the examiner determined that the response exceeded Band 3, moving to Band 4, 'A highly detailed, comprehensive, fully relevant response addressing all aspects of the question.'

The response had some areas where the examiner identified weakness and so it is not placed at the top of the 12 – 15 mark range, however when the descriptors are reviewed there is no irrelevant material. There are however some areas, for example the definition of edible landscapes, the use of the word chemical and the reference to the majority of no dig gardeners being organic. When the response if considered holistically, the examiner concluded that the response exhibits advanced knowledge for the level of the qualification, with the areas of weakness being minor. Therefore, the examiner awarded a mark of 14.

Question 2

This question, which was less popular amongst candidates, required candidates to discuss the economic impact that horticulture has on the UK economy.

Stronger candidate responses to this question included:

- defining the term horticulture
- the identification of key sectors of the horticulture industry, to include:
    - garden retail (Garden Centres etc.)
    - garden tourism
    - landscape design
    - landscape construction
    - ornamental plant production
    - tree and shrub production
    - food production
    - floriculture
    - parks and greenspace
    - sports turf.

Candidates often further developed their responses to include secondary employment, e.g. delivery drivers, chefs in Garden Centres etc.

The economic impact of the above, individually or as a total was discussed using key metrics sourced from the Horticulture Round Table Group.

Other areas considered include:

Cost saving, swales as flood water management
Cost saving, greening the UK to reduce crime and so reduce the cost of policing
Cost saving, green prescribing and health economics
Economic impact of urban food production on the local and national economy

Weaker candidate responses contained information with significant errors, for example discussing that as many of the 500 000 people who visit Chelsea Flower Show each day are international tourists, or that the National Trust manages 30% of the UK landscape, or that it is estimated that UK horticulture adds over £1 trillion to the UK economy.

Other weaker candidate responses focused on the social and wellbeing impacts of horticulture, which were outside the scope of the question.
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Question 3

This question required candidates to explain the influences that led to the development of wild garden styles during the Victorian era.

Stronger candidate responses included:

A definition of the term ‘wild style’.

Strong candidates provided a framework for their answer to include concepts including:

- wild style as being a reaction against industrialisation and Victorian formality
- the impact of notable people such as William Morris and John Ruskin
- the introduction of a gardening press during this period, which promoted and published work by authors like Robinson (The Wild Garden), created interest in the development of a wild garden style.
- the influences of nature and mountain landscapes from increased travel and publication
- this development of nature built on the looser elements of picturesque styles
- increasing wealth allowed the development of gardens from purely productive to decorative
- the increasing leisure time for some people, allowing an increase in ornamental plantings
- parks and great estates pioneered new styles that were widely copied and emulated
- the rise of middle classes, and suburban developments (train transport).

These candidates went on to use the framework provided by adding layers of detail to further explain the above points.

Weaker candidate responses included the development of other garden styles in different periods of time.

Question 4

This was a very popular question, however many candidates failed to gain marks above Band 1 and Band 2 as they did not fully respond to the requirements of the question.

The question started with the scenario that *'A community garden has asked you to help them create a new planted area that will include as wide a range of habitats for wildlife as possible'.* Many candidate responses were based around this statement, and did not reflect the requirement of the second sentence: *'Using your knowledge of plant adaptations, plant associations and planting styles, discuss the range of plants that would be suitable for inclusion in the garden'.*

Many candidates produced detailed and high-level responses on the creation of a newly planted area that includes a very wide variety of habitats for wildlife, and demonstrating a detailed knowledge of this process.

The question was designed to assess candidates applied knowledge of plant adaptations, plant associations, planting style, and plant knowledge exhibited through named plant examples.

Many candidates were restricted to Band 1 or 2, as their responses made no reference to plant adaptations, plant associations, planting style.

It should be noted that candidates who did respond to the full question were graded at the top end of band 4.