

Excluding Examiner Comments



RHS use only			
A	B	C	Total

## RHS Level 3 Certificate in Plant Growth, Garden Planning and Applied Propagation

### UNIT 1

Wednesday 25<sup>th</sup> June 2025

09:30 - 11:30

Candidate Name: .....

Candidate Number: .....

Centre Name: .....

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### Instructions

This paper contains three sections which may be answered in any order. Candidates should answer:

- **Section A** – **all** questions (20 marks)
- **Section B** – **all** questions (50 marks)
- **Section C** – **only TWO** from **FOUR** questions (30 marks).

Place a cross (X) in the box identifying the two Section C questions you have answered.

<b>C 1</b>	<b>C 2</b>	<b>C 3</b>	<b>C 4</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Please note:**

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

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**RHS Level 3 Certificate in Plant Growth, Garden Planning and Applied Propagation - UNIT 1**

**Candidate Name:** .....

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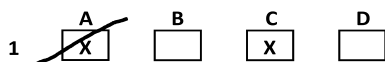
**Candidate Number:** .....

## SECTION A

### RESPONSE GRID

#### Instructions

Place a cross (X) in the box you believe is the correct answer. If you make a mistake, score through the box and place a cross in the correct box as follows:



Question	Answer			
	A	B	C	D
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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## Section A

Answer all questions in this section.

This section is worth 20 marks and each question is worth 1 mark.

### Question 1

This specialist propagation technique involves selecting one plant of optimum quality and type. All stock plants are then propagated from this one plant.

What is this specialist propagation technique called?

- a) Twin scaling
- b) Clonal selection
- c) Treated seed
- d) Cutting selection

### Question 2

The incidence of pests and diseases in propagation units is managed through a process known as Integrated Pest Management. This process involves a number of steps including:

1. Biological control
2. Prevention
3. Chemical control
4. Physical/Mechanical

In which order are these applied?

- a) 2, 4, 1, 3
- b) 2, 1, 4, 3
- c) 3, 4, 2, 1
- d) 4, 1, 3, 2

### Question 3

A plant supplier has included a section on ecosystem services on their website.

Ecosystem services include:

- a) Supporting and Native
- b) Organic and Biodiversity
- c) Distribution and Abundance
- d) Provision and Regulating

#### Question 4



The image above shows plants being propagated in a specialist facility.

What propagation technique is being used at this facility?

- a) Micropropagation
- b) Twin scaling
- c) Micro greens propagation
- d) Nutrient film technique

#### Question 5

Horticulturists are increasingly selecting plants that are climate resilient.

This includes:

- a) selecting plants that sequester carbon
- b) selecting plants that reduce flooding
- c) selecting plants that tolerate high wind speeds
- d) selecting plants that have low carbon footprints

#### Question 6

You have recently taken over as the supervisor of a plant propagation unit.

You have spotted the following issues.

Which one would be your **priority** to resolve?

- a) The fuse box for the soil warming table is hot to touch
- b) Some fire extinguishers are out of date
- c) Staff training and personnel records need updating
- d) Some of the paths in the unit have become uneven

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**Question 7**

A plant supplier has described some of their stock as being available as “feathered maidens”.

These are:

- a) One year old trees with one single stem
- b) One year old trees with one single stem and side shoots
- c) Three-year-old trees with one single stem
- d) Three-year-old trees with one single stem and branches

**Question 8**

A garden designer is talking through their design proposal.

They explain, “the design of the garden is in \_\_\_\_\_ with surrounding buildings, I have repeated colours, materials and form, put simply it feels as if they belong together”.

Which of the following words completes the sentence above?

- a) opposition
- b) contrast
- c) harmony
- d) proportion

**Question 9**

Good garden managers work hard to create cultures where people feel welcome and valued for who they are.

Is this?

- a) Inclusion
- b) Discrimination
- c) Diversity
- d) Equality

### Question 10

Which statement best explains the impact of Persian gardens on the development of horticultural spaces in the UK?

Persian gardens influenced UK gardens through:

- a) the use of porticos and columns, with classical sculptures creating focal points through the garden
- b) the construction of perimeter walls, and being organised symmetrically, along a central axis
- c) developing gardens as places for the dramatic display of wealth, success and power
- d) introducing the concept of outdoor rooms, vibrant colour palettes and temples

### Question 11

The image below shows The RHS Colour Chart.



What is the primary purpose of the RHS Colour Chart?

- a) To measure the impact of diseases on flower colour
- b) To measure the stage of ripeness of top fruit
- c) To record and share heritage colours accurately
- d) To record and communicate colours accurately



### Question 12

Plant labels are vital to the curation of the garden's collections.

Not only are they a convenient way of providing information, they also link the particular plant to its record, stored on the garden's plant database.

*Cambridge University Botanic Garden*



The information indicated by the yellow arrow on the plant label shown above is the:

- a) Propagule number
- b) Batch number
- c) Accession number
- d) Provenance number

### Question 13

Which of the following would be the most useful tool when evaluating the heritage of a garden?

- a) Visitor related spend
- b) Community engagement
- c) Interpretation initiatives
- d) Presence of artifacts

**Question 14**

The International Union for the Conservation of Nature (IUCN) website states:

The IUCN Red List Categories and Criteria are intended to be an easily and widely understood system for classifying species at high risk of global extinction. It divides species into nine categories:

Which category is missing from the list below?

Not Evaluated  
Data Deficient  
Least Concern  
Near Threatened  
Endangered  
Critically Endangered  
Extinct in the Wild  
Extinct

- a) Vulnerable
- b) Exposed
- c) Frequent
- d) Dominant

**Question 15**

The English Landscape Garden tradition:

- a) rejected authoritarian formality in favour of rural simplicity
- b) celebrated technical innovation and the concept of empire
- c) captured the spirit of the age and technological advancement
- d) dismissed the concepts of elegant vistas and natural treescapes.

**Question 16**

The Health and Safety Executive website states:

This legislation sets out the general duties which:

- employers have towards employees and members of the public
- employees have to themselves and to each other
- certain self-employed have towards themselves and others

The legislation being described is the:

- a) Management of Health and Safety Regulations 1999
- b) Manual Handling Operations Regulations 1992 (as amended)
- c) Health and Safety at Work Act 1974
- d) Control of Substances Hazardous to Health Regulations 2002

**Question 17**

Which of the following statements most accurately explains the advantage of wild collected plant material.

- a) Wild collection of plant material has historically increased income to first peoples, to fund projects to enhance biodiversity and protect wildlife.
- b) Wild collected plant material has low genetic diversity, so populations founded from it are more uniform and can be sustainably managed.
- c) Wild collected plant material is important for the conservation of threatened species and can provide material for ecological restoration.
- d) Wild collected plant material is guaranteed to be free from synthetic pesticides, to benefit biodiversity in areas where these plants are cultivated.

**Question 18**

A public garden has published a sustainability strategy.

They have committed to understanding how their gift shop supply chain functions on a global scale.

Key questions include: is child labour involved in manufacturing products? Are people being paid fairly? Is the environment people are working in safe?

Which of the pillars of sustainability does this commitment relate to?

- a) The environmental pillar
- b) The social pillar
- c) The economic pillar
- d) All of the above

**Question 19**

On a recent Equality and Diversity training session the following statement was made, “good garden managers acknowledge and value all the visible and non-visible differences of the people that make up staff and volunteers. This includes practices, activities, understanding and backgrounds”.

This statement is an example of:

- a) Diversity
- b) Marketing
- c) Discrimination
- d) Equality

**Question 20**

How often should a volunteer in a garden inspect their Personal Protective Equipment to ensure it is in good condition and functioning as designed?

- a) Once a month
- b) Once a week
- c) Before use
- d) When directed

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**End of section A.**  
Please continue to Section B.

# Section B

Answer all questions in this section.  
This section is worth 50 marks.

Question 1 (6 marks)

This question relates to the application of Health and Safety knowledge to the planning of plant maintenance.

You have been asked to produce a risk assessment for the maintenance of a range of plants.

a) Name **ONE** maintenance task

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1

b) State **TWO** hazards associated with the task

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2

c) State **TWO** risks associated with the task

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2

d) What action is required to control **EACH** risk?

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2

MARKS

Total Mark

Question 2 (7 marks)

This question relates to the development of propagation protocols.

a) Name a plant that requires scarification to enable germination

1

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b) Develop a propagation protocol for the plant named in a) using the following headings:

- i) Growing media specification
- ii) Hygiene considerations
- iii) Water management

2  
2  
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Question 3 (8 marks)

This question relates to horticultural heritage.

Explain **FOUR** influences on the development of Renaissance gardens.

MARKS

8

Total Mark

MARKS

Question 4 (4 marks)

This question relates to managing plants in botanic and other gardens.

Define the term 'Living Collection'.

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1

State **THREE** purposes that Living Collections fulfil in botanical gardens.

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3

Total Mark



### Question 5 (5 marks)

This question relates to both Equality and Diversity and the importance of horticultural heritage.

State **FIVE** ways that our knowledge of Equality and Diversity has impacted on the interpretation of heritage plant collections.

**MARKS**

**5**

Total Mark

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MARKS

Question 6 (6 marks)

This question relates to planning plant propagation.

Annual propagation plans are used to manage space utilisation and output of propagules.

Explain **THREE** components of an annual propagation plan:

6

Total Mark

## MARKS

### Question 7 (6 marks)

This question relates to sustainability and horticultural heritage.

Discuss **ONE** impact of a changing climate on the management of heritage gardens.

6

Total Mark

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### Question 8 (8 marks)

This question relates to plant procurement.

## How do British Standards impact on the specification and planting of plant material?

**MARKS**

8

Total Mark

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**End of section B.**

**Please continue to Section C.**

## Section C

There are FOUR questions in this Section. You must only answer TWO questions.

Please write your answers on the following pages.

Each question is worth 15 marks. This section is worth 30 marks.

**NOTE:**

You **MUST** indicate which question you are answering by placing a cross in the appropriate box on the **FRONT** of this exam paper.

please turn over.....

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Question C1

This question relates to the impact of horticultural heritage on garden management.

How should the core principles of conservation theory be applied to the management of horticultural heritage?

15 marks

Total Mark

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Question C2

This question relates to applied plant knowledge.  
Discuss how biodiversity ratings are used in horticulture.

15 marks

Total Mark

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Question C3

This question relates to plant selection and cultivation.

Discuss, with reference to named gardens, how heritage can impact on planting design.

15 marks

Total Mark
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Question C4

This question relates to managing plant propagation.

Discuss the implications of applying sustainability principles to the management of a plant propagation unit.

**15 marks**

Total Mark
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