



Excluding examiner comments



R3104

UNDERSTANDING APPLIED PLANT PROPAGATION

Level 3

Wednesday 7 February 2024

15:55 – 16:45

Written Examination

Candidate Number:

Candidate Name:

Centre Name:

IMPORTANT – Please read carefully before commencing:

- i) The duration of this paper is **50** minutes;
- ii) **ALL** questions should be attempted;
- iii) **EACH** question carries **10 marks**;
- iv) Write your answers legibly in the spaces provided. It is **NOT** necessary that all lined space is used in answering the questions;
- v) Use **METRIC** measurements only;
- vi) Use black or blue ink only. Pencil can be used for drawing purposes only. Ensure that all diagrams are labelled accurately with the line touching the named object;
- vii) Where plant names are required, they should include genus, species and where appropriate, cultivar;
- viii) Where a question requires a specific number of answers; only the first answers given that meet the question requirement will be accepted, regardless of the number of answers offered;
- ix) Please note, when the word '**distinct**' is used within a question, it means that the items have different characteristics or features.

ANSWER ALL QUESTIONS

MARKS

Q1

State the parameters involved with the conservation of UK native plant species stored in seed banks under **EACH** of the following headings:

- i) collection and selection of seeds for storage
- ii) preparation of a suitable seed sample for storage
- iii) conditions inside the store

3
4
3

Please see over/.....

iii)

Total Mark

Please turn over/.....

Q2

For **EACH** of **FOUR** propagation facilities listed state:

- i) a suitable vegetative propagation technique for a **NAMED** plant which **EACH** can be used for
- ii) **ONE** reason for using **EACH** facility for this purpose

by completing the table below:

Propagation Facility	Suitable vegetative propagation technique	Named plant	Reason for use
Cold Frame			
Mist Unit			
Heated propagator			
Low Polythene Tunnel			

2.5

2.5

2.5

2.5

Total Mark

Please see over/.....

**THIS PAGE IS DELIBERATELY LEFT BLANK PLEASE TURN OVER
FOR NEXT QUESTION**

Please turn over/.....

MARKS

Q3

Describe the production of **ONE NAMED** chip budded ornamental tree under **EACH** of the following headings:

- i) rootstock selection
- ii) budding technique (outline only)
- iii) containerisation

441

NAMED ornamental tree

1

7

MARKS

Q4 a) Define the term seed dormancy.

2

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) State **TWO** functions of seed dormancy.

2

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Please see over/.....

- c) Name **THREE** endogenous plant growth regulators that have a role in seed dormancy and specify the role of **EACH** by completing the table below:

MARKS
6

Plant growth regulator	Role in seed dormancy
1.	
2.	
3.	

2

2

2

Total Mark

DO NOT USE THIS PAGE

DO NOT USE THIS PAGE

©These questions are the property of the Royal Horticultural Society.
They must not be reproduced or sold.

The Royal Horticultural Society, Wisley, Woking, Surrey GU23 6QB.
Charity Registration Number: 222879/SC038262