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**GENERAL CERTIFICATE IN ORNAMENTAL
HORTICULTURE LEVEL 1**

**Workbook : Demonstrate an understanding of the
basic structure of ornamental plants**

**Demonstrate an understanding of the
basic structure of ornamental plants
Learner Workbook**

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A c k n o w l e d g e m e n t s

Developed by

Lifestyle College

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Study Session Overview

Purpose

The purpose of this study session is to equip you with the knowledge necessary to recognize the different parts of a plant and their function.

This study session forms part of the General Certificate in Horticulture, NQF level 1 and is aligned with the Unit Standard: Demonstrate an understanding of the basic structure of ornamental plants, which carries 4 credits.

Who is it for?

This study session and unit standard form the knowledge base for people working with plants within the ornamental horticulture or landscaping industry and gives the learner an understanding of:

- The functions of the root system in the structure and development of a plant.
- The functions of the stem in the structure and development of a plant.
- The role of the leaf in the plant's structure and growth.
- The role of the flower in the reproductive process of a plant.

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What's in it for you?

The skills acquired in this study session will equip you with the knowledge needed to be able to recognise the different parts of a plant and know their functions. This knowledge will form the basis of your horticultural studies and help you to understand:

- The structure of the root and the root systems.
- The function of the root in absorbing water and nutrients from the soil.
- The importance of the anchoring function of the roots.
- The structure and support role that the stem plays in plants.
- The transportation of water and nutrients through the stem to the leaves and flowers.
- The structure and form of various common leaves.
- The role of photosynthesis in plant growth.
- The factors that influence photosynthesis.
- The structure and components of the flowers.
- The factors that aid pollination.
- The importance of pollination.

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What about assessment?

If you can correctly answer all the knowledge questions in the summative assessment, you will receive credits for a competent rating on your assessments.

These credits contribute 1 unit standard and 4 credits towards the General Certificate in Ornamental Horticulture, at NQF Level 1.

The laid down policies and procedures with regard to assessment, moderation, RPL and appeals govern this assessment.

You will be rated "Competent" or "Not Yet Competent" against the assessment criteria.

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Unit Standard

Title	Demonstrate an understanding of the basic structure of ornamental plants
Number	119711
Level	1
Credits	4
Field	Agriculture and Nature Conservation
Sub field	Horticulture
Issue date	2006-02-09
Learning assumed to be in place	Demonstrate knowledge of communication and Numeracy at Abet level 3.

Specific Outcomes	Assessment Criteria
1. Explain the role of the leaf in the structure and growth of a plant.	1.1 Describe the structure and form of various common leaves. 1.2 Outline the role of photosynthesis in plant growth. 1.3. Name the factors that influence photosynthesis.
2. Indicate the functions of the root in the structure and development of the plant	2.1. Describe the structure of the root and root systems. 2.2. Explain the function of the root in absorbing water and nutrients from the soil. 2.3. Explain the importance of the anchoring function of the roots.
3. Identify the functions of the stem in the structure and development of a plant	3.1. Describe the structure and support role that the stem plays in plants. 3.2. Explain the transportation of water and nutrients through the stem to the leaves and flowers.
4. Explain the role of the flower in the reproductive process	4.1. Describe the structure and components of the flower. 4.2. Describe the factors that aid pollination. 4.3. Outline the importance of pollination.

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Embedded Knowledge

Embedded knowledge is reflected within the assessment criteria of each specific outcome and must be assessed in its own right, through oral and written evidence. Observation cannot be the only assessment.

Critical Cross Field Outcomes

- Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made – specific outcome 3.
- Work effectively with others as a member of a team, group, organisation or community. Specific outcome embedded in the learning for this level of learner.
- Organise and manage oneself and one's activities responsibly and effectively.
- Collect, analyse, organise and critically evaluate information. Specific outcome 1,2, 3 and 4.
- Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation. Specific outcome embedded in the learning for this level of learner.
- Use science and technology effectively and critically, showing responsibility toward the environment and health of others. Specific outcome 1,2, 3 and 4.
- Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation. Specific outcome 1, 2, 3 and 4.

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**Unit Standard Accreditation and Moderation
Options**

1. Internal moderation.
2. External moderation.
3. Moderation of assessment will be overseen by the relevant ETQA, according to the moderation guidelines in the relevant qualification the agreed ETQA procedures.
4. Internal assessment.
5. External assessment with the relevant registered/accredited industry body/ETQA.
6. An Assessor accredited by the relevant ETQA, will assess the Learner's competency.
7. Formative and summative assessment of qualifying Learners against this unit standard should be in alignment with the requirements of the NSB.
8. Practical assessment activities will be used that are appropriate to the contents in which the qualifying Learners are working.
9. Assessment will include self and peer assessment, practical and oral assessment, observations, questions and answers, etc.
10. Direct observation is required in simulated or actual work conditions.
11. Reporting skills are demonstrated by effective communication, using verbal and/or writing skills.
12. Assessment is to be structured to include formative and summative component, as well as the submission of a Portfolio of Evidence.
13. The assessment should ensure that all the specific outcomes, critical cross field outcomes and embedded knowledge are assessed.
14. Specific outcomes must be assessed in their own right, through oral and practical evidence and cannot be assessed by observation only.

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Essential embedded knowledge must be assessed in their own right, through oral and practical evidence and cannot be assessed by observation only.

15. Special outcomes and essential embedded knowledge must be assessed in relation to each other.

16. If qualifying Learners are able to explain the essential embedded knowledge, but are unable to perform the specific outcomes, then they should not be assessed as competent.

17. If qualifying Learners are able to perform specific outcomes, but are unable to explain the essential embedded knowledge, they should not be assessed as competent.

18. Evidence of the specified critical cross-field outcomes should be found, both in performance and in essential embedded knowledge.

19. Assessment activities must be fair, so that all Learners have equal opportunities. Activities must be free of gender, ethnic or other bias.

20.