



FACULTY OF SCIENCE

DEPARTMENT OF BOTANY AND PLANT BIOTECHNOLOGY

MODULE BOT0087 SCIENTIFIC METHODS

CAMPUS APK

EXAM 2018 SUPPLEMENTARY

DATE:

SESSION:

ASSESSOR:

DR A OSKOLSKII

INTERNAL MODERATOR:

MRS J WILLIAMSON

DURATION: 2 HOURS

MARKS: 50

NUMBER OF PAGES: 2 PAGES

INSTRUCTIONS: ANSWER ALL THE QUESTIONS.

REQUIREMENTS: EXAM BOOK

BOT0087 – SCIENTIFIC METHODS SUPPLEMENTARY

QUESTION 1

Study the microslide of *Dais cotinifolia* wood and answer the questions:

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|--------|---|-----|
| 1.1 | Name the mounting medium and its solvent used for preparation of this microslide. | (4) |
| 1.2 | Identify the following wood traits: | |
| 1.2.1. | Ring-porous wood or diffuse-porous wood. | (3) |
| 1.2.2. | Perforation plates simple or scalariform. | (3) |
| 1.2.3. | Intervessel pits scalariform, opposite or alternate. | (3) |
| 1.2.4. | Rays exclusively uniseriate, exclusively multiseriate, or both. | (3) |
| 1.2.5. | Rays consist of only procumbent cells, or square/upright ray cells are also abundant. | (3) |

QUESTION 2

Mention the information which must be recorded when an anatomical sample is collected in the field.	(10)
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QUESTION 3

Suppose you need to study the anatomical structure of onion roots.

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| 3.1. Which is the method of examination that can be suitable for this study? | (6) |
| 3.2. Mention the most important steps of sample preparation required for this examination | (15) |

TOTAL	[50]
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