



<u>FACULTY</u>	: Education
<u>DEPARTMENT</u>	: Science and Technology Education
<u>CAMPUS</u>	: APK
<u>MODULE</u>	: METHODOLOGY AND PRACTICUM: NATURAL SCIENCE 3B (MOSPNB3)
<u>SEMESTER</u>	: Second
<u>EXAM</u>	: November 2019

ASSESSOR(S) :DR T DHURUMRAJ
DR B MUDADIGWA

MODERATOR : MRS M PENN (UJ)

DURATION : 1 HOUR **MARKS** : 50

NUMBER OF PAGES: 3 PAGES

INSTRUCTIONS:

1. Answer ALL THE QUESTIONS.
 2. Number your answers clearly.
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QUESTION 1

The teaching and learning of Natural Sciences involves the development of a range of process skills that may be used in everyday life, in the community and in the workplace. Using examples to discuss the cognitive and practical process skills that Natural Science learners need to develop. **[10]**

QUESTION 2

Fostering students' scientific inquiry competence has been recognised as being an important and challenging objective of Science Education.

2.1 Identify two (2) factors that you will consider when designing teaching and learning material for your learners. (2)

2.2 Discuss the value/s of charts and illustrations as a teaching and learning material. (8)

[10]**QUESTION 3**

Not all schools may have the luxury of a functional laboratory. Therefore teachers need to be creative and improvise. Critically discuss this statement. **[5]**

QUESTION 4

Assessment can be done using different forms/strategies of assessment.

4.1 Describe what is meant by assessment. (2)

4.2 List four assessment principles that are key when developing assessment tasks. (4)

4.3 Distinguish between informal and formal assessments. (4)

[10]

QUESTION 5

In applying teaching methodologies, teachers should bear in mind that there is no single classroom where all learners will be exactly the same or learn in the same way and at the same pace. As a result, teachers are required to be creative in the use of a variety of teaching methodologies to reach learners who are at different levels. Multilevel teaching is of vital importance in addressing the different needs of the learners. Critically discuss this statement. **[15]**

TOTAL: 50