UNIVERSITY
OF
JOHANNESBURG

FACULTY	:	Education
DEPARTMENT	:	Science and Technology Education
CAMPUS	:	APK
MODULE	:	MOFPCA3
		TEACHING METHODOLOGY AND PRACTICUM 3A:
SEMESTER	:	CIVIL TECHNOLOGY
EXAM	:	July 2018

ASSESSOR(S)	:	DR CF VAN AS		
MODERATOR	:	MR W ENGELBRECHT		
DURATION	:	1 HOUR	**MARKS**	: 50

NUMBER OF PAGES: 3 PAGES

INSTRUCTIONS:

1. Answer ALL the questions.
2. Number your answers clearly.
3. You may consult the NCS, CAPS and your lesson plans.

QUESTION 1

1.1 Briefly discuss the key aspects of Civil Technology. **(2)**

1.2 Briefly describe the rationale for Civil Technology as a school subject. **(4)**

1.3 Which one of the Civil Technology specialisations would you prefer to teach? Motivate your answer. **(3)**

[9]

QUESTION 2

By analysing the CAPS document for Civil Technology, identify and briefly explain the main aspects needed to guide you as Civil Technology teacher in teaching and learning the subject. **[6]**

QUESTION 3

Conceptual knowledge relates to the links between knowledge items, to such an extent that when you can identify these links you will have conceptual understanding. Explain conceptual understanding by referring to personal safety in the civil technology workshop. **[6]**

QUESTION 4

You have to plan lessons on **joining** in the specialisation **woodworking** for learners in Grade 10.

4.1 Analyse the content to be covered under the topic joining (generic and specific) for Grade 10 and identify the main concepts to be taught. **(6)**

4.2 If one period is 40 minutes long, how many periods, according to the CAPS, do you have to cover all the content regarding joining? **(2)**

4.3 How many hours, according to the CAPS, are you supposed to spend on practical work during this period of time? **(2)**

[10]

QUESTION 5

5.1 Briefly discuss how you can use informal assessment effectively during a practical session in the civil technology class. **(3)**

5.2 Where in the Civil Technology class do you think self-assessment will be appropriate? Explain. **(3)**

[6]

QUESTION 6

Grade 10 learners are supposed to know how to deal with quantities in building construction (CAPS, p. 55).

6.1 Briefly explain how you will determine the area of the foundation for a simple house.
(4)

6.2 You have to plan a lesson on how to teach the calculation of foundation areas.

6.2.1 What is the underlying mathematical principle this method is based on?
(2)

6.2.2 What will your instructional approach be, to teach the calculation of the foundation area for a simple house, and which instructional strategies will you use?
(4)

6.2.3 How will you ensure that the learners understand the calculation of the foundation area for a simple house by relating to the underlying mathematical principle?
(3)
[13]

TOTAL: 50