

**FACULTY** : Education

**DEPARTMENT**: Science and Technology Education

**CAMPUS** : APK

**MODULE** : METHODOLOGY AND PRACTICUM:FET PHYSICAL

SCIENCES 4 (MOFPPY4)

**SEMESTER** : Second

**SUBMISSION** : SSA January 2020

ASSESSOR(S) : Dr S Ramaila

MODERATOR : Prof S Singh (UL)

**DURATION** : SUBMISSION **MARKS** : 100

NUMBER OF PAGES: 3 PAGES

## **INSTRUCTIONS:**

1. Answer ALL THE QUESTIONS.

2. Number your answers clearly.

3. Type your work neatly and diagrams or illustrations should be clear.

## **QUESTION 1: Constructivist learning in science teaching**

The inquiry-based approach can be used as a tool to promote constructivist learning in science teaching.

- 1.1 Describe how you employed an inquiry-based approach in teaching science topics during work-integrated learning (WIL).(20)
- 1.2 Explain how an inquiry-based approach can be used to demystify abstract concepts by using specific examples in Physical Sciences. (30)

## **QUESTION 2: Nature of Science**

The nature of science is an essential tenet in science education.

- 2.1 Describe how you integrated nature of science to curriculum as a Physical Sciences teacher during work-integrated learning (WIL). (20)
- 2.1 Discuss the significance of the nature of science in science teaching and learning. (30)

[50]

[50]

Total: 100

Appendix 1 and 2 are rubrics for questions 1 and 2 respectively.

<u>Appendix 1</u>

		Levels and descriptors				
	<b>1-5</b> Poor	<b>6-10</b> Satisfactory	<b>11-15</b> Good	16-20 Excellent		
1.1	Superficial description	Adequate description	Meaningful description that answers the question	Coherent, meaningful and explicit description which adequately answers the question		
	<b>0-5</b> Poor	<b>6-10</b> Satisfactory	<b>11-15</b> Good	16-30 Excellent		
1.2	Superficial discussion	Adequate description	Meaningful discussion that answers the question	Coherent and meaningful discussion which adequately answers the question		

## Appendix 2

	Levels and descriptors					
	<b>1-5</b> Poor	6-10 Satisfactory	<b>11-15</b> Good	16-20 Excellent		
1.1	Superficial description	Adequate description	Meaningful description that answers the question	Coherent, meaningful and explicit description which adequately answers the question		
	<b>0-5</b> Poor	6-10 Satisfactory	<b>11-15</b> Good	16-30 Excellent		
1.2	Superficial discussion	Adequate description	Meaningful discussion that answers the question	Coherent and meaningful discussion which adequately answers the question		