



UNIVERSITY OF JOHANNESBURG
FACULTY OF EDUCATION
JANUARY SPECIAL
EXAMINATION 2017

PROGRAMME: B Ed (SENIOR AND FET PHASE)
MODULE: SUBJECT METHODOLOGY: PHYSICAL SCIENCES 3RD YEAR
CODE: MOFPPB3
TIME: 1 hour
MARKS: 50
EXAMINER: Dr RJ Pitjeng-Mosabala
MODERATOR: Prof UD Ramnarain

(This paper consists of **two (2)** pages)

INSTRUCTIONS

Read the following instructions carefully before answering the questions:

1. This question paper consist of four questions
2. All the questions must be answered

QUESTION 1

- 1.1 What is an assessment? (1)
- 1.2 Name three main purposes of assessment in science education. (3)
- 1.3 Name and describe any five forms/types of assessment. (10)
- 1.4 A rubric is one of the assessment tools used in science.
- 3.4.1 Give an example of a task where a rubric is used for assessing. (2)
- 3.4.2 List any three criteria that you will include in the design of a rubric for this task. (6)

[22]

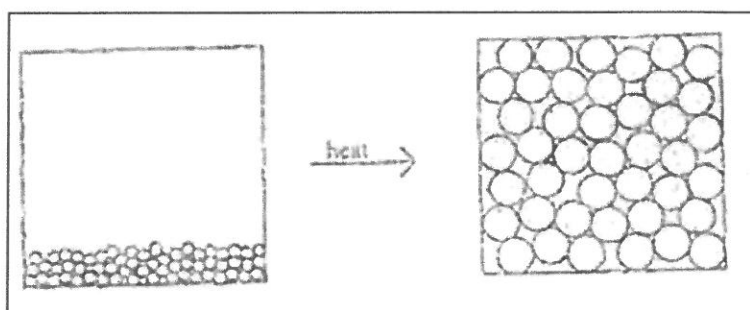
QUESTION 2

2.1 Select **one topic** you may want to teach a grade 10 Physical Sciences class and formulate **four** different learning outcomes you would like learners to achieve in teaching the topic (Note: the learning outcomes should not belong to the same level). Level 1-remembering, level 2-understanding, level 3-apply & analyzing and level 4-evaluate & creating. [8]

QUESTION 3

3.1 Define the term misconception/alternative conception? (2)

3.2 Learners in grade 10 class were asked to represent the change that takes place when the substance is heated. The response Teboho has written on the board is shown below:



How would you respond on Teboho's response as part of an explanation to the rest of the class? (5)

[7]

QUESTION 4

4.1 What you understand by the nature of science (NOS)? (3)

4.2 Give examples of classroom activities to illustrate how teachers may reflect the nature of science in their teaching. (10)

[13]

TOTAL: 50