

P1 SCIENCE

P.T.E. MOCK

March 2019

Time: 2 ½ hours

2 ½ hours

INSTRUCTIONS TO CANDIDATES

Answer ALL the questions.

All answers MUST be written in the spaces provided in this question paper.

Candidates should answer the questions in English.

For Examiner's Use Only

SECTION A

Question	1	2	3	4	5	6	TOTAL SCORE
Candidate's Score							

SECTION B

Question	7	8	9	10	11	12	13	14	15	TOTAL
Candidate's Score										

GRAND TOTAL

SECTION A (60 marks)

Answer ALL the questions in this section in the spaces provided.

1. A Standard VIII teacher took his class to observe how soil is conserved in the nearby farm.
 - (a) Give **two** reasons why the visit to the farm is the best way to teach such content. (2 marks)
 - (b) Explain how the teacher could use the farm to teach soil conservation. (2 marks)
 - (c) State **two** measures of soil conservation learners could have observed on the farm. (2 marks)
 - (d) State **three** reasons for soil conservation. (2 marks)
2. (a) (i) Write an appropriate stem for a multiple choice item in a question form whose responses are provided as follows:
 - A. Screw
 - B. Wheelbarrow
 - C. See-saw
 - D. Spade

- The key is at A. (2 marks)
- (ii) State the ability tested. (1 mark)
- (b) State the meaning of scoring during marking. (2 marks)
- (c) State **three** components of a specifications table. (3 marks)
3. A science teacher intended to teach Standard V learners the sub-topic "Parts of a plant".
- (a) State **one** attitude objective for this lesson. (2 marks)
- (b) Name **two** teaching materials that the teacher could use in this sub-topic. (2 marks)
- (c) State the specific content the teacher should review in the introduction step of the lesson. (1 mark)
- (d) Write down **four** learning activities in sequence that the teacher will have for the lesson. (2 marks)
- (e) State **three** reasons for providing real plants in this lesson. (3 marks)
4. A teacher was preparing a scheme of work for Standard VI. One of the sub-topics in the scheme of work was the "female reproductive system."
- (a) State **two** sources of information the teacher needed at this stage. (2 marks)
- (b) Write **two** learning activities for this sub-topic. (2 marks)
- (c) Explain the relationship between the learning activities and assessment in the scheme of work.
- (d) State what should be included under materials in the scheme of work. (2 marks)
- (e) The teacher wrote "Lesson taught as planned" in the remarks column. Comment on this remark. (2 marks)
5. A Standard VII teacher wanted to teach the topic "Good and poor conductors of electricity."
- (a) List the materials the teacher would have used in the lesson. (2 marks)
- (b) (i) Suggest the method suitable for teaching this sub-topic. (2 marks)
- (ii) Give **three** reason for your answer in 5b (i) above. (2 marks)
- (c) Write down the instructions the teacher would have given the learners during the lesson. (2 marks)
6. A Standard V teacher invited a resource person to cover the sub-topic "Myths and misconceptions about HIV and AIDS."
- (a) Explain why the choice of this method was appropriate. (2 marks)

- (b) State **two** ways in which the teacher would have prepared the resource person for the lesson. (2 marks)
- (c) State **two** follow-up activities learners could carry out after the resource person's presentation. (2 marks)
- (d) State **two** myths and misconceptions about HIV and AIDS. (2 marks)

SECTION B

Answer ALL the questions in this section in the spaces provided.

7. The height of a boy was determined from birth to 20 years of age. The results obtained are shown in the table below.

Age (years)	0	2	4	6	8	10	12	14	16	18	20
Height (cm)	20	85	110	118	130	140	145	160	178	180	180

- (a) On the grid provided, plot a graph of height (y-axis) against time. (4 marks)
- (b) State the period when growth was fastest. (1 mark)
- (c) Determine the rate of growth in height between 7 and 13 years. (2 marks)
- (d) Account for the shape of the curve from 18 years. (1 mark)
8. **Figure 1** represents a weather instrument.
- Figure 1**
- (a) Name the instrument. (1 mark)
- (b) Describe how the instrument works. (3 marks)
9. Explain the following methods water conservation:
- (a) Re-using (2 marks)
- (b) Re-cycling (2 marks)
10. (a) Explain how *Plasmodium vivax* enters the human body. (2 marks)
- (b) Explain the observation of droplets of water that form on a bottle of cold water that has just been removed from the refrigerator. (2 marks)
11. **Figure 2** represents a pulley system.

Figure 2

- (a) On the figure, indicate the direction of effort. (2 marks)
- (b) If the mechanical advantage of the pulley system in figure 2 is 2 and the load is 30 N, calculate the effort.
12. (a) Explain the role of green plants in maintenance of the level of oxygen in the atmosphere. (2 marks)
- (b) State **two** uses of adhesion in everyday life. (2 marks)
13. (a) State **two** advantages of vegetative propagation in plants. (2 marks)
- (b) Explain why patients are advised against self-medication. (2marks)
14. (a) For each of the following, give one example of insects that undergo:
- (i) complete metamorphosis.
- (ii) incomplete metamorphosis.
- (b) Explain how permanent hardness is removed.
15. (a) Explain the preparation of carbon (IV) oxide. (2 marks)
- (b) State **two** ways of preventing bilharzia. (2 marks)

End