THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

033/2B

BIOLOGY 2B
(ACTUAL PRACTICAL B)
(For Both School and Private Candidates)

Time: 2:30 Hours
Friday, 11th November 2016 a.m.

Instructions

1. This paper consists of two (2) questions. Answer all the questions.
2. Each question carries 25 marks.
3. Except for diagrams which must be drawn in pencil, all writings should be in blue or black ink.
4. Calculators and cellular phone are not allowed in the examination room.
5. Write your Examination Number on every page of your answer booklet(s).
1. You have been provided with solution K.
   
   (a) Perform experiments using the reagents provided to identify the type of food substance(s) present in the solution. Tabulate your results as shown in Table 1.

   Table 1
   
<table>
<thead>
<tr>
<th>Food tested</th>
<th>Procedure</th>
<th>Observations</th>
<th>Inference</th>
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</table>

   (b) For the food substance(s) identified in 1(a):
      (i) Name the end product of digestion in the alimentary canal of a human being.
      (ii) Explain one function of each food substance in the body of the human being.
      (iii) Mention which food substance identified in 1(a), its digestion starts at the mouth?

   (c) Name other type(s) of food which should be added to the food substance(s) identified in 1(a) to make a balanced diet.

2. You have been provided with specimens W, X, Y and Z.

   (a) Study specimens W, X, Y and Z carefully, then:
      (i) Identify specimens W, X, Y and Z using their common names.
      (ii) State two observable similarities and differences between specimen W and X.
      (iii) Classify specimen X and Z to Class level.
      (iv) Give two examples of organisms belong to the same Class as specimen X.
      (v) State two advantages of specimen W.

   (b) Observe the structure of specimen Y.
      (i) Name a Class in which the specimen Y belongs.
      (ii) Draw a diagram of specimen Y and label any eight parts.
      (iii) Outline three distinctive characteristics of the Class in which specimen Y belongs.

   (c) Explain three ways in which specimen Z contributes to soil improvement?