INSTRUCTIONS TO CANDIDATES:

(i) Write your Name and Index Number in the spaces provided.

(ii) Sign and write the Date of Examination in the spaces provided.

(iii) Answer all the questions in the spaces provided.

(iv) You are required to spend the first 15 minutes of the 1 ¾ hours allowed for this paper reading the whole paper carefully before commencing your work.

(v) Additional pages must not be inserted.

(vi) This paper consists of 3 printed pages.

(vii) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

FOR EXAMINER’S USE ONLY

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>MAX. SCORE</th>
<th>CANDIDATE SCORE</th>
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<td>TOTAL</td>
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SECTION A (40 MARKS)

Answer all questions in this section in the spaces provided.

1. Below is a photograph of an adult human jaw with teeth. Study the diagram and answer the questions that follow.

(a) State the mode of nutrition in man. (1mk)

(b) Name the type of teeth labeled I and III. (2mks)

I: .......................................................... ..........................................................

III: .......................................................... ..........................................................

...

(c) Name the parts of teeth labeled H and J. (2mks)

H: ..........................................................................................................................

J: ..........................................................................................................................

(d) Identify one distinguishing feature between teeth labeled II and IV. (1mk)

..........................................................................................................................

(e) State one function of tooth IV. (1mk)

..........................................................................................................................

(f) Write the dental formula from the jaw shown in the photograph. (1mk)

..........................................................................................................................

(g) Explain why tooth I would be more prone to dental carries than tooth III. (2mks)

..........................................................................................................................
2. Use the hand lens provided to observe specimen K and answer the questions that follow.

(a) (i) In the space below draw a fully labeled diagram of representative part of the specimen. (5mks)

(ii) Calculate the magnification of your drawing. (2mks)

(b) Identify:
   (i) The Kingdom (1mk)

   (ii) The Division, to which the specimen belongs. (1mk)

   (iii) Give a reason for your answer in b (ii) above. (1mk)

(c) State the functions of any two parts labeled in your diagram. (2mks)

(d) What is the mode of reproduction in the specimen? (1mk)

(e) Explain the significance of colour observed in the specimen K. (2mks)
3. You are provided with a food substance in a powder form labeled R. Place all of it into a boiling tube, add 10cc of water and stir using a glass rod to obtain a mixture. Using the reagents provided, carry out food tests on the mixture and record your observation in the table below. 

(15mks)

<table>
<thead>
<tr>
<th>Food Tested</th>
<th>Procedure</th>
<th>Observation</th>
<th>Conclusion</th>
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