1. (a) You are provided with plant specimens labelled **E**, **F**, **G**, **H**, and **J**. Use the specimens to develop a dichotomous key that can be used to identify the plants from which they were obtained based on the following characteristics in the order they are given: (6 marks)

   (i) Leaf form

   (ii) Leaf venation

   (iii) Leaf colour

   (b) Account for the likely observation if fresh specimen **E** was exposed to light and tested for starch. (3 marks)

   (c) Explain **one** observable feature that adapts plants from which specimen **G** and **H** were obtained to a dry environment.

   G (2 marks)

   H (2 marks)

   (d) Besides leaf characteristics, state **one** other observable characteristic on the plant from which specimen **F** was obtained that enables it to be placed in its Class. (1 mark)

2. You are provided with solution **M** which is a food substance.

   Procedure

   (a) Using the reagents provided, test for the food substance present in substance **M** and complete the table below. (12 marks)

Food Test	Procedure	Observation	Conclusion

   (b) State **two** precautions one should observe while conducting the experiment in 2(a). (2 marks)

3. You are provided with specimen **N** and **P** which are plants of the same species grown under different conditions.

   (a) State **two** observable differences between the two specimens. (2 marks)

(b) (i) Name the phenomenon observed in specimen **N**. (1 mark)

(ii) Explain how the knowledge on the phenomenon named in b(i) is applied in agriculture. (2 marks)

(c) Account for the appearance of specimen **N**. (3 marks)

(d) State **two** other environmental factors necessary for seed germination apart from light. (2 marks)

(e) State **two** observable features on the specimens that make them be placed in the same Class. (2 mark)