



1. You have been provided with specimen **K<sub>1</sub>**. Dissect the specimen **K<sub>1</sub>** in a usual way to fully display the digestive system and excretory system. Pin the ileum to your right side.

(a) Draw a large, neat and well labelled diagram of your dissection.

**Leave your dissection properly displayed for assessment.**

(b) (i) Name the structure in the specimen **K<sub>1</sub>** which is responsible for re-absorption of water molecules from undigested food materials.

(ii) How does the structure named in 1 (b) (i) adapted to its function?

(c) Explain how the centrally location of the gizzard in specimen **K<sub>1</sub>** help it to adapt its environment.

2. You have been provided with solutions **A** and **B**.

(a) Using the chemicals and the reagents provided, carry out the biochemical experiment to identify the food substances contained in each solution **A** and **B**. Tabulate your results as shown in the following table.

Food Tested	Procedure	Observation	Inference

(b) (i) What is the role of the food substance(s) identified in solution **A** and **B**?

(ii) Briefly explain how the alimentary canal is adapted for absorption of the food substances identified in solution **A** and **B**.

3. You have been provided with specimens **G<sub>2</sub>**, **G<sub>3</sub>**, **G<sub>4</sub>** and **G<sub>5</sub>**.

(a) (i) Give two reason to why you agree or disagree that specimens **G<sub>2</sub>**, **G<sub>3</sub>**, **G<sub>4</sub>** and **G<sub>5</sub>** are members of same Kingdom.

(ii) What are the observable differences between specimens **G<sub>2</sub>** and **G<sub>5</sub>** at Class level?

(b) State three adaptations of specimen **G<sub>4</sub>** to its life.

(c) In what ways are specimens **G<sub>2</sub>** and **G<sub>5</sub>** important in the ecosystem?

(d) (i) Classify the specimen **G<sub>4</sub>** to class level.

(ii) Where can we find the specimen **G<sub>5</sub>**?