

**(Either)**

**Item 1**

Joseph is a dairy farmer in Nakasongola producing milk for selling in the market. Many people in Nakasongola liked his milk because it was considered to be of the best quality. Recently, workers on the farm were not observing good hygiene at the farm and the milk quality had become poor. Most of his customers said that his milk coagulated during boiling.

Specimen **W** is a sample picked from Joseph's farm and presented to you.

**Task:**

(a) Describe the condition of specimen W

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(b) Design and carry out a scientific investigation to determine the suitability of Specimen **W** for consumption. Use your results to explain to Joseph the causes of the condition of his milk, and give recommendations on how he can improve his dairy project.

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[illegible]

[illegible]

**(Or)**

### Item 1

Musa is a poultry farmer producing poultry product which he sells to the community. He usually buys day-old chicks for rearing very expensive from the hatcheries. Recently, Musa bought an egg incubator so that he can hatch the eggs on his farm. Musa wants to understand how to select good eggs for hatching.

You have been provided with specimens **A** and **B** which are samples of eggs to be incubated.

### Task:

Design and carry out an investigation on sample **A** and **B**. use your results to advise Musa on which sample is good for incubation.

*Your design and investigation should include the following:*

- (a) (i) Aim, hypothesis, variables, apparatus/requirements, procedure and results.

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(ii) Using your results, explain to Musa on which sample he should incubate

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(b) What other recommendation do you give to improve the hatching of Musa's eggs in the incubator?

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(c) Use a knife provided to break specimen and expose the inner content. Make a labeled drawing of the contents.

## Item 2

Sarah is a vegetable farmer growing mainly tomatoes in her garden. Sarah maintains her garden very well to ensure she gets more profits from her project. During her inspection of her garden, Sarah observed that her plants were stunted, with few and small fruits. She also observed other plants growing along her tomatoes and wondered how they reached her garden.

Specimens **A**, **B**, **C** and **D** are plants collected from Sarah's garden.

### Task:

(a) Explain how each specimen was able to spread to Sarah's garden.

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(b) In which ways did the specimens affected the crops in the garden?

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[illegible]

(c) From your observation, how is each specimen adapted to survive.

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[illegible]

(ii) In the space provided below make a labeled drawing of specimen A

**END**