

ASSESSMENT FOR TERM 1 2023

DEPARTMENT OF BIOLOGY

BIOLOGY (THEORY)

SENIOR TWO

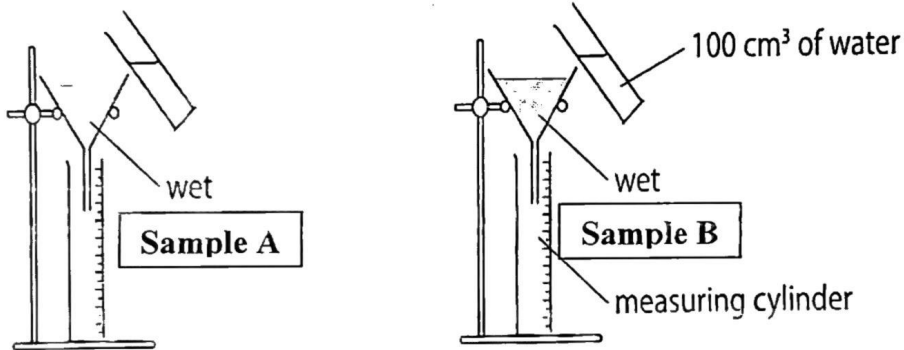
TIME: 45minutes

Name.....stream.....

INSTRUCTIONS:

Attempt all questions in this paper in the space provided

1. The diagram below shows the apparatus used to investigate how water passes through two different soil samples A and soil sample B



Each funnel contained an equal amount of dry soil. Water was poured to make the soil completely wet.

Then **100cm<sup>3</sup>** of water was poured into each funnel and allowed to drain into the measuring cylinders. The volume of **water collected** in the cylinders was measured and recorded at the end of the experiment. The table below shows the results

<i>Sample</i>	<i>Volume of water collected in cm<sup>3</sup></i>
<i>Soil Sample A</i>	70
<i>Soil Sample B</i>	36

a) Identify the property of soil being investigated

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b) Calculate the volume of water retained by each soil sample

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c) Calculate the percentage of water retained by each soil sample. Show your working.

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d) Basing on your results in part c, identify

i) **Soil sample A**.....

ii) **Soil sample B**.....

e) Which of the two soil samples is suitable for plant growth. Give a reason for your answer.

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Reason

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***Good luck***