

**BIOLOGY DEPARTMENT**  
**S.5 TOPICAL TESTS SERIES**  
**SET ONE MARCH 2024 TERM 1**

1.a) What do you understand by the following terms as applied in cytology (03 marks)

i) Cytoskeleton (02.5 marks)

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ii) Syncytia (01 mark)

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iii) Endosymbiosis.(1 mark)

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b) Briefly describe the meaning of the following parts of the cell

i) Cytoplasm (08 marks)

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ii) Protoplasm (03 marks)

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2.a) In the space below, draw a well labeled structure of any rod shaped prokaryotic cell (12 marks)

This image shows a full page of white paper with horizontal dashed lines, typical of primary school writing paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

i) State all the modern ideas of the cell theory (06 marks)

[illegible][illegible]

i) surface area to volume ratio (04 marks)

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[illegible]

5. In just only 5 ways, describe how the properties of water relate to its biological role (10 marks)

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6. a) What do you understand by the term scientific classification (01 mark)

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b) Distinguish between artificial classification and natural classification (03 marks)

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b) Of what importance is classification of organisms (4 marks)

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**Struggle has just started and still continues. Success**