

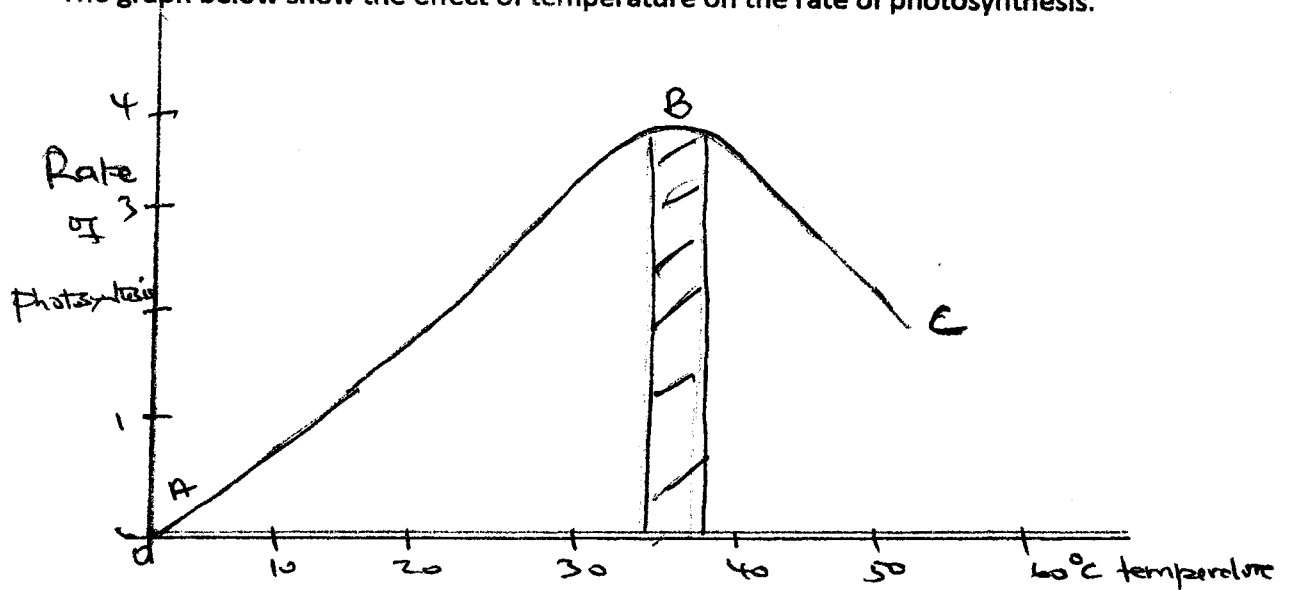
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GATITU SECONDARY SCHOOL, P.O. BOX 327 – 01030, GATUNDU.

FORM 1 BIOLOGY MID TERM EXAMINATION. TERM 3 2015.

Attempt all questions.

1. The graph below show the effect of temperature on the rate of photosynthesis.



ii) Give a reason why the rate of photosynthesis decrease between point B & C. (2mks)

iii) Whats the optimum temperature range for this experiment. (2mks)

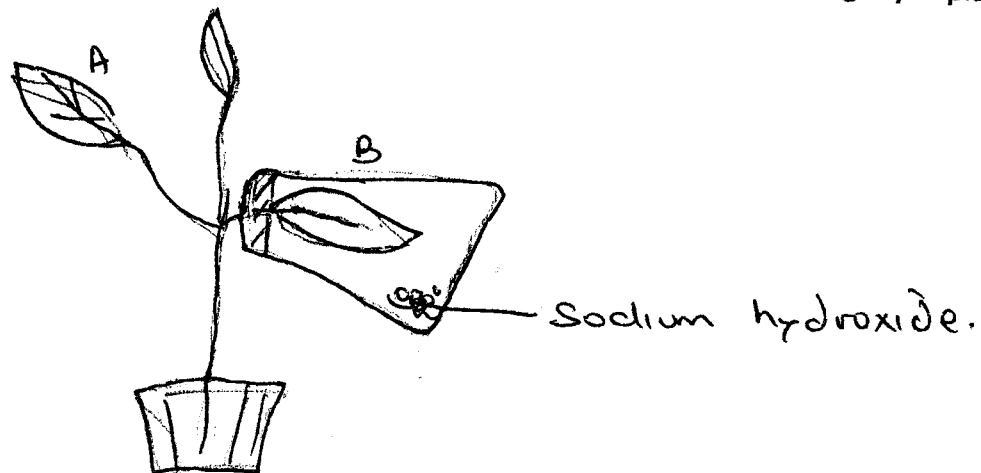
iv) Give a reason why the rate of photosynthesis is low at point A. (2mks)

2. Fill in the table below.

(3mks)

i) Type of Carbohydrate	Examples
Monosaccharide	1.
	2.
	3.
ii) Disaccharide	1.
	2.
	3.
iii) Polysaccharide	1.
	2.
	3.

3. A Potted plant had one of its leaves enclosed in a glass flask as shown in the diagram below it was then left for 24 hours in a dark cupboard. After that it was left in a brightly lit place for 4 hours.



i) What was the aim of the experiment.

(2mks)

ii) Why was the plant kept in the dark for 24 hours.

(2mks)

iii) In brightly lit place for 4 hours. (2mks

iv) What was the role of sodium hydroxide. (2mks

v) What was the observation made when the two leaves were tested for starch. (2mks

A _____

B _____

4. Give the formula used to calculate the magnification in a light microscope. (2mks

5. Draw a labeled diagram of a typical animal cell as seen under the light microscope. (5mks

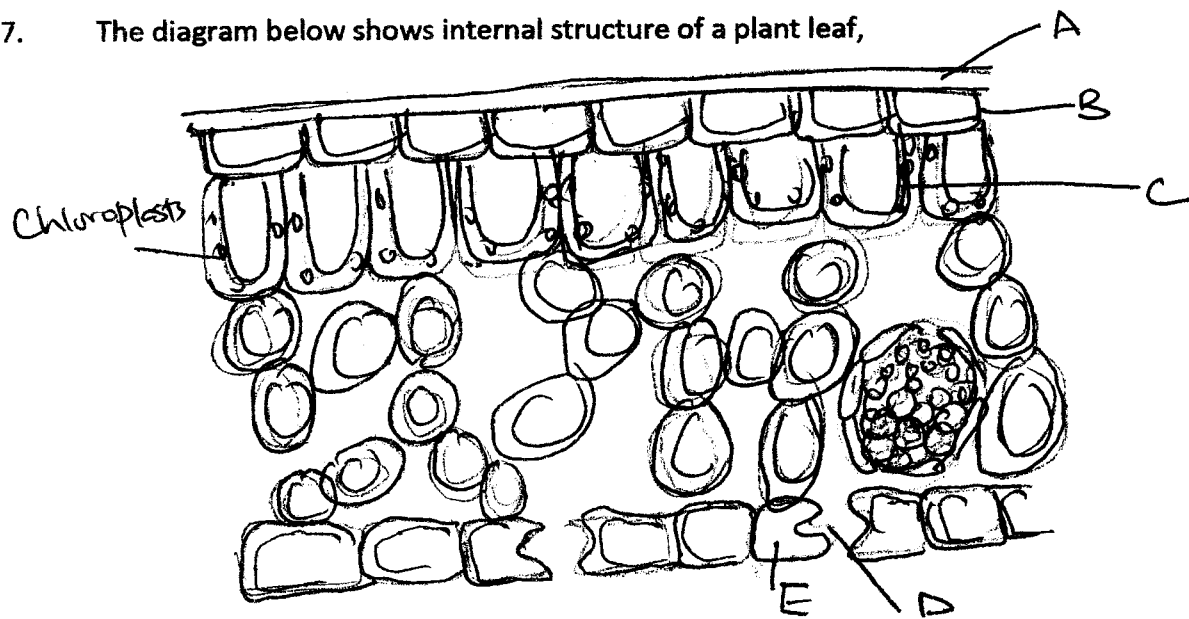
6. Two strips M and N of the same length were obtained from a potato tuber whose cell sap was 30% solution of 5% sugar concentration while strip N was placed in 60% sugar concentration.

a) What change was expected in strips M and N. (4mks)

M

N

7. The diagram below shows internal structure of a plant leaf,



i) Name parts (10mks)

A _____

B _____

C _____

D _____

E _____

ii) Give function of parts labeled (4mks)

D

E

iii) How are cells in C adapted for photosynthesis (2mks)

8. Name the element found in all carbohydrates.

i)

ii)

iii)

b) Name the building blocks of

i) Carbohydrates (2mks)

ii) Lipids (2mks)

c) The equations below represent hydrolysis (breaking) of Disaccharides to form monosaccharides. Fill in the spaces.

i) Maltose _____ Glucose + _____ (2mks)

ii) Sucrose _____ Glucose + _____ (2mks)

iii) _____ Glucose + Galactose (2mks)

9. When testing for starch in a leaf,
The leaf is first boiled in a beaker
The leaf is then transferred to the boiling tube containing methylated spirit.
The leaf is then washed in hot water then spread on a white tile and drops of Iodine is added.

i) Give 2 reasons of boiling the leaf in hot water. (4mks)

i)

ii)

b) Why was the leaf put in a boiling tube containing methylated spirits. (2mks

c) Give a reason of washing the leaf using hot water. (2mks

10. Draw and label the following diagrams.

