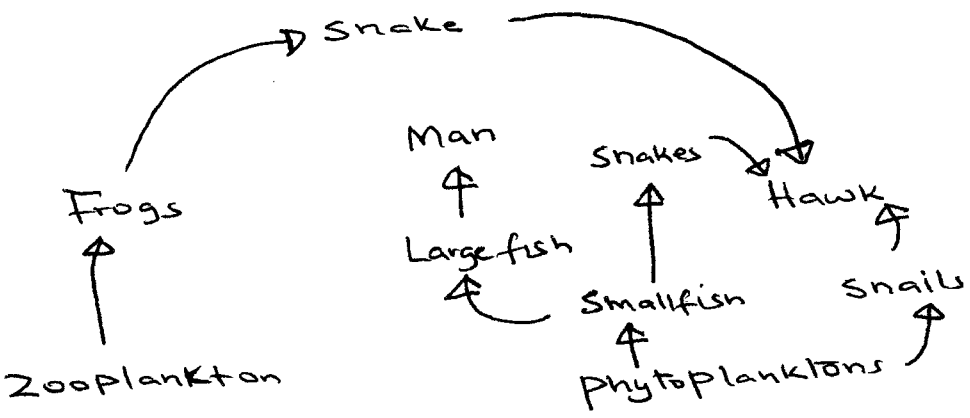
GATITU SECONDARY SCHOOL, P.O. BOX 327 – 01030, GATUNDU.

FORM 3 BIOLOGY MID TERM EXAMINATION. TERM 2 2016.

Name:_____adm:_____class:_____

Answer all the questions.

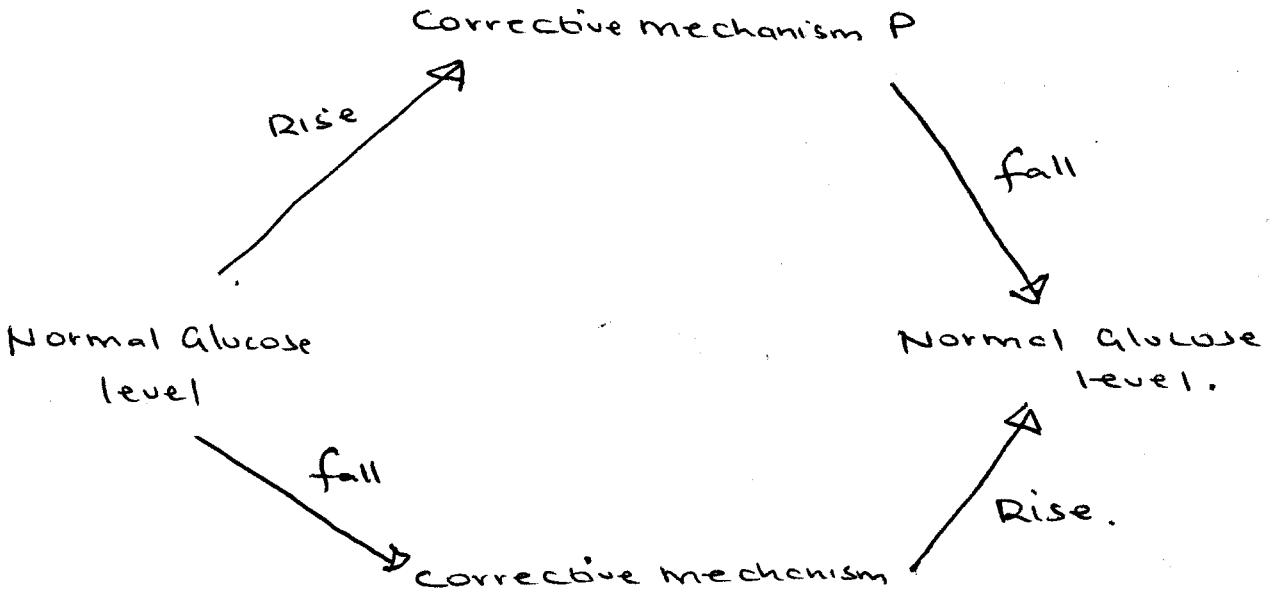
1. The diagram below represent a feeding relationship in an ecosystem.



a) Distinguish between a food chain and a food web. (2mks

b) Name the type of ecosystem represented by the above food web. (1mk

c)Name the organisms in the food web that are producers. (2mks



i) Explain what happen during corrective mechanism P (3mks

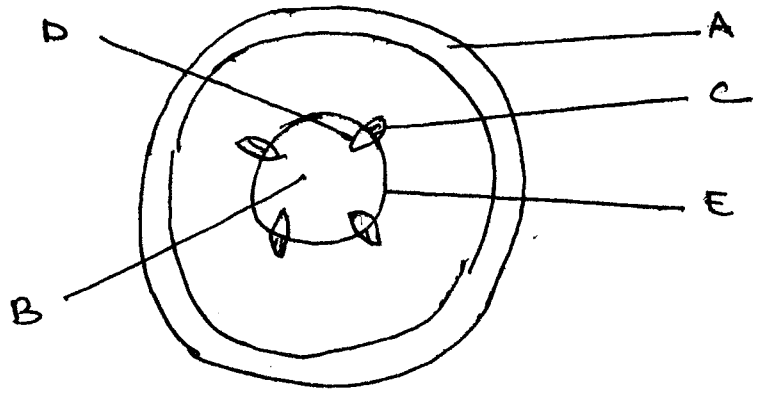
ii) Name 2 organs involved in corrective mechanism p and Q (2MKS

p

Q

iii) Why should glucose level be maintained constant. (2mks

3. The diagram below represent a transverse section of a young stem.



i) Name the parts labeled (2mks

A

B

ii) State functions of the part labeled. (4mks

C

D

iii) Name the compound that dissociate to release to release oxygen in humans. (1mk

iv) Name the blood vessel that has the highest concentration of Urea. (1mk

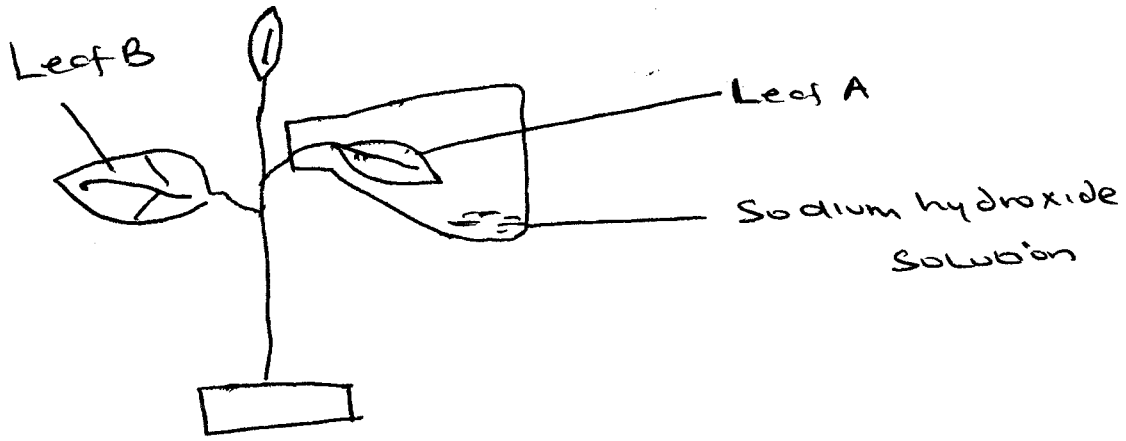
v) Name the blood vessel that nourishes the heart. (1mk

4a) Define the following terms (2mks

i) Photosynthesis (2mks

ii) Chemosynthesis (2mks

b) Study the diagram below and answer the questions that follow.



i) What is destarching (2mks

ii) Giving reasons, state the expected results when leaf A and B are tested for starch.

Leaf A (1mk

Reason: (2mks

Leaf B (1mk

Reason (2mks

5. As part of a study of population growth, an investigator put 16g and 64g of maize flour (food) in two equal boxes K and L respectively. She then introduced equal numbers of flour beetles into the boxes. Both boxes were kept under similar environmental conditions. The beetles were counted at certain intervals and the results tabulated as shown.

Number of days after introduction of beetles	A proximate number present in	of individuals.
	K	L
0	20	20
5	20	20
40	200	300
60	550	800
80	560	1300
100	650	1750
120	640	1600
135	650	1900
150	645	1500

a) Using the set of results draw two graphs on the same axes to present the above data.(6mks

b) What were the approximate number of individuals present in the two boxes on the 90th day? (2mks

i) Number in K (2mks

ii) Number in L (2mks

c) On what day was the population difference greatest. (2mks

d) Account for the shapes of the two graphs between the 1st and the 100th day. (4mks

PART II - [redacted]r Answer either question 6 or 7 at the back of this page).

6. Describe the disease schistosomiasis under the following subheading. (20mks)

i) Species of schistosoma causing the disease. (4mks

ii) Mode of transmission (10mks

iii) Effect on host (4mks

iv) Prevention and treatment (2mks

7. i) State the functions of the skin (4mks

ii) Explain how the various parts of the skin is adapted to its function. (16mks