GATITU SECONDARY SCHOOL, P.O. BOX 327 - 01030, GATUNDU. FORM 3 BIOLOGY MID TERM EXAMINATION. TERM 3 2015.

Answer all the questions.

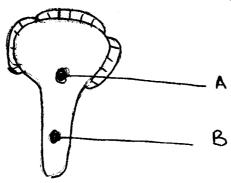
- 1. State four characteristics of fruits dispersed by animals. i) (4mks
- ii)
- iii)

iv)

2. Distinguish between protendry and protogyny.

(2mks

Below is a structure of a pollen grain. Study it and answer the questions that follow. b)



State the functions of the structures you have named in b(i) above i)

(2mks

Name the parts of the flower that are responsible for production of gametes (2mks b) i)

ii)

Below are drawings of specimen from plants. Study them and answer the question that 3. follow. Pr i) What is the role of specimen to the plants. (2mks Name the parts labeled ii) (4mks Α В C D Give the name used to describe the ovary. iii) i) In flower Q (2mks

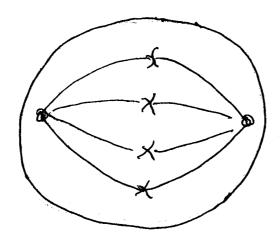
(2mks

ii)

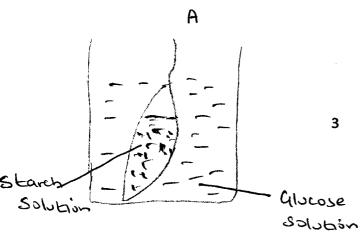
In flower R

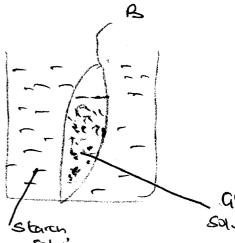
With a reason state the class of plants from which the specimen Class	R was obtained(2mks
Reasons	(2mks

The diagram below show a stage in Mitosis 4.



- i) Identify the phase_ (1mk
- Give a reason for your answer. ii) (2mks
- The following expt was set up by a form one class. After an hour, the contants of the 5. visking & beaker were tested using iodine solution and benedicts solution.





Glucose Solvion

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(i) Record in the table below the expected observations after the contents in set up A and B were tested using iodine solution and benedicts solution. (8mks

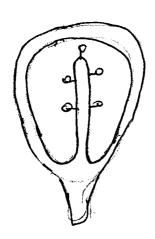
	Visking tu	bing	Beaker		
Set up	lodine Solution	Benedicts Solution	lodine Solution	Benedicts Solution	
Α					
В					

6(i)	Define	the	term	ם	lacentation
~\	• /			CCITII	ν,	accitation

(2mks

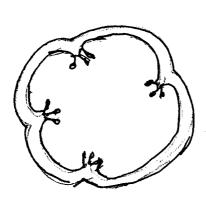
ii) Identify the different types of placentation shown below.

(a)



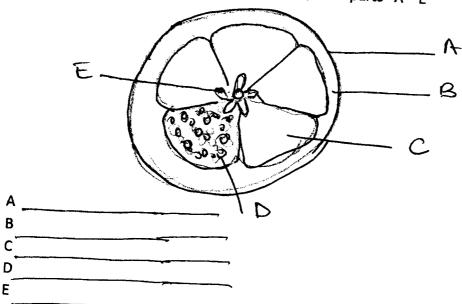
Type of placentation

(b)



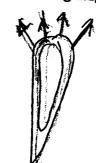
Type of placentation

iii) Below is a simplified T.S of an orange, label parts A-E



(5mks

7. Observe the following diagram of a fruit.



i) Suggest the possible agent of dispersal of the fruit.

(2mks

ii) Identify features that adapt it to the agent of dispersal.

(2mks

8. A group of students carried out a study of the population growth of flour weevils. They put 16 grams of maize flour into 2 equal boxes K and L repectively. They then introduced equal number of weevils into the boxes. The boxes were kept under similar environmental conditions. The weevil were counted at interval and the results recorded in the table below.

days	K	L
0	20	20
5	20	20
40	200	300
60	550	800
80	560	1300
100	650	1750
120	640	1750
135	650	1740
150	645	1748

Using a suitable scale, draw two graph on the same axes from the results in the table. (8mks

ii)	What were the approximate number of weevils present in the two boxes on the 70 th		
day.	•		
Num	ber in K	(2mks	
Num	ber in L	(2mks	
C(i)	On what day was the population of weevils in K, 580	(2mks	

ii) Between which days was the population difference greatest. (1mk

iii) Account for the shape of graph L between day 5 day 100

(2mks

9.Describe how fertilization occurs in a flower.

(20mks