Name:	Adm No:
School:	Class
Date:	
BIOLOGY	

## SUNRISE EXAMINATION Biology FORM 1

## **INSTRUCTIONS TO THE CANDIDATES:-**

- Write your **name** and **Admission number** in the spaces provided.
- Answer *all* the questions in the spaces provided.
- Mathematical tables and electronic calculators may be used
- All working **MUST** be clearly shown where necessary.

## For Examiner's Use Only:

**TIME: 2 HOURS** 

Question	Maximum score	Candidate's score
1-16	100 MARKS	

1.	What is biology?	(1mk)
	List five skills that are gained by studying Biology.	(5mks)
•••		
3.	Biology is derived from two Greek words bios and logos. What is the meaning of	
	Bios	(1mk)
••	Logos	(1mk)
1.	List three main branches of biology and for each give its definition	(6mks)
5.	Describe six characteristics observed among living organisms	(12mks)
•••		• • • • • • • • • • • • • • • • • • • •
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•••		
•••		
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6. Identify the following apparatus and for each state the function

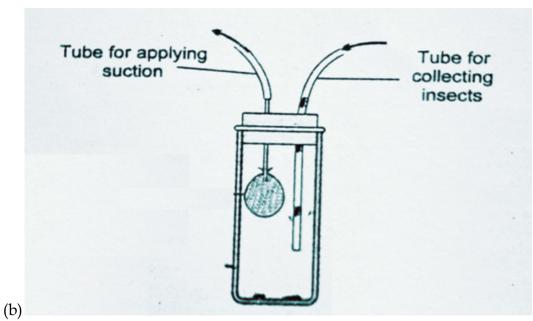
(6mks



(a)

Name

**Function** 



Name

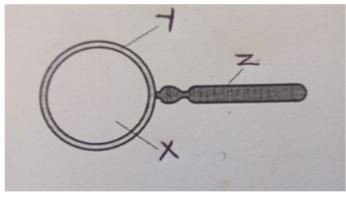
Function



(c)	
Name	_

	Function	
7. C	Dutline the four precautions to be observed during collection and observations of or luring practical study.	ganisms (4mks)

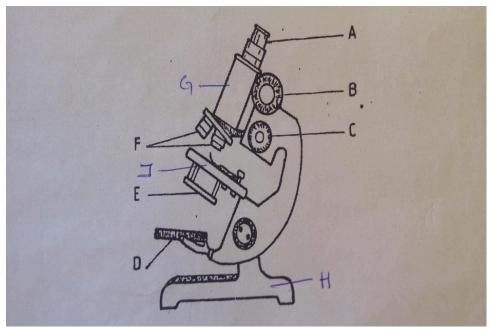
8. The diagram below shows an instrument used in the laboratory



(a) Name the instrument (1mk)

	(b) Label the parts  X	(3mks)
• • •	Υ	
•••	Z	
	(c) What is the function of the instrument?	
• • • •	named above 6(a) above and the total mag drawing. Show your working.	e actual length was 8cm. she used the apparatus gnification was X4. Calculate the length of the (3mks)
• • •		
• • • •		
9.	(a) What is classification?	(1mk)
• • • •		
•••	(b) What is the need for classification?	(4mks)
• • •		
• • •		
• • •		
10.	. Fill the table below by identifying the correct case	kingdom and appropriate representative in each (5mks)
	Kingdom	Representative
	a)	Hydra
	b)	Protozoa
	c)	Yeast
	d) Monera	
	(e)	Garden pea

a) Distinguish between magnification and resolution							
••••							
ł	b) Fill the table below			(3mks)			
	Eye-piece lens	Objective lens	Total magnification				
	X30	(i)	X600				
	X14	X5	(ii)				
	(iii)	X40	X2000				
(		ident counted 55 cells across a fiel erage length of cells. Show your w		eter was (2mks)			
	What is the importance of th ) Cutting <u>very thin</u> section	e following practices in biological s	preparation of the spo	ecimen? (1mk)			
i	i) Staining the cells using c	common dyes		(1mk)			
	ii) Adding <u>a drop</u> of water o			(1mk)			
	Distinguish between unicell	ular and multicellular organisms.		(2mks)			
14. I	dentify three types of cells f	ound in plants.		(3mks)			
15.	The figure shows a microsco	ppe					



5.00		
a)	Name the parts of the microscope shown below.	(4mks)
	A	
 	С	
 	J	
 	D	
b)	State the functions of the parts B	(5mks)
	Е	
	F	
	G	
	Н	

16. State three importance of studying bio	ology	(3mks)					
17. For the table below, identify the cell or	ganelle and state the appropriate function	(10mks)					
CELL ORGANELLE							
a) Cell wall		•••••					
b)	Add carbohydrates to protein and transp the cell						
c) Nucleus							
d) Nucleolus							
e)	Protein synthesis						
f) Chloroplast							
g)	Contain lytic enzymes						
h) Rough endoplasmic reticulum							
i)	Transport lipids						
.)							
18. (a) What is the name given to the dou	Site for respiration ble naming of living organisms?	(1mk)					
(b) The scientific name of a cat is Falis	gatas Which tayonomic group does the non	no Falis and					
catas	<u>catas.</u> Which taxonomic group does the nan	ile <u>rens</u> and					
refer to?		(2mks)					
Felis							
Catas							
(c) Outline four principles used in dou	able naming system of living organisms	(4mks)					

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