MENTOR HIGH SCHOOL KITENDE

UGANDA ADVANCED CERTIFICATE OF EDUCATION (UACE)

END OF TERM 1 EXAMS 2025

S.5 BIOLOGY

2.3 PIOLOGI
TIME 2 ½ HOURS
NAMESIGN
INSTRUCTIONS
Attempt all items
Item 1
John is a 50-year old man who recently started a routine health-up. His doctor informed him that his blood test showed elevated levels of fats and cholesterol. The doctor advised him to make a dietary and life style changes to manage his lipid profile.
(a) Based on John's lipid profile, what potential risks might he face if no changes are made? (2 scores)

Q
€
nloaded from
ᅙ
Ö
윷
8
Ξ
_₹
잍
3
5
3
2
<u>.</u>
3
\subseteq
6
ŏ
ž
₽
Ĭ
100
8
Ξ
3
≤.
S
—
_
Ž
7
≥
ᅋ
S
≓
O
e fo
e for
e for n
e for mo
e for mor
e for more
e for more P
e for more PA
e for more PAS
e for more PAST
e for more PAST P
e for more PAST PA
e for more PAST PAP
e for more PAST PAPE
e for more PAST PAPER
e for more PAST PAPERs
e for more PAST PAPERs a
e for more PAST PAPERs and
e for more PAST PAPERs and
e for more PAST PAPERs and or
e for more PAST PAPERs and oth
e for more PAST PAPERs and othe
e for more PAST PAPERs and other
e for more PAST PAPERs and other ed
e for more PAST PAPERs and other edu
APE
e for more PAST PAPERs and other educa
e for more PAST PAPERs and other education
e for more PAST PAPERs and other education
e for more PAST PAPERs and other education
e for more PAST PAPERs and other education m
e for more PAST PAPERs and other education mat
e for more PAST PAPERs and other education mate

	` ,	As a student who has studied chemicals of life, explain how lipids are formed in John's body. (4 scores)
)		
•••		
	•••••	
,		

Item 2

Kagimu a 7 year old boy was sent at the shop to buy cooking oil by the mother, on his way back home unfortunately he was knocked by a stone and he fell down. On his surprise, he recognized that the cooking oil he bought was almost finished on the ground. He decided to add water in the remaining cooking oil to avoid problems from his mother, however on his surprise he saw another layer forming between the cooking oil and water the thing that puzzled his mind.

(a) Help Kagimu to understand what was puzzling his mind according to the scenario (6 scores)

×
9
>
ownloaded from ww
0
ŭ
5
<u></u>
9
0
-
-
0
3
~
5
>
2
- 1
3
=
=
$\overline{}$
×
$\mathbf{\underline{o}}$
3
3
而
C
Ö
=
3
<u> </u>
70.
<u>''</u> .
_
_
5
Œ
- "-
5
<u></u>
×
×
<u> </u>
=
P
-
Ö
=
₹
=
<u></u>
V
vw.mutoonline.com visit the website for more PAST
⇗
CO
Ľ
77
~
P
T
PAPE
-
\mathcal{J}
S
7
3
Q
_
0
_
-
<u> </u>
he
her
her e
her ec
her edu
her edu
her educ
her educa
her educati
her education
her education
her education
her education r
her education m
her education ma
ther education mate

	•••••						
	(c)	Further a	assist Kagim (4 scores)	u to unde			
			•••••				
•••			•••••				
•••			•••••				
•••	• • • • • • •	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	

Item 3

John a fisherman in Busabala was carrying out his activities very early in the morning, on his surprise he observed some birds walking on the surface of water which puzzled his mind.

He has come to you for an explanation



Downloaded from www.mutoonline.com visit the website for more	(a)	Help John to understand what was puzzling him according to the scenario. (5 scores)
ron	•••••	
§	•••••	
<u> </u>		
aut.		
oon		
line		
.co		
บ <u><</u>	•••••	•••••••••••••••••••••••••••••••••
sitt	(b) He	lp John to understand other physical properties of water
he	and ho	ow they are related in biological systems (7 scores)
veb		
site	•••••	•••••••••••••••••••••••••••••••••••••
or		
mo		
ē P		
PAST		
PA		
PAPE		
Rs a	••••••	
bal	•••••	
oth(
er e		
duc		
atio		
and other education materials		
ater		
ials	•••••	

Downloa	
ided froi	Item 4
Downloaded from www.mutoonline.com visit the website for more PAST PAPE	In their discussion, Opio told Ochaya that proteins are health giving foods and they contain amino acids which are buffers. This confused the mind of Ochoya because he could not understand the meaning of the word buffer. He has approached you for guidance.
m visit the	Help Ochaya to understand the meaning of the word said according to the scenario. (02 scores)
website f	
or more F	
AST PAP	(b)Further explain to Ochaya how amino acids act as buffers (5 scores)
Rs and	scores)
other educ	
education mat	
materials	