# THE UNITED REPUBLIC OF TANZANIA NATIONAL EXAMINATIONS COUNCIL OF TANZANIA FORM TWO NATIONAL ASSESSMENT

033 BIOLOGY

Time 2:30 Hours

Year: 2023

#### Instructions

- 1. This paper consists of sections A, B and C with a total of ten (10) questions.
- 2. Answer all questions in the spaces provided.
- Section A carries fifteen (15) marks, section B seventy (70) marks and section C carries fifteen (15) marks.
- 4. All writing must be in **blue** or **black** ink **except** drawing which must be in pencil.
- Cellular phones and any unauthorised materials are not allowed in the assessment room.
- Write your Assessment Number at the top right corner of every page.

FOR	ASSESSOR'S U	SE ONLY
QUESTION NUMBER	SCORE	ASSESSOR'S INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		
CHECKER'S IN	ITIALS	



## Student's Assessment Number .....

#### SECTION A (15 Marks)

Answer all questions in this section.

(i)	Wh	ich branch of biology of	deals with th	ne study	of plants?
	A	Taxonomy	В	Bota	
	C	Ecology	D	Zool	ogy
(ii)	A to	eacher sprayed a perfu	me in one	corner	of the classroom and after 10 m
	den	ire classroom was fill nonstrated by the teach	led with the er?	he sme	ell of the perfume. Which pro
	A	Osmosis	В	Mass	flow
	C	Transpiration	D	Diffu	
(iii)	Far	mers in Naiva village ease is likely affecting t	complain of them?	passin	g blood - stained urine and faece
	A	Gonorrhoea	В	Chole	era
	C	Bilharzia	D	Malai	ria
(iv)	Α	mother went to hospi	ital with h		
	tem	perature. Which instru	ment will be	used to	complaining of the baby's his examine the baby?
	A	Beam balance	ment will be	used to	examine the baby?
	tem	perature. Which instru	ment will be	used to Then	examine the baby?
(v)	A C	Beam balance Stop watch at happens during the p	ment will be B D process of tal	Ther Steth	examine the baby? mometer oscope
	A C Wh A	Beam balance Stop watch	ment will be B D process of tal	Ther Steth	examine the baby? mometer oscope into the lungs of human being?
	A C Wh	Beam balance Stop watch at happens during the p	ment will be B D process of tal	Then Steth king air	examine the baby? mometer oscope
	A C Wh A C	Beam balance Stop watch  at happens during the p Air is pushed out of	ment will be B D process of tal the lungs racts	Then Steth king air B D	o examine the baby? mometer oscope into the lungs of human being? The ribcage moves inwards The diaphragm relaxes
(v)	A C Wh A C Wh A	Beam balance Stop watch  at happens during the p Air is pushed out of The diaphragm cont  y is chlorophyll necessa Absorbs sunlight ene	orocess of tale the lungs racts  ary for photorgy	Then Steth king air B D	o examine the baby? mometer oscope into the lungs of human being? The ribcage moves inwards The diaphragm relaxes sis?
(v)	A C Wh	Beam balance Stop watch  at happens during the p Air is pushed out of The diaphragm cont y is chlorophyll necessar	orocess of tale the lungs racts  ary for photorgy	There Steth king air B D Dosynthe	o examine the baby? mometer oscope into the lungs of human being? The ribcage moves inwards The diaphragm relaxes
(v)	Wh A C Wh A C	Beam balance Stop watch  at happens during the p Air is pushed out of The diaphragm cont  y is chlorophyll necessa Absorbs sunlight ene Manufactures carboh  ich practice would you	orocess of tall the lungs racts  ary for photorgy ydrate	sused to There Steth king air B D osynthe B D	into the lungs of human being? The ribcage moves inwards The diaphragm relaxes sis? Splits water molecules Transport water and minerals
(v) (vi)	Whi A C Whi A C	Beam balance Stop watch  at happens during the p Air is pushed out of The diaphragm cont  y is chlorophyll necessa Absorbs sunlight ene Manufactures carboh	orocess of tall the lungs racts  ary for photorgy ydrate	sused to There Steth king air B D osynthe B D	o examine the baby? mometer oscope into the lungs of human being? The ribcage moves inwards The diaphragm relaxes sis? Splits water molecules
(v) (vi)	Kem A C Wh A C Wh A C Whi	Beam balance Stop watch  at happens during the p Air is pushed out of The diaphragm cont  y is chlorophyll necessa Absorbs sunlight ene Manufactures carboh  ich practice would you	ment will be B D process of tal the lungs racts ary for photo rgy ydrate recommend d transfusion	sused to There Steth king air B D osynthe B D	into the lungs of human being? The ribcage moves inwards The diaphragm relaxes sis? Splits water molecules Transport water and minerals
(v) (vi)	Whi A C Whi A C	Beam balance Stop watch  at happens during the p Air is pushed out of The diaphragm cont  y is chlorophyll necessa Absorbs sunlight ene Manufactures carboh  ich practice would you Having frequent bloo	process of tall the lungs racts  ary for photorgy ydrate  recommend d transfusional exercises	sused to There Steth king air B D osynthe B D	into the lungs of human being? The ribcage moves inwards The diaphragm relaxes sis? Splits water molecules Transport water and minerals

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(viii)	(ii) They	feed on dea have cell w	all made up d and deca all made up rane bound v)	ying organic n p of cellulose I nucleus B		ii)	plantae?
(ix)	A Milk, g B Milk, c C Cabbag	will you red roundnuts, lassava, sorg e, spinach, m, cassava,	peans and r hum and w cassava and	vheat d eggs	ring froi	n kwashiorko	or?
Match by write	A Feeds of B Conver C Decom D Conver the functions of the letter	on herbivore ts sunlight e pose organi- ts chemical	s and relea energy into c matter an energy into	energy flow in see nutrients chemical energy for sunlight energy to sunlight energy to sunlight energy to be below the control of the see below	gy free gy ne name	of the blood	vessels in <b>List I</b> number in a table
		List A				List B	
(i)	Transports of the heart:	xygenated b	blood from		A B C	Coronary a Superior v Hepatic ar	ena cava tery
(i)	Carries blood from the hea	xygenated be a containing rt.	olood from	terials away	B C D E	Coronary a	rena cava tery y artery ena cava
2.6	Carries blood from the heat Transports dethe lungs.	xygenated be a containing rt.	waste ma	terials away	B C D E	Coronary a Superior v Hepatic ar Pulmonary Inferior ve	rena cava tery y artery ena cava n vein
(ii)	Carries blood from the hea	xygenated be a containing rt.	waste mand blood fro	terials away	B C D E F	Coronary a Superior v Hepatic ar Pulmonary Inferior ve Renal vein Coronary	rena cava tery y artery ena cava n vein
(ii)	Carries blood from the heat Transports do the lungs.	xygenated be a containing of the coxygenated by to the be a coxygenated by a containing a	waste made blood from the blood from	om the heart to	B C D E F	Coronary a Superior v Hepatic ar Pulmonary Inferior ve Renal vein Coronary	rena cava tery y artery ena cava n vein
(ii) (iii) (iv)	Carries blood from the heat Transports do the lungs.  Transports of the boundaries o	xygenated be a containing of the coxygenated by to the be a coxygenated by a containing a	waste made blood from the blood from	om the heart to	B C D E F G H	Coronary a Superior v Hepatic ar Pulmonary Inferior ve Renal vein Coronary	rena cava tery y artery ena cava n vein

2.

List B

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### SECTION B (70 Marks)

Answer all questions in this section.

3.	(a)	Identify the communicable and non-communicable diseases from the following list: Marasmus, Scurvy, Cholera, Tuberculosis, Pellagra, Leukaemia, Malaria and Syphilis
		(i) Communicable diseases
		,
		(ii) Non communicable diseases
		(1)
	(b)	How is each of the communicable disease sorted in (a) (i) transmitted?
		***************************************
4.	Form (a)	Two students were asked to observe sections of plant cells using a light microscope. Why was it necessary to use such an instrument?
		3

	microscope and label the seven	
2		

	Plant cell	Animal cell
	(i)	
		***************************************
	(ii)	
	***************************************	
	200	8444
	(iii)	,
	(iv)	184400.00
	(1V)	
(b)	What will happen if the cell membrane is severel	ly damaged?
	***************************************	
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meat,	community requested you to educate them about n tomatoes, mangoes and vegetables. Briefly explain roducts.	nodern methods of preserving its
meat,	community requested you to educate them about n tomatoes, mangoes and vegetables. Briefly explain	nodern methods of preserving its n to them four methods for prese

		Student's Assessment Number
(ii)		
(11)	******	***************************************
		***************************************
	*******	
(iii)		
		•••••••••••••••••••••••••••••••••••••••
(:)		
(iv)		
		***************************************
		***************************************
	1111	
		and the second s
(a)	Ident	ify four components found in the First Aid kit and state the use of each one.
	(i)	
	(ii)	
	(11)	
	(iii)	
	(iv)	
	()	
		***************************************

7.

		Student's Assessment Number
	(b)	Outline four procedures you will follow to give the First Aid to a person with the problem of nose bleeding.
		(i)
		***************************************
		(ii)
		(iii)
		(iv)
		***************************************
8.	(a)	State two Phyla of the Vinadam E.
	(4)	State two Phyla of the Kingdom Fungi.
	(b)	"Fungi are important organisms to human being." By using four points, justify thi statement.
		(i)
		······································
		75N
		(ii)
		***************************************
		(iii)
		,

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requiring	ople have been severely injured in a car accident, leading to excessive bleeding hence g blood transfusion.
(a) S	Suggest four precautions to be considered before carrying out this process.
	i)
(	ii)
	cin
	(iii)
	(iv)

		Student's Assessment Number
	(b)	Why is blood transfusion important for these individuals? Give a reason.
		**************************************
		SECTION C (15 Marks)
		Answer question ten (10).
10.	Caring In six p	and supporting people living with HIV/AIDS is essential for them to live a healthy lives points, justify this statement.
	incor	
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