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 |
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SECTION A (15 Marks)

Answer all questions in this section.

| 1. | For each of the items (i) - (x), choose the correct answer from the given alternatives letter in the box provided. | | |
|----|--|---|--|
| | (i) | Which branch of biology deals with the study of plants? A Taxonomy B Botany C Ecology D Zoology | |
| | (ii) | A teacher sprayed a perfume in one corner of the classroom and after 10 minutes the entire classroom was filled with the smell of the perfume. Which process was demonstrated by the teacher? A Osmosis B Mass flow | |
| | | C Transpiration D Diffusion | |
| | (iii) | Farmers in Naiva village complain of passing blood - stained urine and faeces. Which disease is likely affecting them? | |
| | | A Gonorrhoea B Cholera | |
| | | C Bilharzia D Malaria | |
| | (iv) | A mother went to hospital with her baby complaining of the baby's high body temperature. Which instrument will be used to examine the baby? A Beam balance B Thermometer C Stop watch D Stethoscope | |
| | | | |
| | (v) | What happens during the process of taking air into the lungs of human being? | |
| | | A Air is pushed out of the lungs B The ribcage moves inwards C The diaphragm contracts D The diaphragm relaxes | |
| | (vi) | Why is chlorophyll necessary for photosynthesis? | |
| | | A Absorbs sunlight energy B Splits water molecules | |
| | | C Manufactures carbohydrate D Transport water and minerals | |
| | (vii) | Which practice would you recommend to control the cancer disease? A Having frequent blood transfusion B Doing regular physical exercises | |
| | | C Taking enough fibres everyday D Using chemo and physical therapy | |
| | | Don't generate and physical therapy | |

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| viii) | 1 1007 | | | | | om plantae? |
| | A (iii) an | | В | (i) and (| | 1 |
| | C (i) and | (iv) | D | (ii) and | (iv) | |
| (ix) | Which foods will you A Milk, groundnu B Milk, cassava, s C Cabbage, spina D Sorghum, cassa | its, beans and m sorghum and wh ch, cassava and ava, rice and yar | neat heat eggs ms | | | orkor' |
| (x) | How do primary prod A Feeds on herbiv B Converts sunlig C Decompose org D Converts chemi | vores and releas tht energy into canic matter and ical energy into | e nutrients chemical end I sets energy sunlight end | ergy free ergy | | |
| atch t | the functions of the blo | ood vessels iii I | List A with | the marrie | - dim a ita | |
| ovide | d | | e below the | correspo | PI | m number in a |
| (i) | d | st A | | A | List B Corona | ary artery |
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| (i) | Transports oxygenat the heart: | st A ed blood from t | the lungs to | A B C | List B Corona Superio | ary artery or vena cava c artery |
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List B

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| Ci I and Co | Assessment | A | lumber | ř, |
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SECTION B (70 Marks)

Answer all questions in this section.

| 3. | (a) | Identit Maras | fy the communicable and non-communicable diseases from the following list: mus, Scurvy, Cholera, Tuberculosis, Pellagra, Leukaemia, Malaria and Syphilis. |
|----|----------|------------------|---|
| | | (i) | Communicable diseases |
| | | | |
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| | | (ii) | Non communicable diseases |
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| | (b) | How i | is each of the communicable disease sorted in (a) (i) transmitted? |
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| 4. | Form (a) | Two str Why w | udents were asked to observe sections of plant cells using a light microscope. vas it necessary to use such an instrument? |
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| 5. | (a) | How does a plant cell differ from an anima | al cell? Give four key points. | | | |
| | | Plant cell | Animal cell | | | |
| | | (i) | ** *** | | | |
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| | | (ii) | ***** | | | |
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| | | (i.e.) | N: 000000000000000000000000000000000000 | | | |
| | | (iv) | iii | | | |
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| | (b) | What will happen if the cell membrane is se | verely damaged? | | | |
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| 6. | meat, | community requested you to educate them about tomatoes, mangoes and vegetables. Briefly exproducts. | out modern methods of preserving its milk splain to them four methods for preserving | | | |
| | (i) | | | | | |
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| (a) | Ident | ify four components found in the First Aid kit and state the use of each one. |
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| | (iv) | |
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| | (b) | Out prob | line four procedures you will follow to give the First Aid to a person with the |
| | | (i) | |
| | | (ii) | *************************************** |
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| | | (iii) | |
| | | (iv) | |
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| 3. | (a) | State | e two Phyla of the Kingdom Fungi. |
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| | (b) | "Fun | gi are important organisms to home lain 22 D |
| | (0) | states (i) | |
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| 9. | Two | ing bloc | have been severely injured in a car accident, leading to excessive bleeding hence od transfusion. |
| | (a) | Sugge | st four precautions to be considered before carrying out this process. |
| | 3.50 | (i) | |
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| | (b) | Why is blood transfusion important for these individuals? | |
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| | | SECTION C (15 Marks) Answer question ten (10). | |
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| 0. | Caring In six r | and supporting people living with HIV/AIDS is essential for points, justify this statement. | r them to live a healthy lives |
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