

**PRESIDENT'S OFFICE**  
**REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT**  
**FORM TWO OPENING TEST**  
**BIOLOGY**

**TIME 2:30 Hours**

**January 2024**

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**SECTION A (15 marks)**

**Answer ALL questions in this section**

1. Question (i)-(x) are multiple choice items. Write down the correct letter of the answer in each case

i) Modern chemical containers carry special chemical warning signs which are;

- a) Explosive, toxic, and corrosive
- b) Explosive, additive and corrosive
- c) Explosive, oxidizing agent and toxic
- d) Flammable, explosive and concentrated

ii) A person with a deficiency of vitamin c is likely to become a victim of:

- a) Beriberi
- b) Rickets
- c) Night blindness
- d) Scurvy

iii) An example of a mammal which lays eggs is:

- a) A whale
- b) A kangaroo
- c) A bat
- d) Platypus

iv) Organisms which can interbreed and produce fertile off-springs usually belong to the same:

- a) Genus
- b) Species
- c) Class
- d) Family

v) The difference between a bacterium and amoeba is that a bacterium possesses:

- a) A cell wall
- b) Cytoplasm
- c) Chloroplast
- d) Cell membrane

vi) The scientific reason for putting a bat and a bird in the same group is that both:

- a) Can fly
- b) Have two wings
- c) Chloroplast
- d) Have a backbone

vii) In naming organisms, two names are used:

- a) One is generic name and the other is specific name
- b) One is phylum and other is order
- c) One is local and other is scientific
- d) One is group name and other is specific

viii) In the microscope the eye piece reads  $\times 10$  and objectives lens reads  $\times 40$ , the total magnification is:

- a) 400times
- b) 200 times
- c) 300 times
- d) 40 times

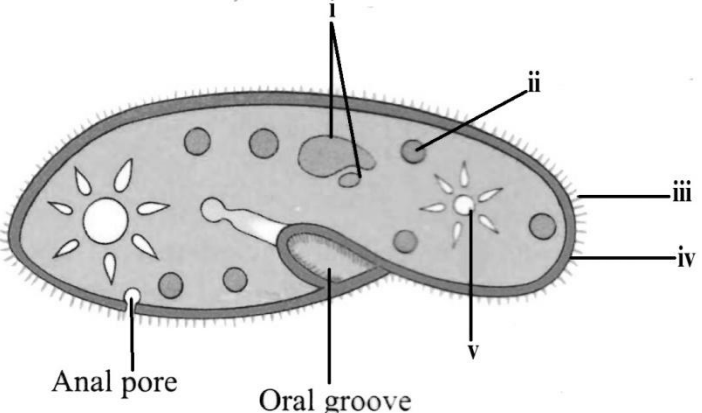
ix) Plant structure associated with water and mineral salts transportation is known as:

- a) Cortex
- b) Species
- c) Xylem
- d) Phloem\

x) Which of the following is true about viruses?

- a) They are the smallest living cells
- b) They can have both living and non-living characteristics
- c) They have no effects to plants
- d) They posses both DNA and RNA

2. Match the function of parts of all in List A with the corresponding part in List B. by writing the letter of the correct response beside the item number in your answer sheet.

| List A   | List B  |
|--|---|
|  <p>The diagram shows a paramecium with various internal and external structures. Labels i through v point to different parts: i points to a ciliated groove (oral groove), ii points to a large central vacuole (contractile vacuole), iii points to the outer covering (pellicle), iv points to the internal fluid (cytoplasm), and v points to a star-shaped structure (mitochondrion). The 'Anal pore' and 'Oral groove' are also explicitly labeled.</p> | <p>A. Cilia<br/>           B. Contractile vacuole<br/>           C. Cell wall<br/>           D. Cytoplasm<br/>           E. Nuclei<br/>           F. Cellulose<br/>           G. Pellicle<br/>           H. Food vacuole<br/>           I. Mitochondria</p> |

### SECTION B (70 Marks)

Answer all questions

3. (a) All scientists in the world have the rules in writing scientific names of living things or organism. As a form one student proves those rules that are using by scientist all over the world in writing scientific names. (Give five points)

(b) In our environment mostly is surrounded with pieces of papers which has been throwing by the people to the environment. Show the role play by waste recycling to the environment. (Give five points)

4. Explain how the following are important in animal cell and what will happen if they are released.

- i) Nucleus
- ii) Cell membrane
- iii) Cytoplasm
- iv) Mitochondria

5. The teacher entered the class room and asked his student to explain about groups of living things, but the student failed. Help them by naming five groups of living things.

6. Biology teacher enter the class and ordered the student to draw a well labeled diagram of animal cell and show the parts responsible for the following.

- (i) Protects and give the cell a definite shape
- (ii) Site for chemical reaction
- (iii) Home of hereditary materials
- (iv) Allows sensitive movements of substances across the cell

7 (a) How can you maintain a good manner when you are invited for a dinner at your friend house? (Give five points)

(b) According to the information that is given by the United Republic of Tanzania it is said that one among of the region which is leading for the HIV and AIDS infection is Iringa. As a form one student show four stages of HIV and AIDS.

8 (a) The family of Kengele's within a five years they lived without getting infections and diseases. As a form one student explain ways used by Kengele's family to maintain a good health. (Give three points)

(b) In 1665, Robert Hooke, an English scientist, designed a microscope and used it to examine cork from the bark of a tree. He noticed that, the cork was made up of many box-like units which were packed up together to form a honeycomb. He called these units cells. Enlighten the constituents of his cell theory that were used by Robert Hooke, an English scientist. (Give five points)

9. With the aid of diagram explain the following

- i) Blood cell which destroy harmful microorganisms
- ii) Blood cell which contain hemoglobin which carries oxygen
- iii) The cell which fertilize the female egg
- iv) Cell which contain large amount of chloroplast
- v) Cell which control opening and closing of stomata

### **SECTION C (15 Marks)**

#### **Answer question number 10**

10. With the aid of diagram show the distinctive features of Paramecium sp.

## **KWA MAHITAJI YA**

**01. MITIHANI YA KILA MWEZI (MONTHLY TEST) KWA MASOMO YOTE NA VIDATO VYOTE**

**02. SERIES ZA 0-LEVEL KWA MASOMO YOTE NA VIDATO VYOTE**

**03. MITIHANI YA KIDATO CHA TANO NA SITA (ADVANCED SERIES) KWA COMBINATION ZOTE**

## **OFA OFA**

**U.B.N COOPERATION TUNATOA OFA MAALUM YA KUJIUNGA NA GROUP LETU LA “U.B.N COOPERATION” KWA WAKUU WA SHULE NA WATAALUMA KWA TSH 50,000/= KWA KIDATO KIMOJA AMBAPO UTAPATA MITIHANI YA KILA MWEZI (MONTHLY TEST) KWA MASOMO YOTE NDANI YA MIEZI SITA. OFA HII NI KWA KIDATO CHA PILI NA CHA NNE TUU. ITAANZA (MWEZI JANUARI – JUNE) MWISHO WA KUJIUNGA NA OFA HII NI TAREHE**

**05/01/2024**

**KWA MAWASILIANO TUCHEKI KWENYE NAMBA**

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