Tahossa examination syndicate Tanga city council pre – national examination Tahossa examination syndicate Tanga city council pre – national examination

THE UNITED REPUBLIC OF TANZANIA

PRESIDENT'S OFFICE

REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

PRE –NATIONAL EXAMINATION

TAHOSSA

FORM TWO

033 BIOLOGY

TIME: 2:30 HRS

Wednesday 28th August 2019 a.m.

INSTRUCTIONS:

1. This paper consist of section A, B and C
2. Answer all questions in section A & B and one question from section C
3. All answer must be written in the spaces provided
4. All writings must be in blue or black ink **EXCEPT** for the diagrams which must be in pencil

SECTION A (30 MARKS

1. Select the correct answer in each item given and write its letter in the box provided

i. Where does gaseous exchange take place in a plant
   a). Spongy mesophyll cells
   b). Palisade cells
   c).Guard cells
   d) Stomata

ii. In mammals, deoxygenated blood from the body enter the heart through
   a). Right auricle
   b). Left auricle
   c). Right ventricle
   d) Left ventricle

iii. The green plants in a community are ecologically referred to as .....
   a). Consumers
   b). Decomposer
   c). Producer
   d) Ecosystem

iv. A kidney is an example of .....
   a). A tissue
   b). A system
   c). An organ
   d) An organelle

V). A person who takes too much carbohydrates and lipids develops:
   a). Giantism
   b). Kwashiorkor
   c). Marasmus
   d) Obesity

Vi). Which of the following is a risk behavior?
   a). Alcoholism
   b). Being patient
   c). Shaking hands with HIV infected individuals
   d) Sharing toilet facilities with HIV infected individuals

Vii). A food sample Y turned blue – black when it was mixed with iodine solution. This conclude that the sample Y contained:
   a). Fats and Oil
   b). Protein
   c). Reducing sugar
   d) Starch

Viii). Which of the following is expected to happen if blood supply to the brain is reduced
   a). Fainting
   b). Nausea

c). Shock
d) Vomiting

ix). The part of a light microscope used for controlling amount of light is the
a). Base
b). Diaphragm
c). Eyepiece
d) Mirror

X).In human being, the brain is an example of
a). Tissue
b). An organ
c). Organelles
d) System

I	II	III	IV	V	VI	VII	VIII	IX	X

2. In each of the following statements, write **TRUE** if a statement is correct or **FALSE** if a statement is not correct
   i. A microscope is an instrument used to observe smaller objects which cannot be seen by using our normal eyes ……
   ii. We can use dry wooden stick to move a victim of electric shock from the source of electric current …….
   iii. The ileum is the part of the digestive system which deals with absorption of end product of digestion……
   iv. Anaerobic respiration occurs in the presence of oxygen…….
   v. All veins carry deoxygenated blood except pulmonary veins……
   vi. The highest rank of classification is called kingdom……
   vii. First Aid is given by qualified doctor before a victim is sent to the hospital……
   viii. All bacteria are pathogens……
   ix. Thrombocytes are blood cells which defend the body against pathogens ……
   x. Salting and drying in the sun are examples of traditional methods of food preservation
3. For each of items I – V, choose the correct answer among the given alternative in list B, and write its letter in the table below.

LIST A	LIST B
i. The first part of small intestine ii. Contain an acidic medium for digestion iii. Wave like muscular contraction that push the food along the oesophagus	A. Ingestion B. Ptyalin C. Duodenum D. Oesophagus E. Molars F. Sphincter muscle G. Pyloric sphincter H. Peristalysis

iv. The muscular ring like valve which regulates the passage of food from the stomach in to small intestine v. Grind the food				I. Stomach J. canine	
A	i.	ii.	iii.	iv.	v.
B					

4. Complete each of the following statements by writing the correct answer in the space provided
   i. The largest artery is called……
   ii. Supplies nutrients and oxygen to the heart ……
   iii. A vein that carries the digested food from the small intestine to the liver……
   iv. The largest vein is called …… ……
   v. Carries oxygenated blood from the lungs to the heart……

SECTION B (50 MARKS)

Short answer questions

5. (a) What is:
   i. Food web……
   ……
   ii. Food chain……
   ……

   (b) Below is the list of organisms occupying a certain habitat in an ecosystem

   Grass, Lion, Zebra and Gazelle
   i. Construct a food web using the given organisms above
   ii. From the food web you have constructed, identify two food chains
   iii. Mention one group of organism which must be added to balance the ecosystem ……
   iv. Briefly explain the role of green graces in the ecosystem ……
   ……

6. (a) What is respiration?……
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   ……
   ……

   (b) Name and define two types of respiration ……
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(c) Write four factors affecting the rate of respiration
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(d) Outline four areas /places where anaerobic respiration could be applied in our daily real life situation
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7. (a) Figure 01 represent a diagram of simple animal cell.
Study the diagram then answer the question that follow

Name the part labelled with letter A, B, and C

(b) Five the function of the part labelled by letter c .....
.....
.....
(c) Give four difference between animal cell and plant cell

ANIMAL CELL	PLANT CELL
i).	i).
ii)	ii)
iii)	iii)
iv)	iv)

8. (a) Define the following terms:
   i. Diffusion .....

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ii. Osmosis

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(b). Explain why a red blood cell immersed in the low concentration solution burst?

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9. (a) With one example outline phyla of kingdom fungi

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(b). Outline any four (4) advantages of kingdom fungi

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SECTION C:

(Essay questions)

Answer only **one** question in this section

10. (i) What do you understand by the terms Disease and immunity

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(ii). Mention types of immunity and states any six factors that lowers or affects body immunity in the human being

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11. Write an essay about photosynthesis under the following guidelines
    i. Site of the process
    ii. Raw materials
    iii. Conditions
    iv. End products
    v. Importance of this process to other organisms

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