

FORM II BIOLOGY

NAME: _____ STREAM: _____ DATE: _____

DURATION: 2: Hours

INSTRUCTIONS:

- **Attempt all numbers in all 3 sections**
- **Neat work is highly needed**

SECTION A

1. Question (i-x) are multiple choice items. Write down the correct letter of the answer in each case.
- (i) A person with a deficiency of vitamin C is likely to become a victim of:
A: Beriberi B: Ricket C: Night blindness (d) Scurvy ()
- (ii) Organisms which don not have nuclei are called:
A: Eukaryotes B: Protoctists
C: protest D: prokeryots ()
- (iii) The following is expected to happen if blood supply to the brain is reduced.
A: Vorniting B: Shock C: shivering D: Fainting
()
- (iv) A parasite that causes bilhazias is known as:
A: Bacteria B: Ameoba sp.
C: Plasmodium D: Schistosomiasis ()
- (v) The smallest unit of life is:-
A: A tissue B: An organ C: An amoeba D: A cell ()
- (vi) The following are chemical warning signs:-
A: Explosive, toxic and cohesive
B: Explosive, additive and corrosive
C: Explosive, toxic and Oxidant
D: Explosive, flammable and concentrated ()
- (vii) The basic importance of photosynthesis is to:-
A: Release oxygen into the atmosphere

- B: Convert solar energy to chemical energy
 C: Manufacture carbohydrates from carbon dioxide and water
 D: Reverse the process of respiration. ()

- (viii) A mature spores germinate into a structure called:-
 A: Sori B: Archigonia C: Frond D: Prothollus()

- (ix) A living part of the natural environment is known as:-
 A: Topographic factor B: Abiotic factor
 C: Biotic factor D: Edaphic factor
 ()

- (x) _____ is ability of a species to resemble its surrounding to avoid detection by its enemies.
 A: Minicry B: Neutralism
 C: Camouflage D: commensalism
 ()

2. Each of the following statements is either correct or incorrect. Write TRUE if the statement is correct or FALSE if the statement is incorrect.

- (i) The main method of HIV transmission is through food contamination _____
 (ii) Animal cell has a large permanent vacuole _____
 (iii) Pathogens are organisms which transmit diseases

- (iv) Cholera is an air -borne disease _____
 (v) People living with HIV/AIDS should be discriminated _____
 (vi) Tongue rolls food into bolus _____
 (vii) A bat and a whale belong to the same kingdom

- (viii) Some types of fungi are good food source for human being

- (ix) Root hairs increase the surface area of plant roots for water absorption _____
 (x) Duodenum is the first part of small intestine

3. The following are matching items. Match the phrase or item LIST A with that in LIST B. by writing the letter of the item against its appropriate position in the space provided along side. LIST A. as shown in the worked example Example below

| | |
|--------|--------|
| LIST A | LIST B |
|--------|--------|

| | |
|-----------------------------|-------------------------|
| ...Y... biological catalyst | x. Hormone y. Enzyme |
|-----------------------------|-------------------------|

LIST A:

- (i) _____ Unicellular fungi
- (ii) _____ Mutualistic association between algae and
fung
- (iii) _____ Feed on dead matters and decomposes them
- (iv) _____ feed directly on primary producers
- (v) _____ non living part of ecosystem
- (vi) _____ site for photosynthesis
- (vii) _____ required by animals in small quantities
- (viii) _____ locomotory structure of amoeba
- (ix) _____ classification based on few observable
features and economic values.
- (x) _____ first part of small intestine

LIST B:

- | | |
|------------------------------|------------------------|
| A: Duodenum | L: Abiotic factor |
| B: Rectum | M: primary consumers |
| C: Artificial classification | N: Secondary consumers |
| D: Natural classification | O: Saprophytes |
| E: Pseudopodia | P: Holozoic |
| F: flagella | Q: Lichens |
| G: Micronutrients | R: Symbiosis |
| H: Macronutrients | S: Yeast |
| I: Chloroplasts | T: Mushrooms |
| J: Chlorophyll | |
| K: A biotic factor | |

SECTION B:

4.(a) Define the following terms

- (i) Ecosystem _____

- (ii) Food chain: _____

(b) Explain the role of each of the following organisms in the ecosystem.

- (i) Producers: _____

- (ii) Decomposers: _____

(c) Produce any four differences between a food chain and food web.

| | Food chain | Food web |
|-------|-------------------|-----------------|
| (i) | | |
| (iii) | | |
| (iv) | | |
| (v) | | |

5 (a) What is meant by the term ;

(i) First Aid _____

(ii) First Aid kit _____

(b) Outline any four advantages of giving first Aid to a Victim

(i) _____

(ii) _____

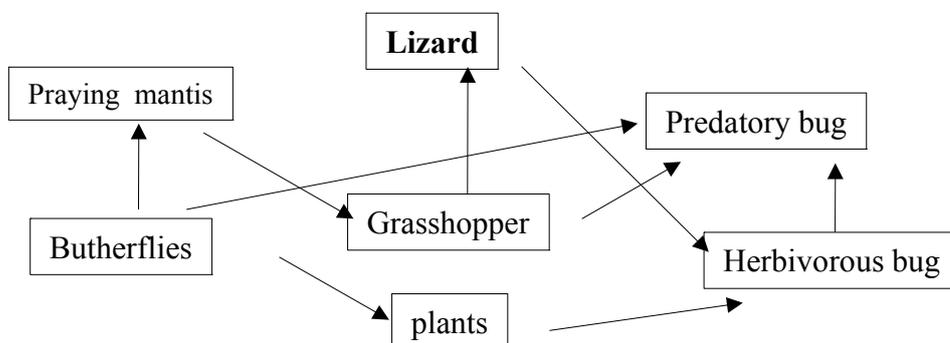
(iii) _____

(iv) _____

(c) Explain the uses of the following first Aid kit complements.

| Components | uses |
|-------------------|-------------|
| Scissors | |
| Gauze | |
| Iodine tincture | |
| Soap | |

6 (a) The diagram below represents a feeding relationship in an ecosystem.





(b) (i) What is the feeding relationship represented above?

(ii) What does the sequence:
plant → Grasshopper → Lizard represent?

(iii) Name the organisms which are:- _____

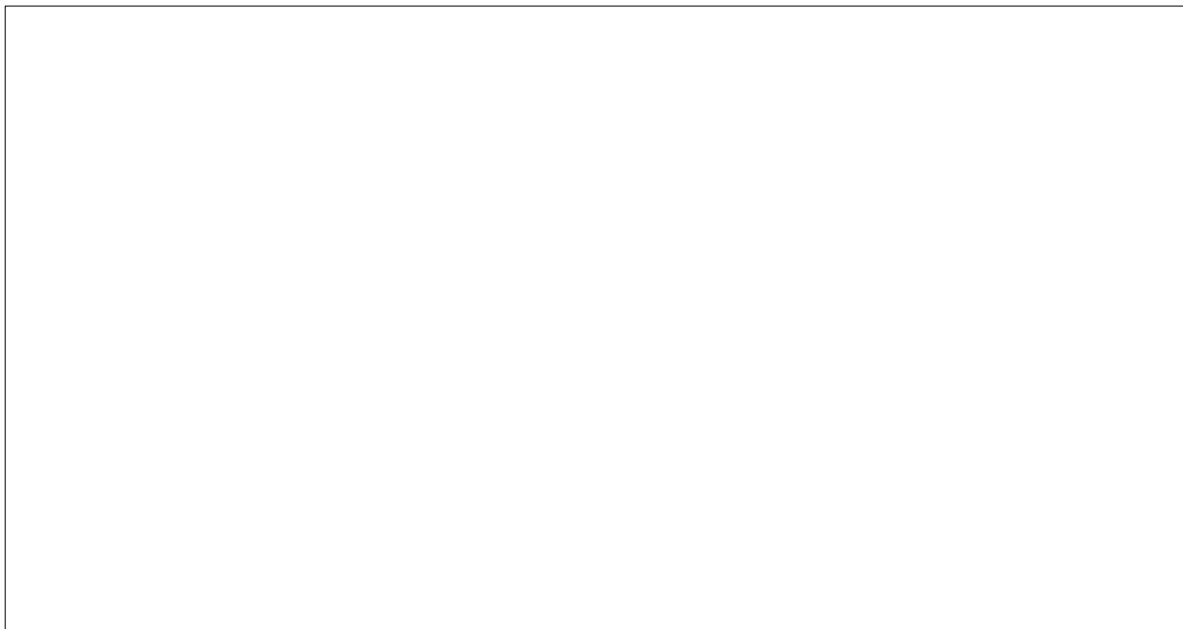
(i) Primary producers _____

(ii) Primary consumers: _____

7. (a) Outline four differences between a plant cells and animal cell

| Plant cells | Animal ccess |
|-------------|--------------|
| (i) | |
| (ii) | |
| (iii) | |
| (iv) | |

(b) Draw a well labeled diagram of a generalized plant cell under a light microscope.



8. (a) What is taxonomy?

(b) List four advantages of kingdom Fungi

- (i) _____
- (ii) _____
- (iii) _____
- (iv) _____

(c) Outline any two disadvantages of kingdom fungi

- (i) _____
- (ii) _____

9 (a) (i) What do you understand by the term Laboratory?

(ii) Outline any two qualities of a good laboratory

- (i) _____
- (ii) _____

(b) Mention one function of each of the following apparatus

| Apparatus | Uses/function |
|-------------------|----------------------|
| Mortor and pestle | |
| Hand lens | |
| Thermometer | |
| microscope | |

SECTION C:

10. Write an essay on cholera by using the following guidelines

- (i) Cause
- (ii) Transmission
- (iii) Signs and symptoms
- (iv) Effects
- (v) Preventive measures
- (vi) Treatment
- (vii) Conclusion