PRIME MINISTERS 0FFICE
REGIONAL ADMISTRATION AMD LOCAL GOVERNMENT
KILOMBERO DISTRICT PRE-NATIONAL EXAMINATION
BIOLOGY FORM TWO
MARKING SCHEME

SECTION A (30 Marks)

1. One mark each to make 10marks

i	Ii	iii	iv	v	vi	vii	viii	ix	x
C	B	D	B	A	C	D	A	C	D

2. One mark each to make 10marks

i	Ii	iii	Iv	v	vi	vii	viii	ix	x
True	False	True	Fals e	True	False	False	True	False	False

3. One mark each to make 10marks

List A	i	ii	iii	iv	v	vi	vii	viii	ix	x
List B	G	O	J	N	A	E	D	L	B	H

SECTION B (50marks)

4. (a) 1. It helps man to know himself / herself better.
   2. It helps us to prevent and avoid disease.
   3. It helps to get professional people such as doctors, nurses and teachers.
   4. Biology helps us to conserve our environment.
   5. Biology is a applied in different fields such as agriculture, pharmacy.

   *Mark any four points 0.5mark each = 02marks

   (b) i) Plant cells
   a) Palisade cells
   b) Mesophyl cells
   c) Guard cells
   d) Cuticle cells

   ii) Animal cells

   a) Leucocytes
   b) Sperm cells
   c) Red blood cells

   *Mark any two point 1mark each = 02marks

   c) i) Help him/ her to calm down and lie or sit down.

ii) Tightly tie the area just above the bite to avoid slowing down the spread of venom.

5. (a) (i) This is the process of grouping living organisms according to their similarities and differences. (01mark)

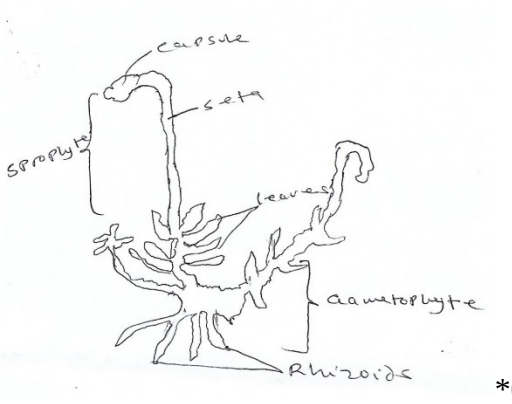
ii) 1. Classification helps us to identify living organisms.

2. It makes easy the study of living organisms.

3. Scientific names used in classification helps communications among biologists all over the world.

4. Classification helps in identification of new observed organisms.

*mark any 4points 0.5marks each = 02marks

(b) 

*02marks

(c)

Organism		Kingdom	Plylum/ Division
i)	Amoeba	Animali (0.5marks)	Rhizopoda (0.5marks)
ii)	Yeast cell	Fungi (0.5marks)	Ascomycota (0.5marks)
iii)	Liverwort	Plantae (0.5marks)	Bryophyta (0.5marks)
iv)	Plasmodium	Animalia (0.5marks)	Apicomplexa (0.5marks)
v)	Fern leaf	Plantae (0.5marks)	Filicinophyata (0.5marks)

6. (a) (i) Infection refers to the occurance of pathogens in the body while disease refers to the deviation from normal health which can be caused by the pathogen.

(ii) Biode grable wastes are those wastes from living things while Bio-hazardous wastes are the wastes that can transmit infection and diseases. (02marks)

(b) (i) Pit latrine

(ii) Land fills

(iii) Incinerating

*1mark each = 03marks

(c) 1. In the laboratory there are chemical/ reagents and different apparatus used for experiments.

2. School laboratory has water supply.

3. In the laboratory also there is a strong room for storing of chemicals.

4. Fume chamber is there in school laboratory

*Mark any 3 points 1mark each = 03marks

7. (a) (i) Trophic level is the position of an organisms in a food chain/ web. *(1mark)

(ii) 1. Producers

2. Primary consumer

3. Secondary consumer

4. Tertiary consumer

5. Quaternary consumer

6. Decomposers

(b) (i) Food web

(ii) Grass → Cow → Lion (iii) Zebra → Hyena → Mucor

(c) Role breaks down (decompose) dead organic matter.

*(1mark)

8. (a)

	INHALATION	EXHALATION
i)	External intercostals muscles contract.	The external intercostals muscles relax.
ii)	Internal intercostals muscles relax	External intercostals muscles contract
iii)	The ribcages is lifted outward and upwards	The ribcages moves inward and downwards
iv)	The diagram contract and flattens	The diagram relaxes and become dome – shaped
v)	Air enters the alveoli through the nostrils, pharynx, glottis, trachea, bronchioles and finally alveoli.	Air leaves the alveoli through the glottis, trachea, bronchioles and finally nostrils.

*Mark any 4points, 1mark each 04marks

(b) (i) Charcoal to undergo combustion requires oxygen then after combustion it may produce hazard/ dangerous fumes, so if the room is poor ventilated the person sleeping there may get respiratory defers and may faint or die. (02marks)

(ii) Because plant cells have call wall which exhaust pressure to prevent the cell from bursting while red blood cells have only cell membrane (no cell wall) so it fail to exhaust pressure and burst. (02marks)

(c) 1. Most gaseous exchange takes place through the stomata on the leaves and lenticels on the stem.

2. Some plants carry out gaseous exchange through breathing roots.

3. Plants are not complex as animals.

Mark any 2 reasons 1mark each = 02 marks

SECTION C

9. 4 traditional methods in food processing, preservation and storage are

i. Smoking

ii. Drying in the sun
iii. Salting
iv. Cooking
v. Fermentation

*Mark any 4 points 2marks each = 08marks

3 – Modern methods in food processing, preservation and storage are:-

1. Refrigeration
2. Liquefaction
3. Canning and bottling
4. Pasteurization
5. Drying (dehydration)
6. Irradiation

NOTE:- Introduction = 03maks
Conclusion = 03marks
Students should correctly explain the points

10. Essay on Tuberculosis
    a) Cause (2marks)
    b) Mode of Transmission (02 points 2marks each = 04marks)
    c) Symptoms/ signs (02 points 2marks each = 04marks)
    d) Effects (02 points 2marks each = 04marks)
    e) Prevention and control (02 points 2marks each = 04marks)
    f) Conclusion = 02marks