

**THE CATHOLIC DIOCESE OF SAME**  
**KINDOROKO GIRLS' SECONDARY SCHOOL**  
**FORM ONE SEPTEMBER MID-TERM EXAMINATIONS**

**033****BIOLOGY****Time: 2:30 Hours****Year: 2024****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.
3. Section A and C carry **fifteen (15)** marks each and section B carries **seventy (70)** marks.
4. All writing must be in **blue** or **black** ink.
5. Cellular phones, calculators and any unauthorized materials are **not** allowed in the examination room.
6. Write your **Name in Full** on the top right hand corner of every page.

| <b>FOR EXAMINER'S USE ONLY</b> |              |                            |
|--------------------------------|--------------|----------------------------|
| <b>QUESTION NUMBER</b>         | <b>SCORE</b> | <b>EXAMINER'S INITIALS</b> |
| <b>1</b>                       |              |                            |
| <b>2</b>                       |              |                            |
| <b>3</b>                       |              |                            |
| <b>4</b>                       |              |                            |
| <b>5</b>                       |              |                            |
| <b>6</b>                       |              |                            |
| <b>7</b>                       |              |                            |
| <b>8</b>                       |              |                            |
| <b>9</b>                       |              |                            |
| <b>10</b>                      |              |                            |
| <b>TOTAL</b>                   |              |                            |
| <b>CHECKER'S INITIALS</b>      |              |                            |



**SECTION A (15 Marks)**

Answer **all** questions in this section

1. For each of the items (i) – (x) choose the correct answer from among the given alternatives and write its letter besides the item number in the answer table provided.

- (i) We are advised to observe proper eating habits so as to enhance wellbeing of our bodies. Which of the following foods are considered healthy?
- A Fruits, vegetables and whole grains
  - B Foods that contains chemical preservatives
  - C Juices that contain extra sugar
  - D Foods cooked with a lot of oil
- (ii) Which of the following things would biologists prefer to study in details?
- A Rat, car, tortoise and human being
  - B Louse, baobab tree, ruler and bacteria
  - C Ruler, computer, car and television
  - D Flamingo, penguin, cockroach and wildebeest
- (iii) In order to ensure safety, different signs are put in areas where accidents are likely to happen. Which of the following signs would you insist to be placed at a filling station?
- |                  |                  |
|------------------|------------------|
| A Harmful sign   | B Corrosive sign |
| C Flammable sign | D Biohazard sign |
- (iv) Which of the following is correct with regard to measurements?
- A Mass is measured by spring balance and its SI unit is kilogram (Kg)
  - B Length is measured by tape measure and its SI unit is metre (m)
  - C Time is measured by stopwatch and its SI unit is minutes (min)
  - D Temperature is measured by thermometer and its SI unit is degrees Celsius (°C)
- (v) Mothers are advised to breastfeed their babies especially in the first days after birth. This helps the baby to have:
- |                            |                               |
|----------------------------|-------------------------------|
| A Natural passive immunity | B Natural active immunity     |
| C Active passive immunity  | D Natural artificial immunity |
- (vi) Rita was taken to the hospital after being observed with the following signs: Watery diarrhea like rice water, vomiting, sunken eyes, weak pulse, wrinkled skin and muscle cramps. Which pathogen (disease-causing microorganism) do you expect to find in her faeces?
- |                           |                                     |
|---------------------------|-------------------------------------|
| A <i>Salmonella typhi</i> | B <i>Mycobacterium tuberculosis</i> |
| C <i>Vibrio cholerae</i>  | D <i>Plasmodium</i> sp.             |
- (vii) Adolescents face many challenges due to the rapid changes of their body. All of the following can help them to behave well during this period, **EXCEPT**:
- A Abstaining from religious teachings
  - B Resisting peer pressure
  - C Getting counselling from reliable people
  - D Abstaining from sexual acts before marriage



**SECTION B (70 Marks)**

Answer **all** questions in this section

3. On the way to Dar-es-Salaam, Chakupewa observed a road accident that caused injuries to some passengers. While asking himself about what to do to help the victims, he found the small box with a Red Cross on its top in vehicle.

(a) Suggest and explain the term used to name the box .....

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(b) Identify four (4) items from the box and explain how Chakupewa would use them to assist the victims.

(i) .....  
.....

(ii) .....  
.....

(iii) .....  
.....

(iv) .....  
.....

(c) State five (5) significance of the process done by Chakupewa to assist the victims.

(i) .....

(ii) .....

(iii) .....

(iv) .....

(v) .....

4. Recent environmental publications and reports condemns on the serious environmental pollution resulting from poor water disposal.

(a) If you could be assigned to educate people on how the condemned issue can keep them unsafe, use four (4) points to do so.

(i) .....

(ii) .....

(iii) .....

(iv) .....

(v) .....

- (b) "Dispose waste properly to avoid environmental pollution". Use three (3) main principles to support this statement.

- (i) .....  
.....
- (ii) .....  
.....
- (iii) .....  
.....

5. (a) Suppose you are invited by the head master of Mshika Mbili Secondary School to attend the laboratory building meeting. Which conditions will you advise to the owner of the school to consider in building a laboratory with standard requirement? Give six (6) points to support.

- (i) .....  
.....
- (ii) .....  
.....
- (iii) .....  
.....
- (iv) .....  
.....
- (v) .....  
.....
- (vi) .....  
.....

- (b) State four (4) ways through which communicable diseases can be transmitted from one person to another.

- (i) .....  
.....
- (ii) .....  
.....
- (iii) .....  
.....
- (iv) .....  
.....

6. (a) The human body has natural defense system that prevent the entry of pathogens or combat them once they manage to enter the body. As form one student who is an expert of immunology concept, briefly explain six (6) natural body defense mechanisms.

- (i) .....  
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- (ii) .....  
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- (iii) .....  
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- (iv) .....  
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- (v) .....  
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- (vi) .....  
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(b) Good manners and personal hygiene act as a reasonable behaviour that is socially accepted. State four (4) principles of good manners.

- (i) .....  
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- (ii) .....  
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- (iii) .....  
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- (iv) .....  
.....

7. (a) Briefly explain the following terms as used in biology especially in health and immunity.

- (i) Communicable disease .....  
.....
- (ii) Non-communicable disease .....  
.....
- (iii) Pandemic disease .....  
.....
- (iv) Endemic disease .....  
.....
- (v) Immunity .....  
.....

(b) Categorize the following diseases according to their causative agents: (*Malaria, Typhoid, Candidiasis, Schistosomiasis and Rabies*)

| S/N   | TYPE OF DISEASE   | NAME OF THE DISEASE |
|-------|-------------------|---------------------|
| (i)   | Protozoa disease  |                     |
| (ii)  | Fungal disease    |                     |
| (iii) | Worm disease      |                     |
| (iv)  | Bacterial disease |                     |
| (v)   | Viral disease     |                     |

8. Name and draw the laboratory apparatus that can be used to:

(a) Crush and grid solid complex things into powdered or simple substances.

(b) Picking up smaller animals such as insects without hurting them

(c) Estimate the population of living things in a given area

(d) Heating substance at very high temperature.

(e) Measure the volume of liquid.



9. (a) It is well known that biology has a close relationship with other scientific fields. Verify this statement by providing four (4) points.

(i) .....  
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(ii) .....  
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(iii) .....  
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(iv) .....  
.....

(b) In four (4) points, justify the fact that forests are so advantageous in the environment.

(i) .....  
.....

(ii) .....  
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(iii) .....  
.....

(iv) .....  
.....

### SECTION C (15 Marks)

Answer the question **ten (10)** below

10. Describe six (6) factors that affect the ability of the body to fight against diseases.

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[illegible]