

1. List five differences between a plant and an animal. (5mks)

Plant	Animal
Green plants have chlorophyll that enables them manufacture their own food	Lack chlorophyll hence feed on already made food
Respond slowly to stimuli	Responds quickly to stimuli
Lack specialized excretory organs	Have complex excretory organs
Their cells have a cellulose cell wall	Their cells lack a cellulose cell wall
Growth occurs at specific growth points	Growth occurs in all parts of the body

2. Mention the name given to the study of each of the following: (4mks)

a. The cell

Cytology

b. Micro organisms

Microbiology

c. Fungi

Mycology

d. Insects

Entomology

3. An electric train is able to move but does not oxidize any fuel, yet it is not classified as a living organism. List four characteristic features of living organisms that are not evident in an electric train. (4mks)

i. **Irritability**

ii. **Reproduction**

iii. **Gaseous exchange**

iv. **Nutrition**

v. **Growth and development**

4. Give four reasons why Biology is studied in schools. (4mks)

- i. **To help in solving environmental problems such as food shortage, pollution, poor health services.**
 - ii. **It is necessary for entry into careers such as dentistry, public health, animal husbandry.**
 - iii. **Promotes international co-operation.**
 - iv. **To acquire scientific skills e.g. observing, analyzing that are useful in day to day life.**
 - v. **Enables one to understand, appreciate and conserve environment.**

5. State one use of each of the following apparatus in the study of living organisms. (3mks)
 - a. Pooter
Used for collecting small animals such as insects by sucking them.
 - b. Pitfall trap
For collecting small crawling animals such as beetles and spiders.
 - c. Sweep net
For collecting and catching flying insects as grasshoppers.

6. Give the difference between the following characteristics of living organisms. (4mks)
 - a. Gaseous exchange and respiration.
Gaseous exchange is the exchange of gases across the respiratory surfaces while respiration is the energy producing process that takes place in the cell of living organisms.

 - b. Nutrition and reproduction
Nutrition is the process by which living organisms acquire and utilize nutrients while reproduction is process by which living organisms give rise to new individuals of the same kind.

7. Define the term Biology. (1mk)
 - **Biology is a branch of science that deals with the study of living organism.**

- b. Name the two main branches of Biology. (2mks)

- Botany
- Zoology

8. Name any three skills acquired when one studies Biology. (3mks)

- i. **Observation**
- ii. **Identification**
- iii. **Recording**
- iv. **Classifying**
- v. **Measuring**
- vi. **Analyzing**
- vii. **Evaluating**