**DECEMBER HOLIDAY ASSIGNMENT BIOLOGY FORM ONE.**

1. The table below shows the number of teeth in the jaws of an animal

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Canines | Incisors | Premolar | Molars |
| Upper jaw | 0 | 0 | 6 | 4 |
| Lower jaw | 8 | 0 | 6 | 6 |

1. Write the dental formula of the organism (1 mk)
2. i) State the mode of feeding of this animal (1 mk)
3. Give **two** reasons for your answer (2 mks)
4. Name any **two** dental diseases (2 mks)
5. Name **two** structures found in plant cell that are absent in animal cell (2 mks)

a) Define active transport (1 mk)

b) What is the significance of active transport in living organisms (2 mks)

1. a) Give the uses of the following apparatus (2 mks)
2. Speciment bottle
3. Pooter
4. State **two** necessary precautions to be observed when collecting specimens (3 mks)
5. Name the carbohydrate that is
6. Stored in plant seeds (1 mk)
7. Stored in mammalian muscles (1 mk)
8. Most abundant in human blood (1 mk)
9. The scientific name of an onion is ***Allium cepa*** Identify the genus and the species to which the organism belongs (2 mks)
10. Genus **b.** species
11. Outline three functions of carbohydrate in living organism (2 mks)
12. What are the building blocks of proteins (1 mk)
13. Give **two** factors that determine energy requirement in human beings (2 mks)
14. Name the monosaccharides that make up the following substances
15. Sucrose (1 mk)
16. Lactose  (1 mk)

7. Explain why swallowing and breathing in cannot occur at the same time. (2mks)

 (b) Why is it necessary that pepsin be produced in its inactive forms? (1mk)

c.What is Binomial nomenclature (1 mk)

8.Name the organelles that would be found in large numbers in cells of a:

1. Rapidly respiring tissue (1 mk)
2. Secretory gland (1 mk)
3. State the function of each of the following tissues
4. Meristematic (1 mk)
5. Blood (1 mk)
6. Differentiate between plasmolysis and crenation (2 mks)
7. State **two** factors that affect enzymatic activities (2 mks)
8. State a function of the large intestine in humans (1 mk)
9. State the role of
10. Vitamin C in human (1 mk)
11. Iron in humans (1 mk)
12. List skills that are gained on studying Biology (2 mks)
13. Give three difference between the light and electron microscopes

Light microscope Electron microscope (3 mks)

1. State the functions of the following parts of a light microscope
2. Diaphragm (2 mk)

b.Objective lens

1. Motor vehicle move, use energy and produce carbon iv oxide and water similar characteristics occur in living organisms yet motor vehicles are not classified as living organism. Explain (2 mks)