**GATSIBO DISTRICT**

**SUBJECT: BIOLOGY AND HEALTH SCIENCE**

**DATE: 27/02/2023**

**CLASS: SENIOR ONE**

**DURATION: 3Hrs**

## **Instructions: -Attempt all questions in this paper**

**1.** Which one of the following is not a kingdom of living organisms. (**2marks)**

 a) Monera

 b) Animalia

 c) Anelida

 d) Protoctista

2. Think of some safety rules and regulations that you must follow when doing practical work in the laboratory and outside the laboratory. **(4marks)**

3.Match the description in column A with the correct term in column B. **(7marks)**

|  |  |
| --- | --- |
| **Column A** | **Column B** |
| 1.Toxic | A.Excretion |
| 2.Making energy from the sun’s energy ,carbon dioxide,and water in plants | B.Poisonous |
| 3.Getting of rid of waste substances | C.Variety of living organisms |
| 4.Responding to the environment | D.Respiration |
| 5.Using food molecules and oxygen to get energy | E.Photosynthesis |
| 6.Biodiversty | F.Reproduction |
| 7.Producing offspring | G.Sensitivity |

4. How do we know that something is a living? **(7marks)**

5.why is it necessary to group organisms? **(2marks)**

6.Arrange the classification groups below into the correct order. Start with the group that contains the smallest numbers of organisms. **(7marks)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| family | species | order | phylum | Kingdom | class | genus |

7.Identify the kingdom to which each organism described belongs. **(6marks)**

a) It has a cell wall and chloroplast

b) It is a single cell.

c) It reproduces by means of spores.

8. A plant has a tap root, two cotyledons a flower with eight petals. Is this a monocotyledonous or dicotyledonous plant? **(2marks)**

9 a) List three functions of leaves. **(3marks)**

 b) Describe two ways in which leaves are suited to their functions. **(2marks)**

c) List three reasons why flowering plants are important. **(3marks)**

10. a) A leaf measures 4cm in length. A diagram of the leaf that appears in a Biology text book measures 12cm. By how much the leaf been magnified? **(4marks)**

b) Complete the table. **(4marks)**

|  |  |  |
| --- | --- | --- |
| Eyepiece magnification | Objective lens magnification | Total magnification |
| 5x | 25x |  |
| 10x |  | 100x |

11. Draw a table to show the differences between a plant and an animal cell. **(10marks)**

12.a) What is the function of chloroplasts? **(2marks)**

 b) What pigment is found inside chloroplasts? **(2marks)**

13 a). What the function of red blood cells? **(2marks)**

 b) List two ways in which red blood cells are suited to their functions? **(2marks)**

14.Using V and X indicate part of the cell found in a plant and animal cell. First one has been done for you. **(10marks)**

|  |  |  |
| --- | --- | --- |
| **Part** | **Plant cell** | **Animal cell** |
| Nucleus | $$√$$ | $$√$$ |
| Cell membrane |  |  |
| Cytoplasm |  |  |
| Cell wall |  |  |
| Large vacuole |  |  |
| Chloroplasts |  |  |

15. a). Name two foods that are good sources of proteins. **(2marks)**

 b). Explain briefly why the human body needs proteins.  **(2marks)**

 c). Name six food nutrients. **(3marks)**

15). Movement is a life process. Name four other life process that all plants and animals do. **(4marks)** 16). Movement is a life process. Name FOUR other life processes that all plants and animals do. **(8marks)**

(i) ……………………………………………….. .

(ii) ……………………………………………….

(iii) ………………………………………………..

(iv) ………………………………………………..

  ***GOOD LUCK***