**FORM THREE**

**BIOLOGY PRACTICAL**

**END OF TERM 2 EXAM**

**NAME ………………………..……………………ADM……………….CLASS……….**

**Answer all the questions in the spaces provided.**

1. You are provided with chemical reagents **Q** (**Iodine solution**), **R** (**NaOH**), **S** (**CuSO4**), **T** (**DCPIP**)and food solution **X**

Using the reagents provided carry out food test on solution **X**

(a) Record your results in the table below. (12marks)

|  |  |  |  |
| --- | --- | --- | --- |
| **Food substance** |  | **Observation** | **Conclusion** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

(b) Suggest the importance of food substance present in solution **X** in a human body. (2mks)

………………………………………………………………………………………………………

………………………………………………………………………………………………………

2. Below is a photograph of a certain animal. Examine it and answer the questions that follow.



a) Giving a reason in each case, classify the animal into the taxonomic units in the table below. (4 marks)

|  |  |  |
| --- | --- | --- |
| Taxonomic unit | Name of taxonomic unit | Feature |
| Phylum |  |  |
| Class |  |  |

(b)Study the photograph shown below part of animal above.



**L**

**G**

**R**

**B**

List adaptive characteristics of part labeled **G** to its function. (4mks)

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(c).The following illustration shows a flow in the photograph shown above.

**N/B; Figures show O2**

**SATURATION**

**15 90**

**25 45 65**

**35 70 85**

**25 100**

**Blood capillary**

(i) Indicate on the illustration the direction of blood and water flow. (1mk)

(ii)Name the type of flow represented in the illustration (1mk)

………………………………………………………………………………………………………

(d)(i)Name the process by which oxygen leaves water into capillaries of filaments. (1mk)

………………………………………………………………………………………………………

(ii)What condition enables an efficient exchange of oxygen by process identified in d(i) above

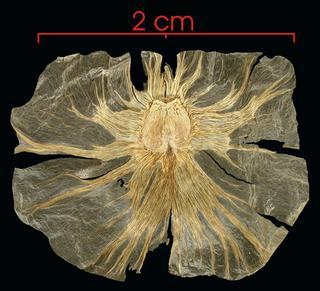
……………………………………………………………………………………………….(1mk)

(e)The atmospheric air has more oxygen than that dissolved in water yet a fish dies immediately after being withdrawn from water. Explain. (1mk)

……………………………………………………………………………………………………..

3.**S**tudy the photographs of plant structures shown below then answer the questions.

**X1**

****

**X2**



**X3**

**X4**

**Q**



**R2**

( a)For each type of structure shown above state a dispersal agent (4marks)

|  |  |
| --- | --- |
| Structure | Dispersal agent |
| X1 |  |
| X2 |  |
| X3 |  |
| X4 |  |

(b)Name the observable adaptive features in **X1** and **X2** that enable them to be dispersed by the dispersal agent identified. (2marks)

|  |  |
| --- | --- |
| Structure | Adaptive features |
| X1 |  |
| X2 |  |

(C)(i) Give possible description of leaves and roots of plant of flower labeled **R2**.

Roots………………………………………………………………………….,…….(2mks)

……………………………………………………………………………………………..

Leaves (3mks)

……………………………………………………………………………………………..

……………………………………………………………………………………………..

……………………………………………………………………………………………..

(ii) Flower **R2** has polypetalous characteristic. Explain. (1mk)

……………………………………………………………………………………………………..

(iii) Name part labeled **Q** on **X3. (1mk)**

**……………………………………………………………………………………………………..**