**ST.MARIE EUGENIE GIRLS SECONDARY SCHOOL**

**FORM THREE HOME PACKAGE**

**BIOLOGY**

**TIME \_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ MARCH 2020**

1. Match the phrase in list A with responses in list B by writing the correct letter of the response in list B below the item number of list A in a table provided

**LIST A**

1. Antagonistic muscles in a mammal’s arm
2. Responsible for thought, memory, intelligence and judgement.
3. Involuntary muscle
4. Spouse inheritance
5. Amplify sound waves
6. Hair-like structures of moss that absorb water and nutrients.
7. Controls involuntary actions in the body such as respiration, heartbeat etc.

(viii) Helps plants to transport water up to leaves.

(ix) A fatty material that insulates the neurone

(x) Plant body not differentiated into root, stem and leaves,

**LIST B**

1. Biceps and triceps B. Cardiac muscle and skeletal muscle

C. Cerebellum D. Cerebrum

E. Risk behaviour F. Responsible behaviour

G. Transpiration pull H. Phloem vessels

I. Roots J. Rhizoids

K. Skeletal muscle L. Smooth muscle

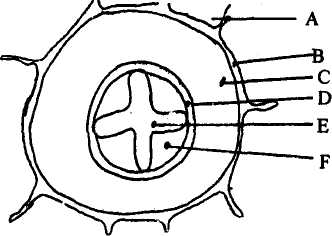
M. Myelin sheath N. Node of ranvier

O. Medulla oblongata P. Spinal cord

Q. Pteridophyta. R. Bryophyta

S. Auditory ossicles T. Auditory canal

1. a) Figure 7 shows the arrangement of tissues in a dicotyledonous plant.



(i) Name the parts labeled A, B, C, D, E and F.

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(ii) State the functions of parts A, B, E and F.

(iii) From which part of the plant body was the section taken? Give reasons.

(b) Draw and name the lens used to correct

i) Myopia

ii) Hypermetropia

1. (a)Mention just one enzyme which is found in the following part of human alimentary canal

|  |  |
| --- | --- |
| Part of Alimentary Canal | Enzyme |
| Mouth |  |
| Stomach |  |
| Duodenum |  |
| Small Intestine (Ileum) |  |

(b)State the chemicals and reagent which are used to identify the presence of the below mentioned food, substances and in each test show the expected result (observation) if the food is present. First parts have been answered as an example.

|  |  |  |
| --- | --- | --- |
| Food substance | Chemical/reagent | Observations(Expected result) |
| Starch |  |  |
| Reducing Sugar |  |  |
| Non-reducing Sugar | Dil HCl, NaOH and Benedict’s solution | Colour of solution changes from blue to green to yellow and finally to brick red precipitate |
| Protein |  |  |
| Lipids |  |  |

5. (a) State the components of nervous system.

(b) Mention two functions of the spinal cord

(c) Briefly explain four functions of the cerebrum

6. Explain how adrenaline prepares your body when you see a snake.

7. (a) state the function the liver in excretion

(b) Explain why desert animals have a long loop of Henle and fewer glomeruli.

8. By the aid of diagram explain how urine is formed.

***THIS WORK SHOULD BE SUBMITED TO THE SUBJECT TEACHER; OPENING EXAMINATION WILL BE EXTRACTED FROM THESE QUESTIONS.***