**NAME: ………………………………………….………………………… ADM NO ..............................................................**

 **DATE……………………………………………………**

 **CANDIDATE’S SIGN…………………………………**

**231/3**

**BIOLOGY**

**PAPER 3**

**TIME: 1 ¾ HOURS**

**FORM 4**

**INSTRUCTIONS TO CANDIDATES**

* *Write your* ***name*** *and* ***index******number*** *in the spaces provided above.*
* ***Sign*** *and write the* ***date*** *of examination in the spaces provided above.*
* *You are required to spend the first 15 minutes of the 1 ¾ hours allowed for this paper reading the whole paper carefully before commencing your work.*
* *Answers must be written in the spaces provided in the question paper.*

|  |  |  |
| --- | --- | --- |
| **QUESTION** | **MAXIMUM SCORE** | **CANDIDATE’S SCORE** |
| **1** | **12** |  |
| **2** | **11** |  |
|  **3** | **17** |  |
| **TOTAL** |  **40** |  |

**FOR EXAMINER’S USE ONLY:-**

This paper consists of printed 4 pages.

Candidates should check the question paper to ascertain all the pages are printed as indicated and no questions are missing.

Q1. You are provided with the specimen labelled **K**.

 (a)Using observable features only classify the specimen into:

 (i)Kingdom (1mk)

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

 (ii)Phylum (1mk)

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

 (iii)Class (1mk)

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

 (b)Give **three** reasons for your answer in (a)(iii) above. (3mks)

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

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

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

 (c)State the functions of any **three** structures found on the body of specimen **K.** (6mks)

 **Structure** **Function**

 (i) ………………………………………… ………….………………………..…………..

 (ii) ………………………………………… ………….………………………..…………..

 (iii) ………………………………………… ………….………………………..…………..

Q2. You are provided with specimen **L**.

 (a)Draw the anterior view of the specimen. (6mks)

 (b)Give **three** functions of the bones which articulate with the bone on its lateral side. (3mks)

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

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

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

 (c)Name the bone which articulates with specimen **L** on its:

 (i)Posterior end. (1mk)

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

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

 (ii)Anterior end. (1mk)

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

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

Q3. You are provided with specimen M. Wash it clean. Cut the specimen transversely in the middle.

 (a)(i)State the mode of dispersal of the specimen. (1mk)

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

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

 (ii)How is the specimen adapted to its mode of dispersal? (3mks)

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

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

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

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

 (b)What is the placentation of the specimen? (1mk)

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

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

 (c) Remove Four seeds from one of the halves of the specimen and wash them in clean water. Then drop

 them into a beaker of hydrogen peroxide and observe for 5mins.Account for the results. (3mks)

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

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

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

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

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

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

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

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

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

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

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

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

 (d)Squeeze juice from one of the halves of the specimen into an empty beaker. Mix 5ml of the juice with

 5ml of water and put the mixture into a clean test-tube. Using 2cm3portions of the mixture and the

 apparatus and reagents provided carry out food tests and fill in the table below. (9mks)

|  |  |  |  |
| --- | --- | --- | --- |
| **FOOD** | **PROCEDURE** | **OBSERVATION** | **CONCLUSION** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |