**231/3**

**NAME…………………………………………….……. INDEX NO………..…………………..**

**SIGNATURE……………………………….………………DATE……………………………..**

ASUMBI GIRLS HIGH SCHOOL

 POST -MOCK 1

AUGUST/SEPTEMBER

2022

 **AUGUST / SEPTEMBER - 2022**

**BIOLOGY**

**PAPER 3**

 **(PRACTICAL)**

**TIME: 1 ¾ HOUR**

 **INSTRUCTIONS TO CANDIDATES**

Answer all the questions in the spaces provided.

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.

 Additional pages must not be inserted.

 **FOR EXAMINERS USE ONLY.**

|  |  |  |
| --- | --- | --- |
| **Question** | **Maximum score** | **Candidates score** |
| 1 | 17 |  |
| 2 | 09 |  |
| 3 | 14 |  |
| **Total score** | **40** |  |

***This paper consists of 6 printed pages. Candidates should check to ensure that all pages are printed as indicated and no questions are missing***

1. You are provided with specimen P and Q. Examine them carefully and answer the questions that follow.

(a). State three observable differences between P and Q. (3mks)

|  |  |
| --- | --- |
|  **Specimen P** |  **Specimen Q** |
|  |  |
|  |  |
|  |  |

(b) Identify the parts of the flower from which specimen **P** and **Q** developed. (2mks)

 P ---------------------------------------------------------------------------------------------------------------------------------

 Q ---------------------------------------------------------------------------------------------------------------------------------

(c i). Make a longitudinal section of specimen P. Draw a well-labelled diagram of one half with all its

 Contents intact. (4mks)

 (ii). State the functions of any two structures in (c) (i) above. (2mks)

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(d). Using a mortar and pestle crush specimen Q, add 5ml distilled water to make a **solution Q** and carry out appropriate tests using the reagents provided. (6mks)

|  |  |  |  |
| --- | --- | --- | --- |
| Test | Procedure | Observation | Conclusion |
|  |  |  |  |
|  |  |  |  |

2. Study the photos below.

 

a) Name:-

 i) The stimulus operating in **Plant K1.** (1mk)

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ii) The type of response being investigated in **Plant K2.** (1mk)

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iii) Suggest a control set up for **Plant K2** investigation. (1mk)

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b) Describe the role of auxins in the response exhibited by **Plant K1.** (4mks)

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c) What is the biological value of the tropisms evident in: -

 i) **Plant K1** (1mk)

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ii) **Plant K2** (1mk)

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3. Below are photos of of a certain arthropod at different stages of its life cycle.

 

a) Identify the stage of the life cycle represented by organism **S**. (1mk)

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b i) Name the stage that immediately preceed and succeed organism S in the life cycle. (2mks)

Preceeding stage

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Succeeding stage.

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ii) What name is given to the complete life cycle of the arthropod? (1mk)

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c) Name the gaseous exchange system of orgaism **S**. Give a visible featuret that supports your answer. (2mks)

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d i) What type of food does organisms **S** feed on? Give a reason to support your answer. (2mks)

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ii) State the significance of stage **U** in the life cycle of the beetle. (2mks)

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iii)How is specimen T adapted to locomotion in its habitat ? (2mks)

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e) State the role of the following in the life cycle of the arthropods. (2mks)

i) Juvinile hormone.

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ii) Moulting stimulating hormone.

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