

SC5043
WASSCE 2022
BIOLOGY 3
Practical
2 hours

3

Name.....

Index Number.....

THE WEST AFRICAN EXAMINATIONS COUNCIL

West African Senior School Certificate Examination
for School Candidates

SC 2022

BIOLOGY 3
PRACTICAL
[80 marks]

2 hours

INSTRUCTIONS TO CANDIDATES

Write your name and index number in ink in the spaces provided above.

Answer all the questions.

Write boldly and legibly in ink (blue or black) and state your answers precisely.

Use 2B pencil to draw where necessary.

Do not write answer(s) beyond the spaces provided for the question(s).

Do not write more than one answer on a line.

Do not write on the bar codes at the bottom of the pages.

Do not tear off any part of this booklet. It is an examination malpractice if you do so.

Write your answers in the spaces provided in the question paper.

Write in the space provided below, the **QUESTION NUMBERS OF THE QUESTIONS YOU HAVE ANSWERED** in the order in which you have answered them.

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For Examiner's Use Only

Question
Number

Mark

Total

Do not write in this margin.

SECTION A

[50 marks]

Answer all the questions in this section.

1. Study specimens **B** and **C** and answer questions 1(a) to 1(d).

(a) (i) Name the Phylum of **each** of specimens **B** and **C**.

B: _____
C: _____ [2 marks]

(ii) State **three** reasons for the answer in 1(a)(i).

_____ [3 marks]

(b) (i) State the Classes of **each** of specimens **B** and **C**.

B: _____
C: _____ [2 marks]

(ii) State **three** reasons **each** for the answers in 1(b)(i).

B: _____

_____ [3 marks]

C: _____

_____ [3 marks]

Do not write in this margin.

Candidate's Name:

(c) (i) State **five** observable structural differences between specimens **B** and **C**.

B	C

[5 marks]

(ii) State **two** observable structural similarities between specimens **B** and **C**.

[2 marks]

(d) Name **one** habitat **each** of specimens **B** and **C**.

B: _____

C: _____

[2 marks]

(e) Mention **one** way **each** by which specimens **B** and **C** are of economic importance.

B: _____

C: _____

[2 marks]

(f) Name the organ used for respiration in specimen **C**.

[1 mark]

2. Study specimen **F** and answer questions 2(a) to 2(D).

(a) (i) Write the floral formula of specimen **E**.

[6 marks]

(ii) List the essential parts of specimen E.

[2 marks]

(iii) Remove **one** of the male reproductive organs of specimen E.

Make a drawing, 6 cm to 8 cm long of the removed male organ of specimen E and label fully.

[8 marks]

(b) (i) Name **one** agent of pollination of specimen E.

[1 mark]

(ii) State **three** reasons for the answer in 2(b)(i).

[3 marks]

(iii) What type of fruit would result from the fertilization of specimen E?

[1 mark]

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(e) Describe **briefly** the mechanism by which the fruit of specimen **E** is dispersed.

[4 marks]

SECTION B

[30 marks]

Answer **all** the questions in this section.

3. Study specimens **G** and **H** and answer questions 3(a) to 3(e).

(a) (i) Name the Division to which specimens **G** and **H** belong.

G: _____

H: _____

[2 marks]

(ii) State **two** reasons **each** for the answers in 3(a)(i).

G: _____

[2 marks]

H: _____

[2 marks]

(iii) Name **one** natural habitat **each** of specimens **G** and **H**.

G: _____

H: _____

[2 marks]

(b) (i) On the table below, state **three** observable differences between specimens **G** and **H**.

G	H

[3 marks]

(ii) Give **one** observable similarity between specimens **G** and **H**.

_____ [1 mark]

(c) State **three** features of biological importance of specimen **G** that adapts it to its mode of life.

_____ [6 marks]

(d) List **two** observable features which enable specimen **H** to survive as an epiphyte.

_____ [2 marks]

Candidate's Name:.....

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write in
this margin.

- (e) Make a drawing, 8 *cm* to 10 *cm* long of the underside of a frond of specimen **H** and label fully.

[10 marks]

END OF PAPER