

PC5043
 WASSCE (PC2) 2024
 BIOLOGY 3
 Alternative to Practical Work
 2 hours

3

Name.....
 Index Number.....

THE WEST AFRICAN EXAMINATIONS COUNCIL
 West African Senior School Certificate Examination
 for Private Candidates, 2024 - Second series

(PC2) 2024

BIOLOGY 3
 ALTERNATIVE TO PRACTICAL WORK
 [80 marks]

2 hours

INSTRUCTIONS TO CANDIDATES

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

Answer all the questions in Section A and all the questions in the section peculiar to your country.

No marks will be awarded for answering questions not peculiar to your country.

Use 2B pencil to draw where necessary.

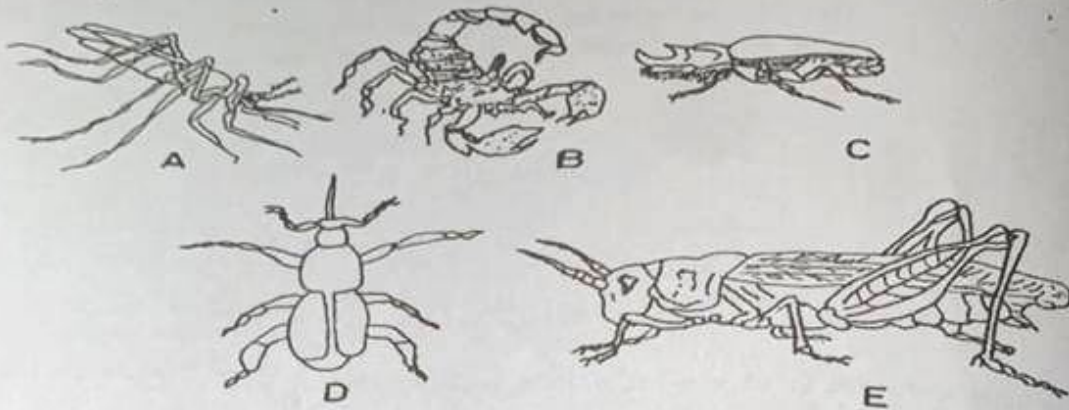
Write your answers in the spaces provided in the question paper.

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

For Examiner's Use Only	
Question Number	Mark
Total	

SECTION A
[50 marks]
Answer all the questions.

1. The diagrams below are illustrations of organisms. Use them to answer questions 1(a) to 1(f).



(a) Identify the organisms labelled A, B, C, D and E.

- A: _____
 B: _____
 C: _____
 D: _____
 E: _____

[5 marks]

(b) Complete the table below by naming the Class to which each of organisms A, B, C, D and E belong.

Organism	Class
A	
B	
C	
D	
E	

[5 marks]

Do not write in this margin.

Candidate's Name:.....

(c) State **three** observable features of **each** of the organisms labelled **A** and **B** that support their placement into the Classes named in 1(b).

A: _____

B: _____

[6 marks]

(d) State **one** way by which **each** of organisms **A**, **D** and **E** are of economic importance.

A: _____

D: _____

E: _____

[3 marks]

(e) Name the habitat of organism **E**.

_____ [1 mark]

(f) State the:

(i) ecological niche of **each** of organisms **D** and **E**;

D: _____

E: _____

[2 marks]

(ii) mode of nutrition of organisms **A**, **B** and **E**.

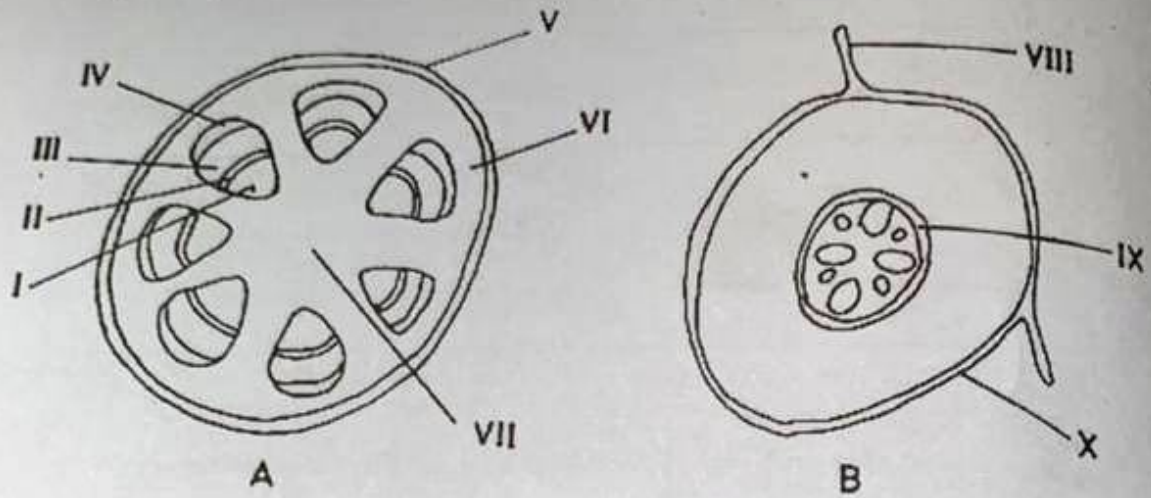
A: _____

B: _____

E: _____

[3 marks]

2. Diagrams A and B are illustrations of sections of parts of a plant. Study them and answer questions 2(a) to 2(e).



- (a) (i) Mention the Class to which the plants that possess the sections in diagrams A and B belong.

A: _____

B: _____

[2 marks]

- (ii) Name the organ in plants from which each of sections A and B is obtained.

A: _____

B: _____

[2 marks]

- (iii) Name the parts labelled I to X.

I: _____ VI: _____

II: _____ VII: _____

III: _____ VIII: _____

IV: _____ IX: _____

V: _____ X: _____

[5 marks]

Do not write in this margin.

Candidate's Full Index No.

SENIOR HIGH (ACA) Mock

Candidate's Name:

Do not write in this margin.

- (b) Name the labelled part which carries out each of the following functions:
- (i) protection; _____
 - (ii) transport of food; _____
 - (iii) transport of water and mineral salt; _____
 - (iv) absorption of water from soil; _____
 - (v) support. _____
- [5 marks]

- (c) State two adaptive features each of the parts labelled IV and VIII.
- IV: _____
- VIII: _____
- [4 marks]

- (d) State four observable structural differences between the parts illustrated in diagrams A and B.

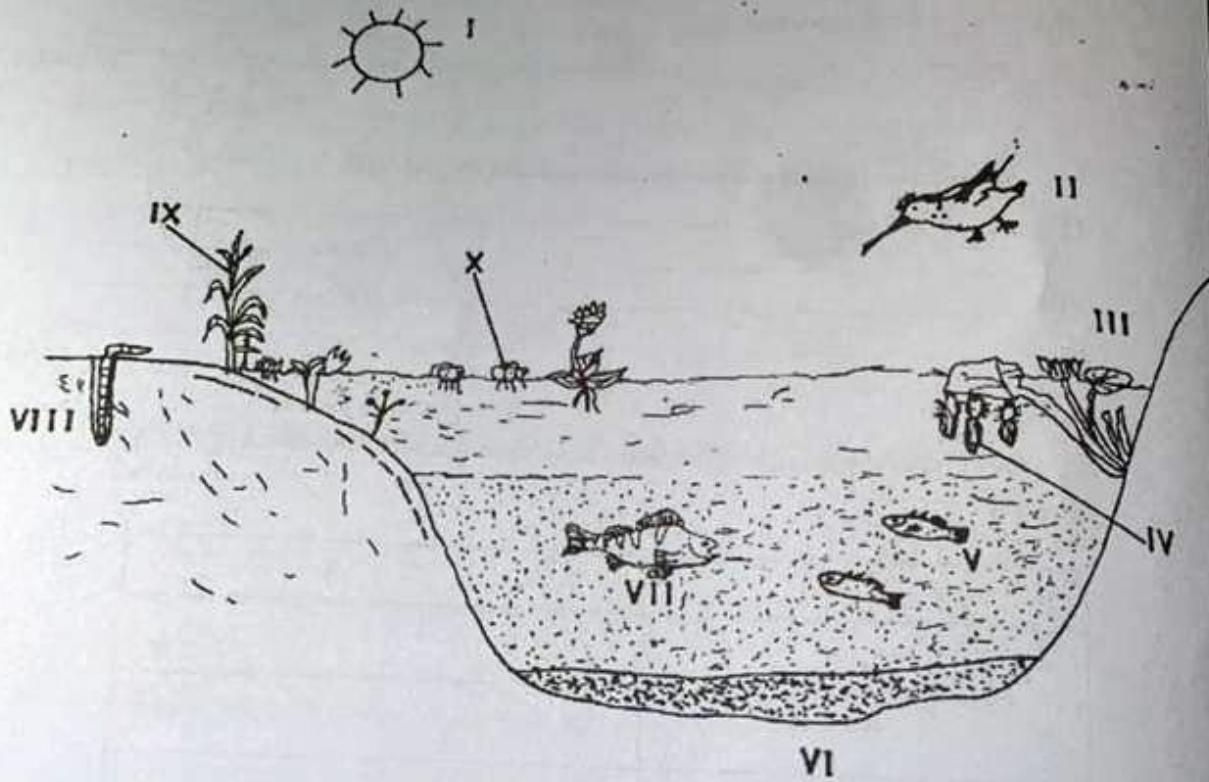
A	B

[4 marks]

- (e) Name the biological process involved in the following functions in plants:
- (i) transport of food; _____
 - (ii) transport of water and mineral salts; _____
 - (iii) absorption of water from soil. _____
- [3 marks]

SECTION B
[30 marks]
Answer all the questions.

3. The diagram below is an illustration of a community in an aquatic ecosystem. Study it and answer questions 3(a) to 3(e).



(a) Identify the parts labelled I to X.

- | | |
|------------|-------------|
| I: _____ | VI: _____ |
| II: _____ | VII: _____ |
| III: _____ | VIII: _____ |
| IV: _____ | IX: _____ |
| V: _____ | X: _____ |

[5 marks]

Do not write in this margin.

Do not write in this margin.

Candidate's Name:

(b) Construct a food chain using the organisms labelled II, III, IV and V.

[7 marks]

(c) In the table below, place organisms II, III, IV, V, VII, VIII, IX and X under their appropriate roles in the ecosystem.

<i>Decomposer</i>	<i>Producer</i>	<i>Consumer</i>

(d) Explain briefly:

[8 marks]

(i) the role of the part labelled I in the ecosystem;

[3 marks]

(ii) how oxygen is produced and used in the ecosystem.

[3 marks]

(e) Name **four** abiotic factors that would affect the organisms in the ecosystem.

[4 marks]

END OF PAPER