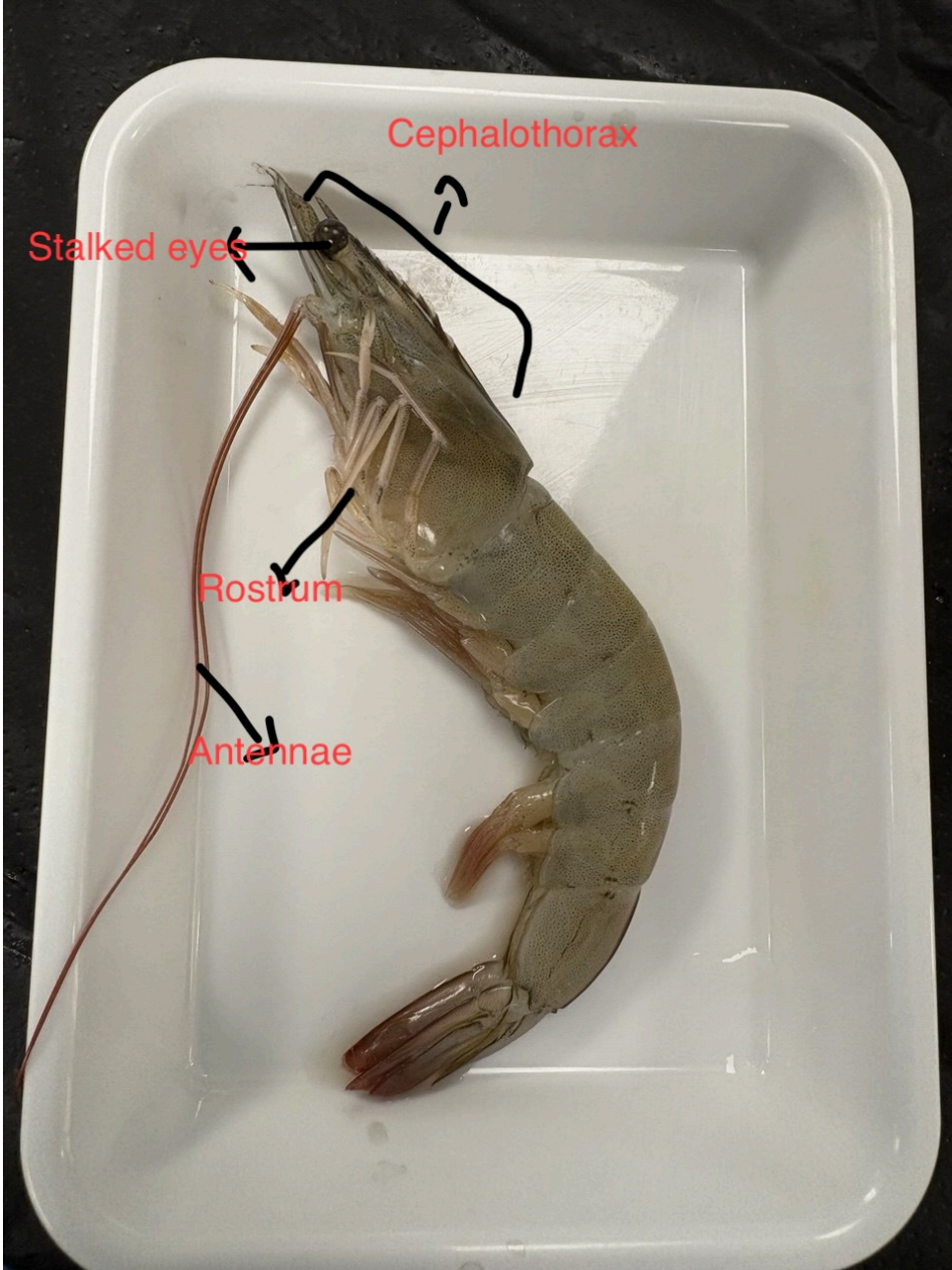
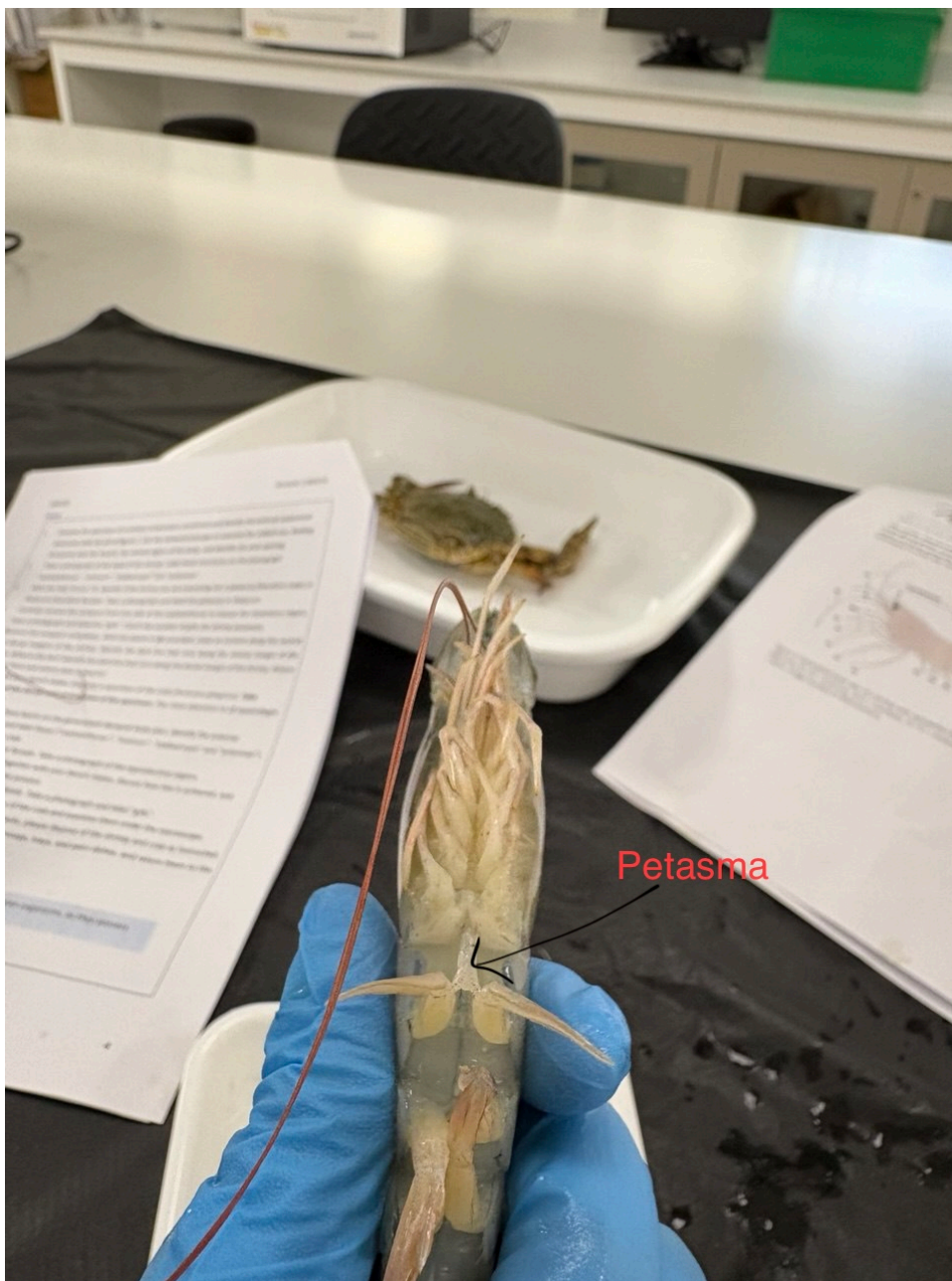


Laboratory 4
Animal Form and Function: The Arthropod Body Plan

Name	Zhu Chongqiao
Matriculation Number	A0292160L
Question 1 marks]	[2
 <p>The image shows a lateral view of a shrimp in a white rectangular tray. Four anatomical features are labeled with red text and black arrows: 'Cephalothorax' points to the head and first few thoracic segments; 'Stalked eyes' points to the eyes on stalks; 'Rostrum' points to the long, forward-pointing mouthpart; and 'Antennae' points to the long, thin sensory appendages extending from the head.</p>	
Question 2 marks]	[2



It is a male. There is a petasma here.

Question 3
mark]

[1



Question 4
mark]

[1

The dark line on the ventral side of the shrimp is the ventral nerve cord. It runs along the belly side of the shrimp and controls movement and reflexes.

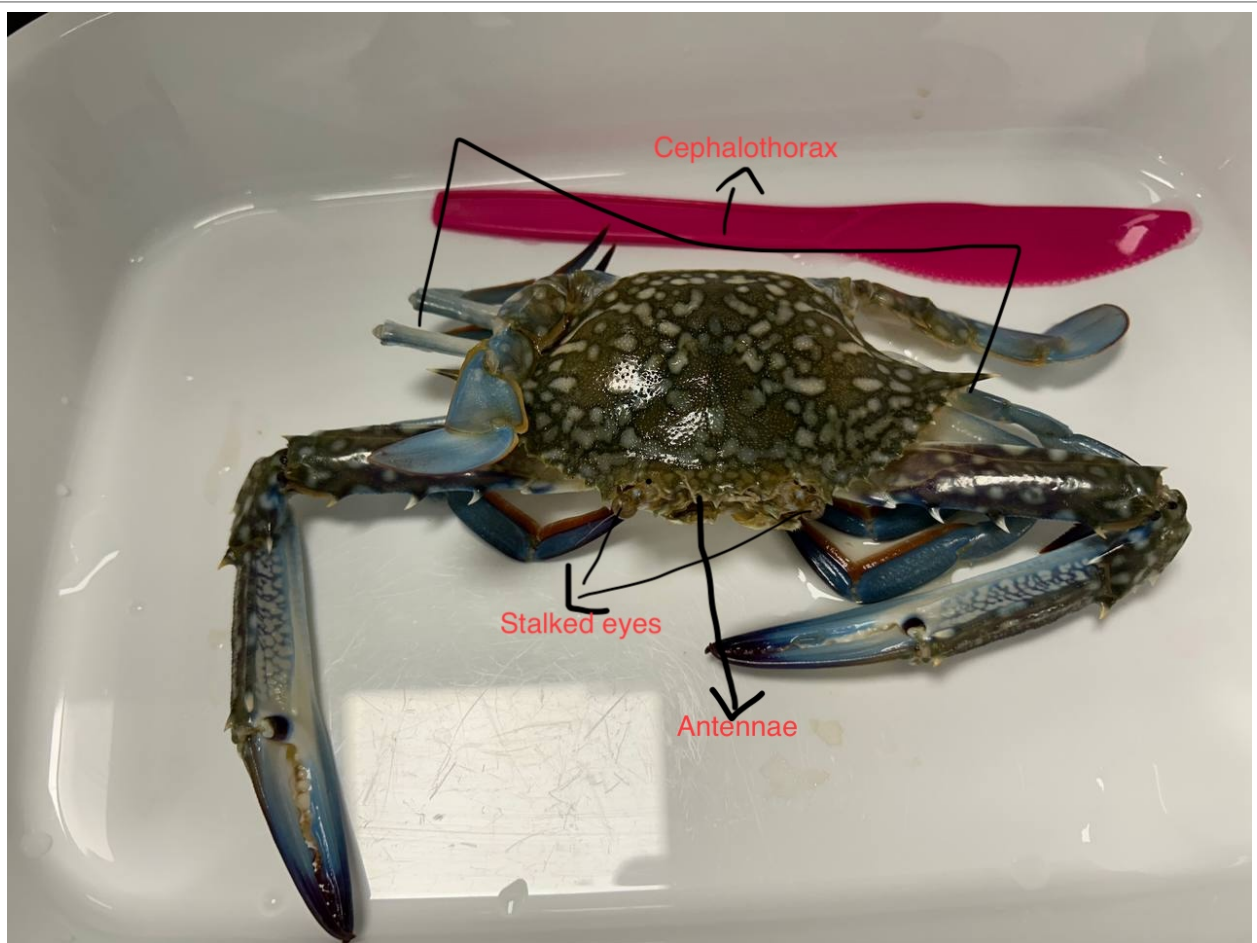
Question 5

[2 marks]

The dark line along the dorsal side is the digestive tract . It starts at the stomach in the head region, and ends at the anus in the tail .

Question 6

[2 marks]



Question 7

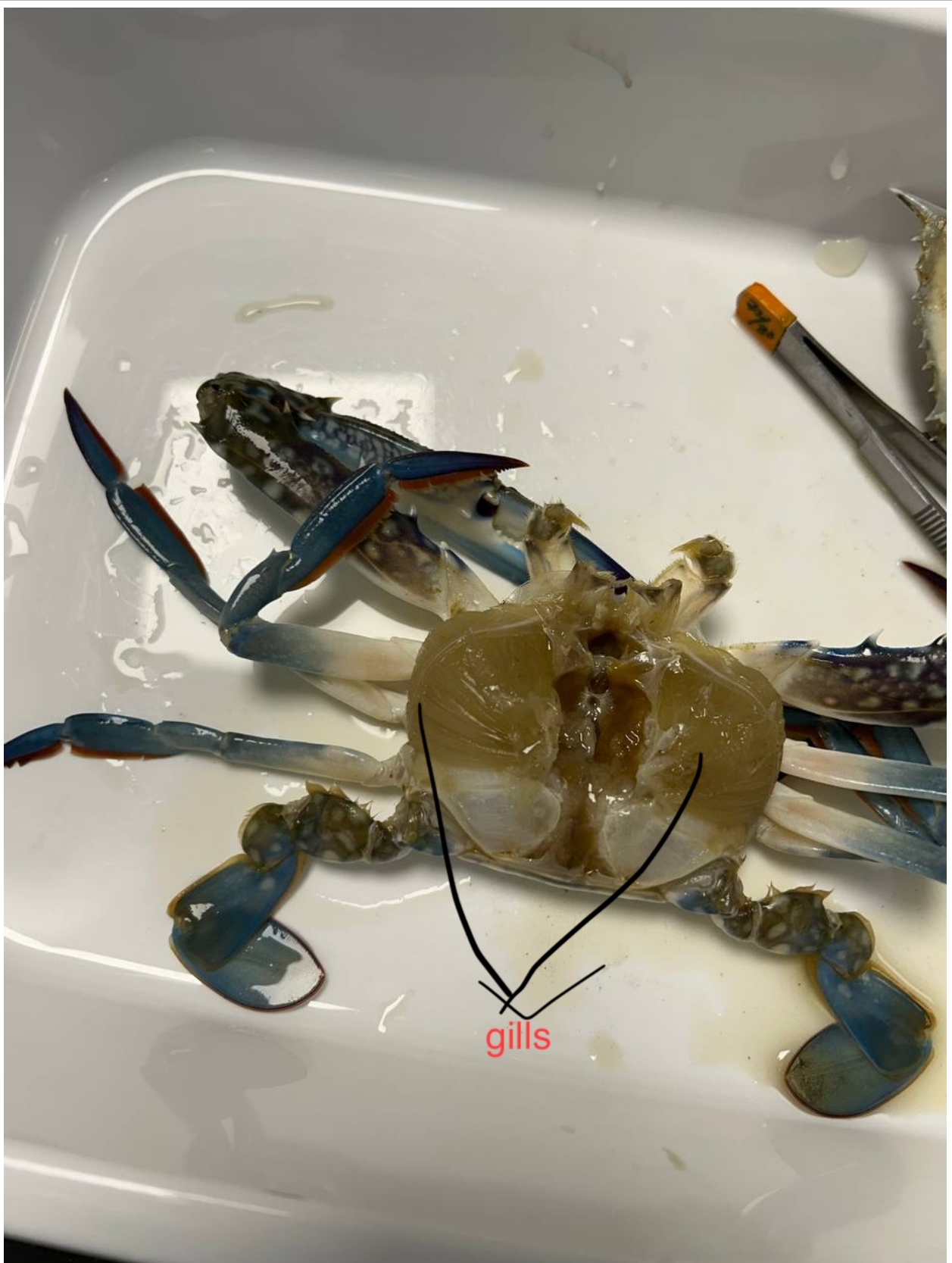
[2 marks]



The crab dissected is male, identified by a narrow and pointed abdomen folded under the body.

Question 8

[1 mark]



Question 9

[3 marks]

General plan: The shrimp is adapted for swimming with its long abdomen and numerous flexible appendages. The crab is adapted for walking and protection with a broad, flattened body and strong claws.

Similarity: Both the shrimp and crab have a segmented body divided into a cephalothorax and abdomen, and both possess jointed appendages for movement and feeding.

Difference:

The shrimp has a long, flexible abdomen with swimming appendages adapted for swimming, while the crab has a short abdomen and sturdy walking legs adapted for crawling .

Question 10

[4 marks]

For Protection against predators and streamlining the body for movement through water.



