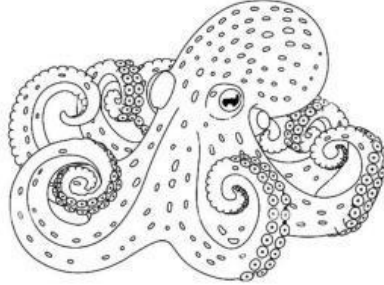


Section A: Reading (15 marks)

Read the passage below and answer the questions that follow.

The Astonishing Octopus



- 1 What animal has three hearts, blue blood, and can change colour in an instant? It can squeeze its whole soft body through a gap the size of a coin. It sounds like something from a science fiction film, doesn't it? But we're talking about a real creature that lives in our oceans.
- 2 The octopus is one of the strangest and most intelligent creatures in the ocean. Indeed, sailors have been amazed by octopuses for centuries. Long ago, when sailors saw a giant octopus disappear instantly by changing colour, some believed they were seeing a monster from the deep. One old sailor, staring at the empty water where the creature had just vanished, might have thought to himself: 'Is someone trying to trick me? I don't think that was a _____ animal.'
- 3 If you look at an octopus, it's easy to see why it seems so unusual. It has eight long arms covered in hundreds of suckers, a soft, boneless body, and skin that can change colour and texture in an instant. But there are many other incredible facts about this remarkable animal.
- 4 In the wild, octopuses are found in every ocean on Earth, from shallow coral reefs to the deep sea. They are expert hunters and move through the water using jet propulsion, squeezing water out through a tube called a siphon. However, an octopus's most distinctive feature is its skin, which is covered with thousands of tiny colour changing cells called chromatophores. These cells let the octopus change colour and pattern within a second, helping it to hide from predators by blending into rocks, sand or coral. An octopus can even copy the texture of its surroundings, making its skin look bumpy or smooth to match the seabed.

- 5 Food that an octopus catches is broken down in an unusual way. Octopuses don't have teeth like most animals; instead, they use a hard, beak-like mouth to bite into crabs and shellfish, and a rough, tongue-like organ called a radula to scrape out the soft flesh inside.
- 6 An octopus is a mollusc and, like other molluscs, it has no internal skeleton and a soft, unsegmented body. Yet, another astonishing fact about this creature is that it has three hearts and blue blood, instead of the one heart and red blood most animals have. Scientists classify octopuses, squid and cuttlefish together as 'cephalopods', and cephalopods are considered highly intelligent for invertebrates. Two of the octopus' closest relatives are the squid and the cuttlefish. The cuttlefish, like the octopus, can change colour instantly, but it also has two extra long tentacles in addition to its eight arms, which it uses to catch prey.
- 7 Octopuses are usually shy and solitary creatures, but they come together to mate during the warmer months of spring and summer. After mating, the female lays thousands of tiny eggs in a den and guards them constantly, cleaning them and blowing water over them to keep them oxygenated. She does not leave the den to eat during this time. After several weeks, the eggs hatch and the baby octopuses drift away into the open ocean. Sadly, most mother octopuses die of exhaustion shortly after their eggs hatch.
- 8 One more interesting thing about octopuses is that some species have a venomous bite. They specifically use this venom for catching prey or for defending themselves against predators such as sharks and eels. While most octopus venom is mild, the blue-ringed octopus is a dangerous exception: its bite is lethal, powerful enough to kill a human, even though the animal itself is only about the size of a golf ball.
- 9 There is still much that we don't know about these creatures, and scientists continue to study them closely. One thing is certain: octopuses are living proof of nature's cleverness and creativity.

ANSWER ALL THE QUESTIONS

From paragraph 2

1. What did the sailor think when he saw the octopus disappear? Complete his thoughts by selecting ONE word from the box below and writing it in the gap:

joke	real	harmless	friendly
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“Is someone trying to trick me? I don't think that was a _____ animal.” [1]

From paragraph 4

2. Think of ONE **word** you could use to replace 'distinctive' on line 20. Write your answer in the box below.

_____ [1]

3. Choose the best answer from A, B, C and D, and write that letter in the box.

Which sentence is NOT TRUE about an octopus's skin?

- A. It has thousands of colour-changing cells.
- B. It always stays the same colour.
- C. It can copy the texture of its surroundings.
- D. It helps the octopus hide from predators.

☐

[1]

From paragraph 5

4. Choose the best answer from A, B, C and D, and write that letter in the box.

What is the main topic of this paragraph?

- A. What octopuses eat.
- B. How an octopus feeds without teeth.
- C. Where octopuses find food.
- D. Why octopuses need a radula.

☐

[1]

From paragraph 6

5. In what way is an octopus like other molluscs? Give ONE detail from this paragraph.

_____ [1]

6. Give TWO details about cuttlefish.

i. _____

ii. _____ [2]

From paragraph 7

7. (a) In which season are baby octopuses most likely to hatch and drift into the open ocean?

[1]

- (b) Why? (Explain your answer to Question 7(a))

[1]

From paragraph 8

8. What does 'They' mean on line 47?

[1]

9. Pick out and write down a single word used in this paragraph that means 'deadly'. (Your answer should be ONE WORD)

[1]

From the whole passage

10. Choose the best answer from A, B, C and D, and write that letter in the box.

Which statement is an opinion about octopuses, **NOT** a fact?

- A. ...it has eight long arms covered in hundreds of suckers.
B. Octopuses are usually shy and solitary creatures...
C. The octopus is one of the strangest and most intelligent creatures in the ocean.
D. There is still much that we don't know about these creatures...

[1]

11. Are the following statements about the passage true (T) or false (F), or is there no information (NI) in the text to decide? Circle the best answer for each statement.

Statement		T	F	NI
i.	A mother octopus continues to eat regularly while guarding her eggs.	T	F	NI
ii.	The number of eggs a female octopus lays depends on her size.	T	F	NI

[2]