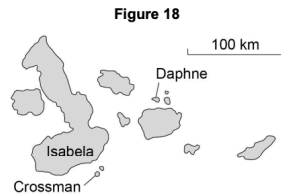


(Evolution theory (Darwin, Wallace))

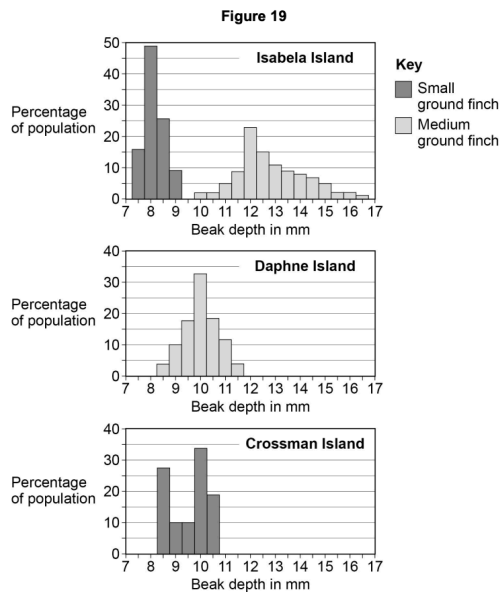
Q1.a)(2021)

Figure 18 is a map of the Galapagos Islands.



On Isabela Island, the medium ground finch **and** the small ground finch are found.
 On Daphne Island, only the medium ground finch is found.
 On Crossman Island, only the small ground finch is found.

Figure 19 shows how the beak depth of each species varies on each island.



The medium ground finch and the small ground finch both feed on seeds.

The size of seeds eaten by each bird depends on the depth of the bird's beak.

The range of beak depth of **medium ground finches** on Isabela Island is different from the range on Daphne Island.

Explain what might have caused this difference.

[6 marks]

Q1.b)(2021)

Figure 19 shows:

- the **two** species of finch live on Isabela Island
- only **one** of the species lives on Daphne Island
- only **one** of the species lives on Crossman Island.

Suggest why both species of finch are able to live on Isabela Island.

[2 marks]

Q2.(2023)

A wide variety of species exists on Earth.

Most scientists accept Darwin's theory of evolution by natural selection as the explanation for this variety of species.

Explain how our understanding of evolution has developed due to:

- fossil evidence
- increased understanding of the mechanisms of genetics.

[6 marks]

Q3.(2023)

Describe the process of natural selection.

[3 marks]

Q4.(2023)

Which scientists suggested the theory of evolution by natural selection?

[1 mark]

Tick (✓) **one** box.

Alexander Fleming and Carl Woese

☐

Alfred Wallace and Alexander Fleming

☐

Alfred Wallace and Charles Darwin

☐

Charles Darwin and Carl Woese

☐