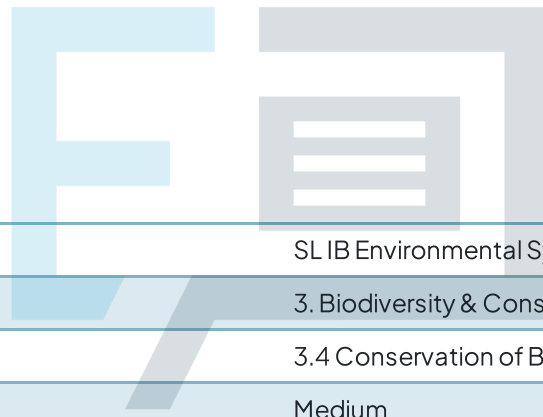




3.4 Conservation of Biodiversity

Question Paper



Course	SL IB Environmental Systems & Societies (ESS)
Section	3. Biodiversity & Conservation
Topic	3.4 Conservation of Biodiversity
Difficulty	Medium

Exam Papers Practice

To be used by all students preparing for
SL IB Environmental Systems & Societies (ESS)
Students of other boards may also find this useful

Question 1

When setting up a protected area for wolves, there are various characteristics that the protected area should have in order to be successful.

Outline **two** of these characteristics.

[2 marks]

Question 2a

The western lowland gorilla, *Gorilla gorilla*, has become an endangered species.

Explain how captive breeding programmes may help in the protection of endangered species, such as the western lowland gorilla.

[3 marks]

Question 2b

Identify **three** disadvantages of captive breeding programmes.

[3 marks]

Exam Papers Practice

Question 3a

The tree species Slippery elm (*Ulmus rubra*) has a sticky lining of its bark that has long been used in North America, as a traditional remedy for coughs, gastrointestinal ailments, and skin irritations.

The slippery elm was traditionally used seasonally by locals, but is now in demand by millions across the world. Slippery elm wood has no commercial value, so the trees are stripped of their bark and then left to die.

State **two** reasons why the Slippery elm species should be conserved.

[2 marks]

Question 3b

Many plant and animal species are protected by the treaty known as CITES.

i)
State the full name of this treaty.

[1]

ii)
Identify the main aim of CITES.

[1]

[2 marks]

Exam Papers Practice

Question 4a

One such endemic species is the central rock rat (*Zyzomys pedunculatus*).



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This species is classified as critically endangered by the IUCN because when they were last assessed there were only 800 mature individuals in total within 10 fragmented subpopulations in central Australia.

In the past, captive breeding programmes have been attempted for this species, but are not currently taking place.

Scientists must be very careful when carrying out captive breeding programmes for very small populations such as this one.

i)
State **one** reason why this is the case.

One of the reasons the programme ended was because scientists were concerned about the safety of the individuals released back into the wild.

[1]

ii)
Suggest **two** other conservation strategies that could be used to conserve this species, other than captive breeding.

[2]

[3 marks]

Question 4b

Outline **three** reasons why a habitat-based conservation approach may be more successful in conserving biodiversity in the long term compared to an individual species-based approach.

[3 marks]



Exam Papers Practice