

**Year 12 General Biology**

|  |  |
| --- | --- |
| **Task 6: Extended Response – Invasive Species** | **Weighting**  10% |

**PART A:**- Define invasive species (1 mark)

- Define ecosystem (1 mark)

- Define biodiversity (1 mark)

- Identify and describe three impacts of invasive species (1 mark per impact , total 3 marks)

- Outline and explain an example of an Australian invasive species (1 mark for identifying, 1 mark for description of species, total 2 marks)

- Define a migratory species (1 mark)

- Compare and contrast an invasive species and a migratory species (1 mark for similarities, 1 mark for differences, total 2 marks)

- References (1 mark)

**PART B:**

1. Give an example of an invasive species in Australia. List and describe three of the impacts that species has had on native ecosystems. How or why do invasive species get introduced to an area? (8 marks)  
-Example of Invasive species 1 mark

-Three impact examples listed, 1 mark each, max 3 marks

-Three impact examples described 1 mark each, max 3 marks

-Reason for invasive species introduced (humans, intentionally for agriculture, entertainment etc. or accidently) 1 mark

2. Explain the importance of biodiversity in native ecosystems. Would an invasive species increase or decrease the biodiversity of an ecosystem? Explain your answer. (5 marks)

-An ecosystem requires a range of species for biodiversity (1 mark)  
-A biodiverse ecosystem has more resilience and adaptability to changes (1 mark)

-Invasive species increase/decrease biodiversity (1 mark for making selection)

-Explanation given: Species loss (1 mark) and food webs damaged (1 mark)

OR

-Explanation given: Additional species in area (1 mark) and additional food sources for some species (1 mark)

3.Why do species migrate? Explain the impact migratory species have on the ecosystem they leave and the ecosystem they migrate to. How does is this different to an invasive species? (6 marks)

-Species migrate due to seasonal shifts in temperatures (1 mark) or seasonal/annual food source changes (1 mark)

-Migratory species increase the biodiversity of the ecosystems they migrate to (1 mark)  
-Migratory species decrease the biodiversity of the ecosystems the migrate from (1 mark)  
-Migratory species are native to both ecosystems they affect and thus impact is minimal/non-existent/regulated (1 mark) whereas invasive species alter ecosystems in an unregulated manner (1 mark)