
(Section B: The Living World) Challenge Ecosystems

Question Paper

These practice questions can be used by students and teachers and is Suitable for GCSE
AQA Geography Topic Questions 8035

Course	AQA GCSE Geography
Section	The Living World
Topic	2.1 Ecosystems
Difficulty	Medium

Level: GCSE AQA 8035

Subject: Geography Exam

Board: GCSE AQA

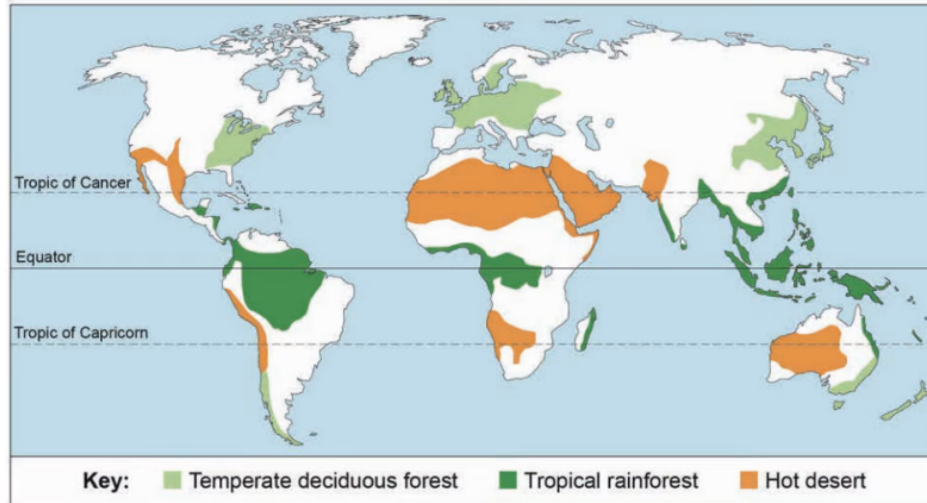
Topic: Challenge of Ecosystems

Question 1

The living world

Study **Figure 6**, a world map showing some global ecosystems.

Figure 6



Using **Figure 6**, which one of the following statements is true?

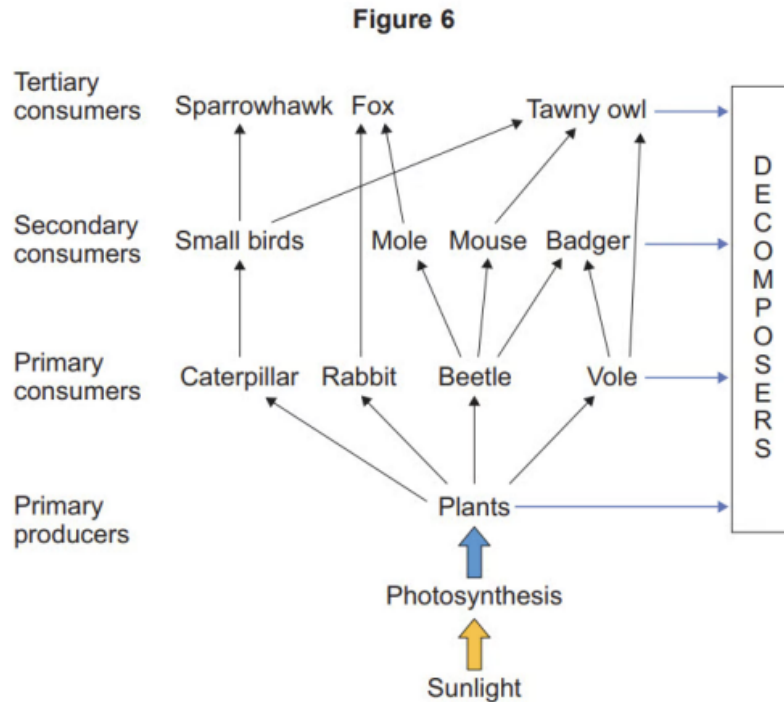
Shade **one** circle only.

- A. There is a greater area of hot desert in the Southern Hemisphere than the Northern Hemisphere.
- B. The largest single area of tropical rainforest is in South America.
- C. Temperate deciduous forests are all found on the western side of continents.
- D. Hot desert areas are all found between the two tropics.

[1 mark]

Question 2a

Study **Figure 6**, which shows a food web for a small scale ecosystem in the UK.



(a)

Using **Figure 6**, which one of the following statements is true?

Shade **one** circle only.

- A. Sparrowhawks eat plants.
- B. Voles eat moles.
- C. Moles eat beetles.
- D. Badgers eat small birds.

[1 mark]

Question 2b

(b)

Suggest what would happen in the food web shown in Figure 6 if foxes became extinct.

[2 mark]

Question 3a

Study **Figure 7**, which shows annual climate data for two different environments.

Figure 7

Place A

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (mm)	3	2	1	1	0	1	0	0	0	4	7	8
Average temperature (°C)	16.0	16.7	17.9	18.6	20.3	21.4	23.3	23.9	23.3	22.3	20.1	15.4

Place B

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (mm)	16	20	21	12	9	11	16	28	26	17	19	18
Average temperature (°C)	-14.0	-14.5	-13.3	-10.6	-3.5	2.6	6.2	5.1	1.0	-4.9	-8.7	-12.2

(a)

Using **Figure 7**, calculate the temperature range in **Place A**.

[1 mark]

Question 3b

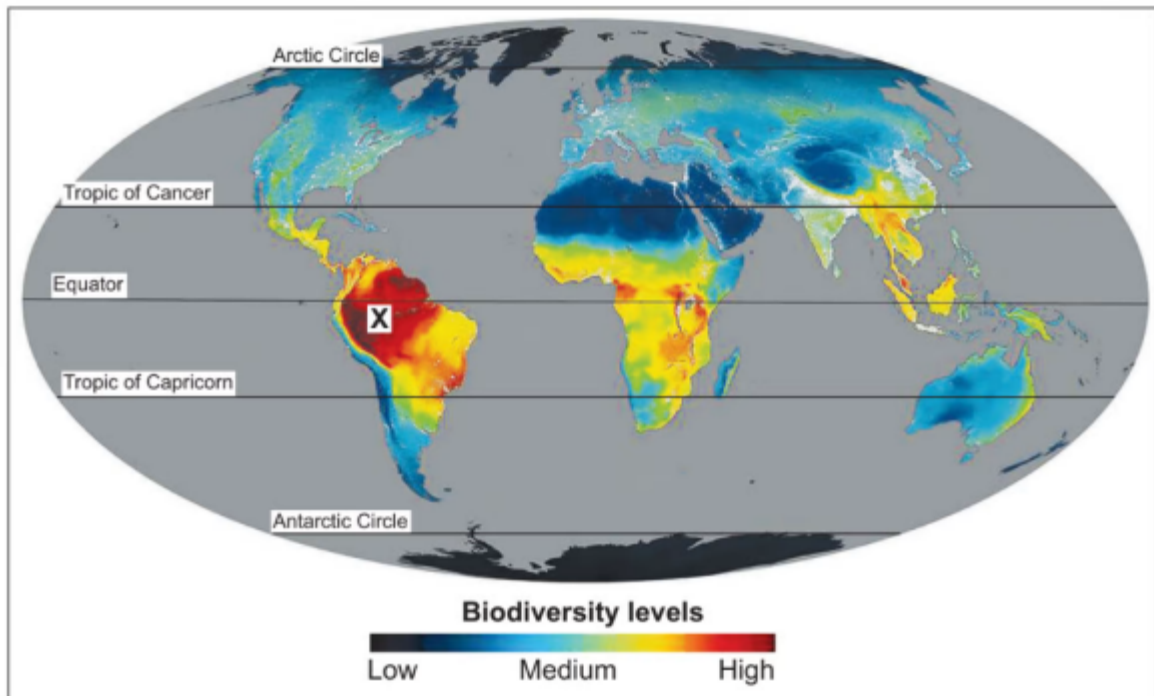
(b) Using **Figure 7**, state two differences between the climate in **Place A** and **Place B**.

[2 mark]

Question 4a

Study **Figure 5**, a world map showing global biodiversity levels.

Figure 5



(a)

Using **Figure 5**, describe the location of areas with low biodiversity levels.

[2 mark]

Question 4b

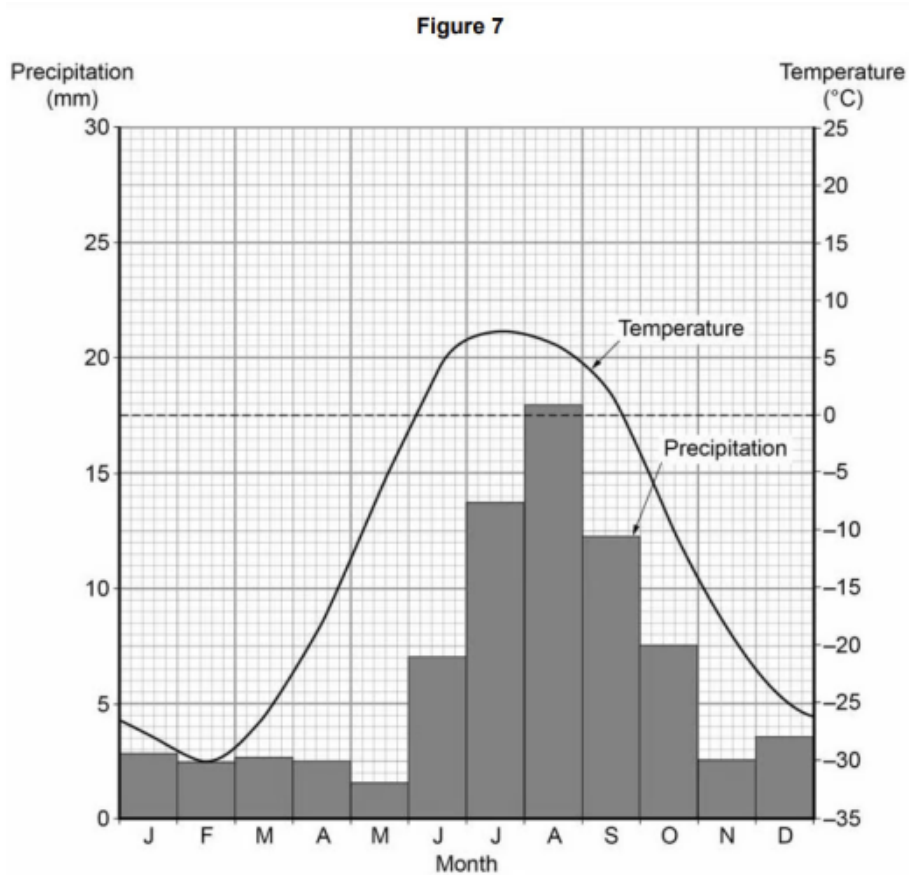
(b)

Using **Figure 5**, suggest one reason for the high biodiversity levels in area X

[2 mark]

Question 5a

Study **Figure 7**, a typical climate graph for one global ecosystem.



(a)

Which global ecosystem is most likely to have the temperature and precipitation pattern shown in **Figure 7**?

Shade **one** circle only.

- A. temperate deciduous forest
- B. tundra
- C. hot desert
- D. savanna

[1 mark]

Question 5b

(b) State the minimum temperature shown in **Figure 7**.

Shade **one** circle only.

- A. -26°C
- B. -28°C
- C. -30°C
- D. -32°C

[1 mark]

Question 5c

(c)

Give **one** reason why polar regions have low temperatures throughout the year.

[1 mark]

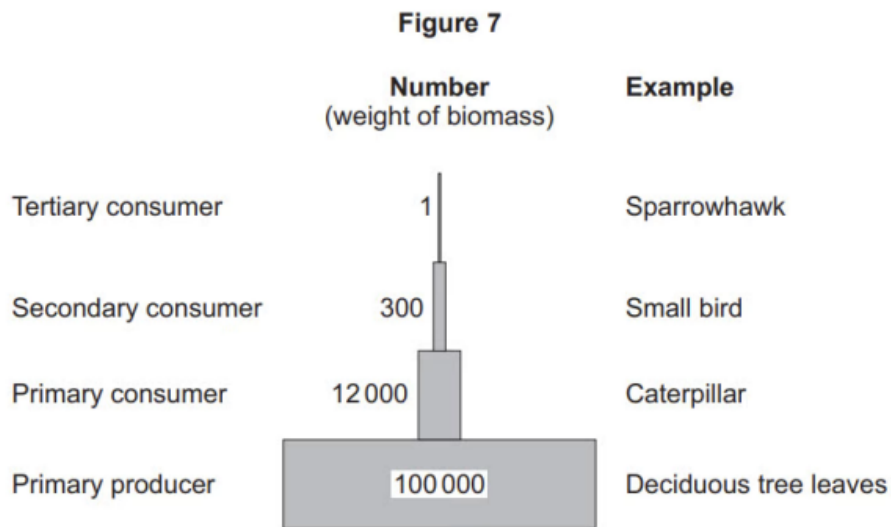
Question 6

State **one** role of decomposers in an ecosystem.

[1 mark]

Question 7

Study **Figure 7**, a graph showing the biomass at different levels of a food chain.



Biomass is the total quantity or weight of organisms in a given area.

Calculate the percentage loss in biomass between the primary consumer and secondary consumer levels.

Shade **one** circle only.

- A. 2.5%
- B. 97.5%
- C. 25.2%
- D. 95.5%

[1 mark]

Question 8

Give **two** reasons why the biomass changes between each level in the food chain.

[2 mark]

Question 9

What is the role of producers in an ecosystem?

[1 mark]

Question 10

Which global ecosystem matches the following description?

An area with trees which drop their leaves in winter.

Shade **one** circle only.

- A. Tundra.
- B. Tropical grassland.
- C. Deciduous forest.
- D. Tropical rainforest

[1 mark]

Question 11

For a small scale ecosystem you have studied, name **one** producer and **one** consumer.

Producer _____

Consumer _____

[2 mark]

Question 12

Which **one** of the following phrases defines the term biodiversity?

Shade **one** circle only.

- A. How living things affect each other and the environment.
- B. The number and types of plants and animals that live in an area.
- C. Energy flows between living things when they eat or are eaten.
- D. How plants and animals are adapted to their habitats.

[1 mark]