Exam-style questions

Chapter 7: Climate and natural vegetation

Question 1

(a) Fig. 7.1 shows an area of tropical rainforest from which an area has been cleared.

(i) What is the land use of the area which has been cleared of forest? [1]

(ii) Describe the relief of the area from which forest has been cleared. [2]

(iii) Describe the climate where tropical rainforest is the natural vegetation. [3]

(iv) Describe the features of the forest shown in Fig. 7.1. [4]

(b) Fig. 7.2 shows what happens to rainfall in areas of tropical rainforest and Fig. 7.3 shows how this differed in one deforested area.

Figs. 7.2 and 7.3
(i)  Compare what happens to rainfall that falls on tropical rainforest with rainfall on the land cleared of forest for agriculture.  

(ii) Explain the differences you have stated for (i).  

(c)  For a named area of tropical rainforest explain why it is undergoing deforestation and assess the impacts of the clearance on the natural ecosystem.  

[Total: 25]  

Question 2  

(a)  Fig. 7.4 shows the climate of a weather station at latitude 25° in a hot desert.  

![Fig. 7.4](image)

For the weather station shown in Fig. 7.4:  

(i)  Calculate the total annual rainfall.  

(ii) State which hemisphere the weather station is in. Give evidence for your answer.  

(iii) Calculate the annual temperature range. Show your working.  

(iv) Describe the summer and winter temperatures and explain the difference between the summer and winter temperatures at this weather station.
(b) Fig. 7.5 shows an area in the Mojave Desert, USA.

The location in Fig. 7.5 has an average annual rainfall of 115 mm. Half the annual rainfall falls from July to September, just before the photograph was taken.

(i) Describe the natural vegetation shown in Fig. 7.5. [3]

(ii) The rain occurs in sudden heavy summer thunderstorms and falls from towering cumulonimbus clouds. Explain how this type of rainfall occurs. [5]

(c) For a named area of hot desert, explain how animals and plants adapt to the difficulties of living in their environment. [7]

[Total: 25]

Question 3

(a) Fig. 7.6 shows land uses that have replaced deforested areas of the Amazon tropical rainforest. The percentages of land cleared for each land use are estimated.

![Diagram showing land uses and their percentages for deforestation]

Fig. 7.6
(i) Use the figures in the table to complete the pie graph. Use the key provided.

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(ii) What is the main use of deforested land in the Amazon tropical rainforest? [1]

(iii) Calculate the total percentage of deforested land that was cleared for agriculture. [1]

(iv) Suggest a land use that is likely to be in the ‘other’ category. [1]

(b) Careful management can limit any damage done by an activity to the environment.

Explain how the following should be managed to minimise the damage to the former tropical forest environment:

(i) logging [2]

(ii) ranching. [2]

[Total: 8]

**Question 4**

Fig. 7.7 shows an area in the Namib Desert.

(a) Describe the grass and trees in the area. [2]

(b) Describe how their different root systems enable the grass and trees to obtain water. [4]

(c) Explain how the feathers and their colours help ostriches to survive in hot deserts. [2]

[Total: 8]