

Surname	Centre Number	Candidate Number
First name(s)		0



GCSE

C112U10-1



WEDNESDAY, 11 NOVEMBER 2020 – MORNING

GEOGRAPHY B – Component 1
Investigating Geographical Issues

1 hour 45 minutes

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1	32	
SPaG	4	
2	32	
3	32	
Total	100	

ADDITIONAL MATERIALS

In addition to this paper you may use a calculator and a ruler if required.

INSTRUCTIONS TO CANDIDATES

Answer **all** of the questions in this examination paper.

Use black ink or black ball-point pen. Do not use gel pen. Do not use correction fluid.

Write your name, centre number and candidate number in the spaces at the top of this page.

Write your answers in the spaces provided in this booklet.

Additional space is provided for some questions within the booklet (if required). If further space is required for any question, you should use the lined page(s) at the end of this booklet. The question number(s) should be clearly shown.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [] at the end of each question or part-question.

You are reminded that assessment will take into account your ability to spell, punctuate and use grammar and specialist terminology accurately in your answer to question 1(c).



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Theme 1: Changing Places – Changing Economies

Answer all questions.

1. The pattern of how and where we shop in the UK is changing.

(a) Study **Figure 1.1** below.

Figure 1.1 – The proposed Scotch Corner Retail Park in North Yorkshire

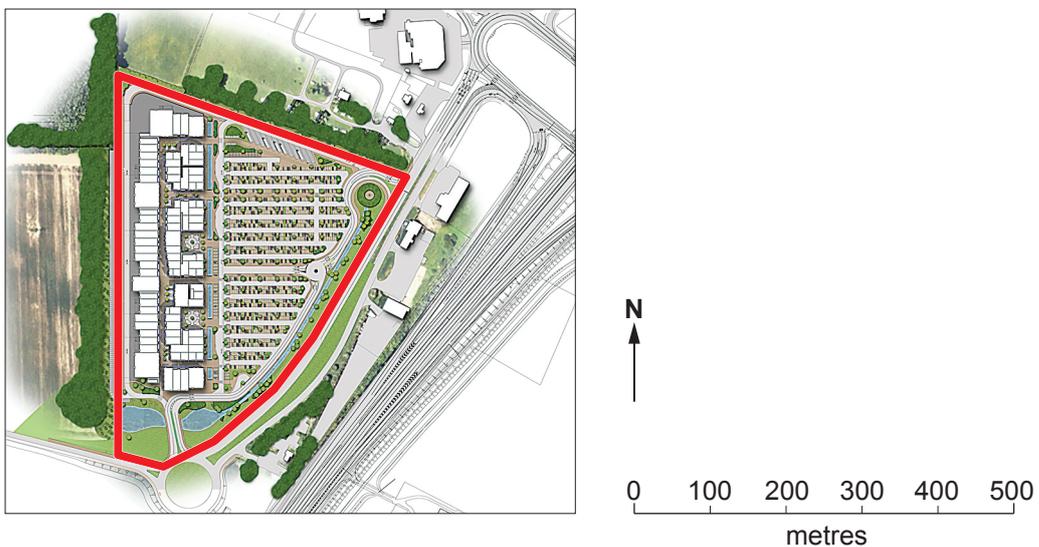


(i) Suggest **two** reasons why this is a suitable site for a retail park. Use evidence from **Figure 1.1** only. [2]

Reason 1

Reason 2

Figure 1.2 – A plan of the retail park



- (ii) Study **Figure 1.2** on the opposite page. Calculate the approximate area of the new retail park. The edge of the retail park is shown in red. Choose the correct answer from the box below. [1]

	Tick (✓)
250 000 square metres	
200 000 square metres	
100 000 square metres	

- (iii) The Scotch Corner development is on a 'greenfield' site. Explain why developers often prefer greenfield sites to brownfield sites. [4]

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- (iv) Complete the sentences that follow, using **four** words or phrases from the text box below. [4]

threshold	low value	retail	high value
travel	catchment	convenience	commute

The range is the distance a shopper is prepared to

People will travel further for goods.

The area a shop gets its customers from is called the

The minimum population needed for a service such as a shop is called the



(v) Explain why out of town retail parks are attractive to shoppers.

[4]

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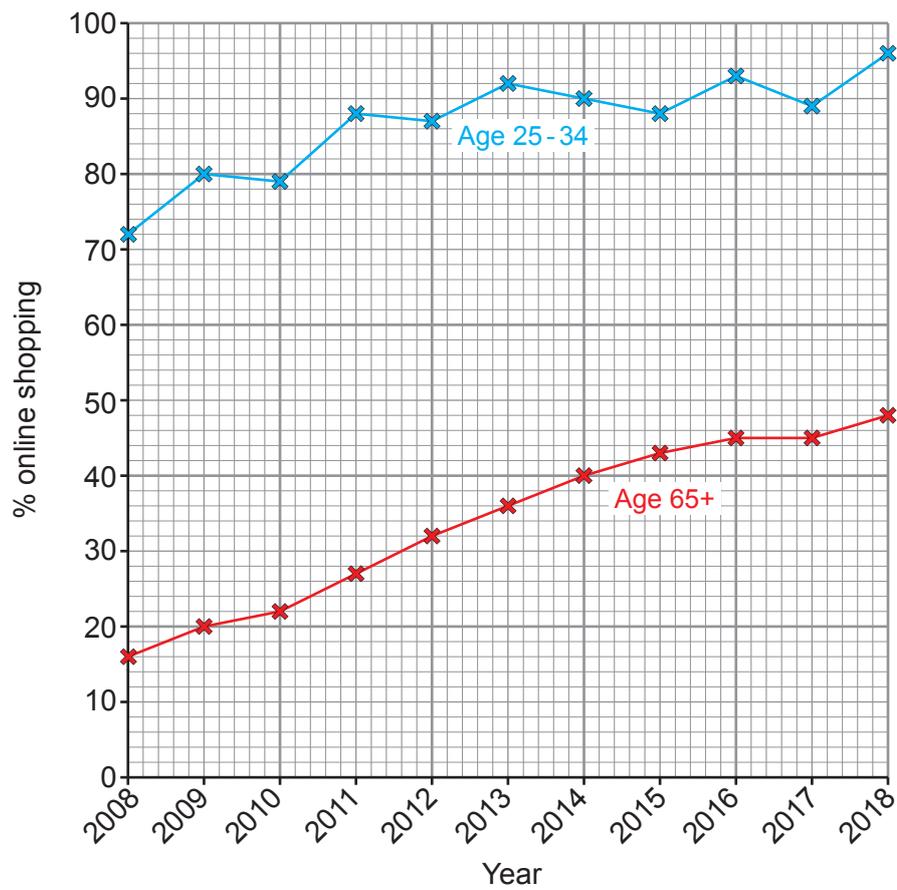
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(b) Study Figure 1.3.

Figure 1.3 – Changing patterns of online shopping 2008-2018



(i) **Compare** the changing pattern of online shopping of people aged 25-34 with that of people 65+. [3]

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(ii) Study **Figure 1.4**.

Figure 1.4 – Frequency of online shopping over a three-month period

Frequency	Age group %	
	Age 25-34	Age 65+
Once or twice	17	29
3-5 times	27	28
6-10 times	19	23
11 times or more	37	20

Give **two** reasons why a bar graph is an appropriate technique to represent this data. [2]

Reason 1

Reason 2

(iii) Describe the **economic** and **environmental** impacts the growth of online shopping is having on town centres (CBDs) in the UK. [4]

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(c) Study the photos below which show some honeypot sites in the UK.

Figure 1.5
A beach in the south west of the UK



Figure 1.6
A village in rural England



Figure 1.7
A footpath in a UK National Park



Analyse the likely positive and negative impacts of honeypot sites on **both** local residents **and** leisure users. [8]

Use evidence from the photographs. You may also use examples you have studied to support your answer.

Your ability to spell, punctuate and use grammar and specialist terminology accurately will be assessed in your answer to this question. [4]

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Additional space for 1(c) only:

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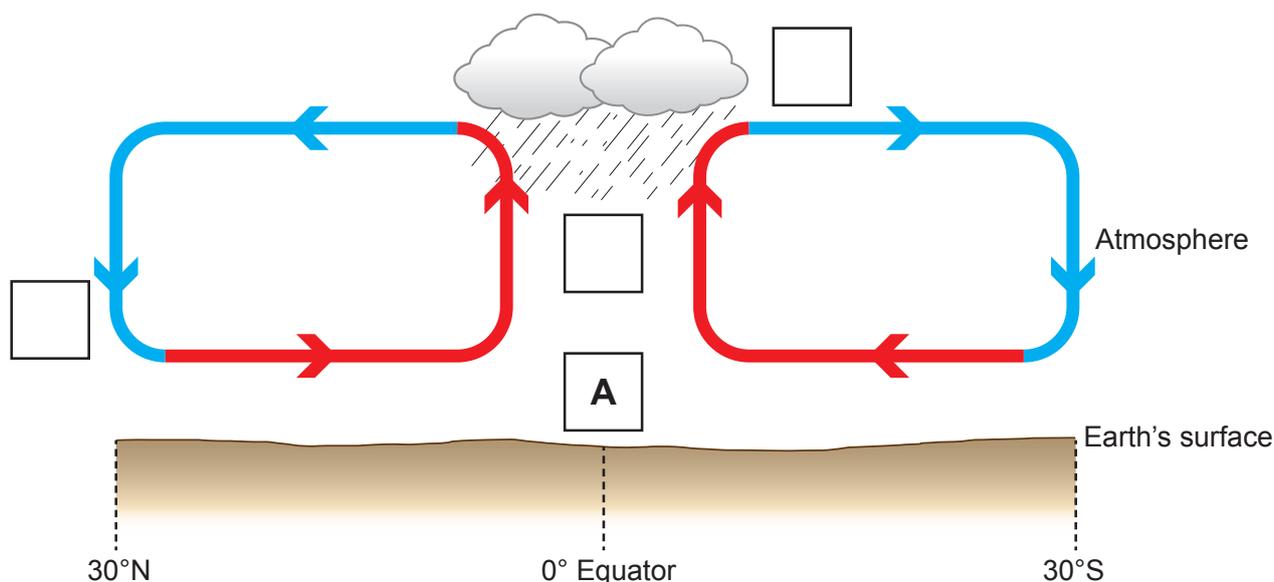


Theme 2: Changing Environments

Answer all questions.

2. (a) Study **Figure 2.1**.

Figure 2.1 – Global circulation of the atmosphere



(i) Complete the diagram by adding the correct letters from the table below to **Figure 2.1**. One has been done for you. [3]

A	ITCZ (Inter tropical convergence zone)
B	Air sinks to create high pressure
C	Sun heats the Earth and air then rises to create low pressure
D	Air spreads out towards the North and South Poles

(ii) One factor affecting climate is latitude. What does the term latitude mean? **Tick (✓)** the correct answer in the box below. [1]

Latitude means...	Tick (✓) one
the distance above sea level	<input type="checkbox"/>
the distance north or south of the Equator	<input type="checkbox"/>
the distance east or west of the Prime Meridian	<input type="checkbox"/>



(b) Describe the characteristics of temperature and rainfall in the hot semi-arid climate zone. [4]

Temperature

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Rainfall

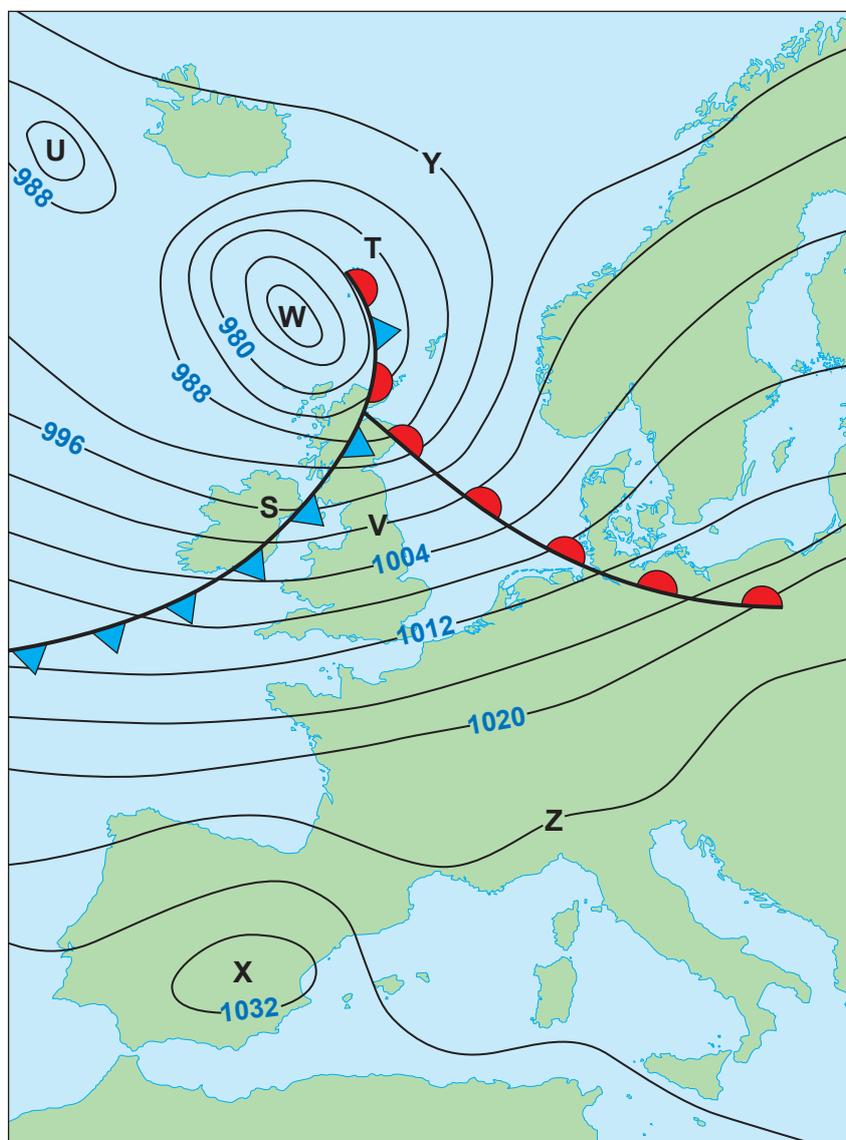
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(c) Study **Figure 2.2**.

Figure 2.2 – Weather (synoptic) map showing pressure systems over Europe



- (i) Use the information on **Figure 2.2**. Match the correct letters from the map to the statements below. Write the correct letter in the box. [3]

	Letter on map
The point with the highest air pressure	
A point in the warm sector	
The point with the lowest air pressure	



- (ii) Calculate the difference in air pressure between point **S** and point **Z** on **Figure 2.2**. Show your working in the space below. [2]

..... millibars

- (iii) Give **one** reason to explain why there is likely to be heavy rain at Point **S** on **Figure 2.2**. [2]

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- (iv) Periods of extended high pressure can lead to impacts on different groups of people. Explain why. [6]

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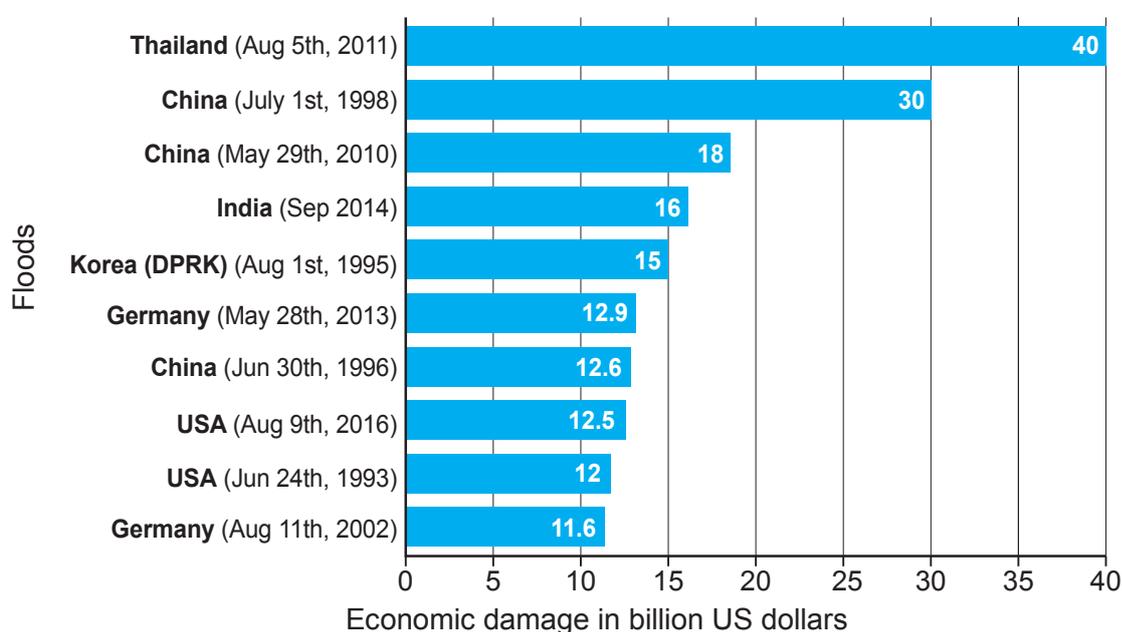
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- (d) Floods can also have impacts on people.
Study **Figure 2.3**.

Figure 2.3 – Economic damage of selected floods between 1993 to 2016



- (i) The table below contains four statements about **Figure 2.3**. Only two are correct. **Tick (✓) the two** correct statements. [2]

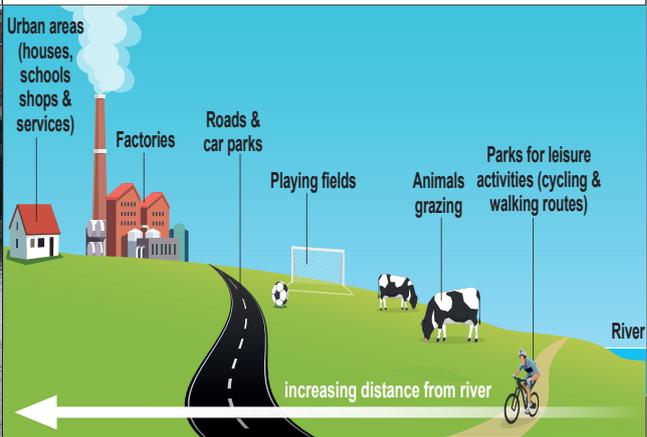
	Tick (✓) two
Germany had greater total economic damage than the US	
China had greater total economic damage than Thailand	
There was lower economic damage between 1993 and 1999 than between 2000 and 2016	
The most recent flood shown occurred in Germany	

- (ii) Suggest **one** way in which **Figure 2.3** could be improved. [1]



(e) Study the information in **Figure 2.4**.

Figure 2.4 – Some examples of soft and hard engineering solutions to river flooding

Hard Engineering	Soft Engineering
	
<p>Dam construction in China</p>	<p>Planting trees/wetland restoration</p>
	
<p>Concrete reinforcement of river banks in Ipswich</p>	<p>Land Use Zoning</p>

“Soft engineering is a better river flood management strategy than hard engineering”.
 How far do you agree with this statement? You should consider both sides of the argument
 in your answer. [8]

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Theme 3: Environmental Challenges

Answer all questions.

3. (a) (i) What is meant by the term 'biome'?
Tick (✓) **one** of the definitions below.

[1]

	Tick (✓) one
The part of the Earth that contains living things.	
A plant and animal community covering a large part of the Earth's surface.	
A small community of plants and animals and the environment they live in.	

- (ii) Complete the sentences that follow using **three** words from the text box below. [3]

rocks	photosynthesis	biodiversity	plants
weathering	decomposers	soil	leaching
water			

Ecosystems include both living and non-living components.

The living parts include and

The non-living parts include solar energy, which is taken in by plants through the process of

- (iii) Give **one** reason why there are more primary consumers than secondary consumers in a food web. [2]

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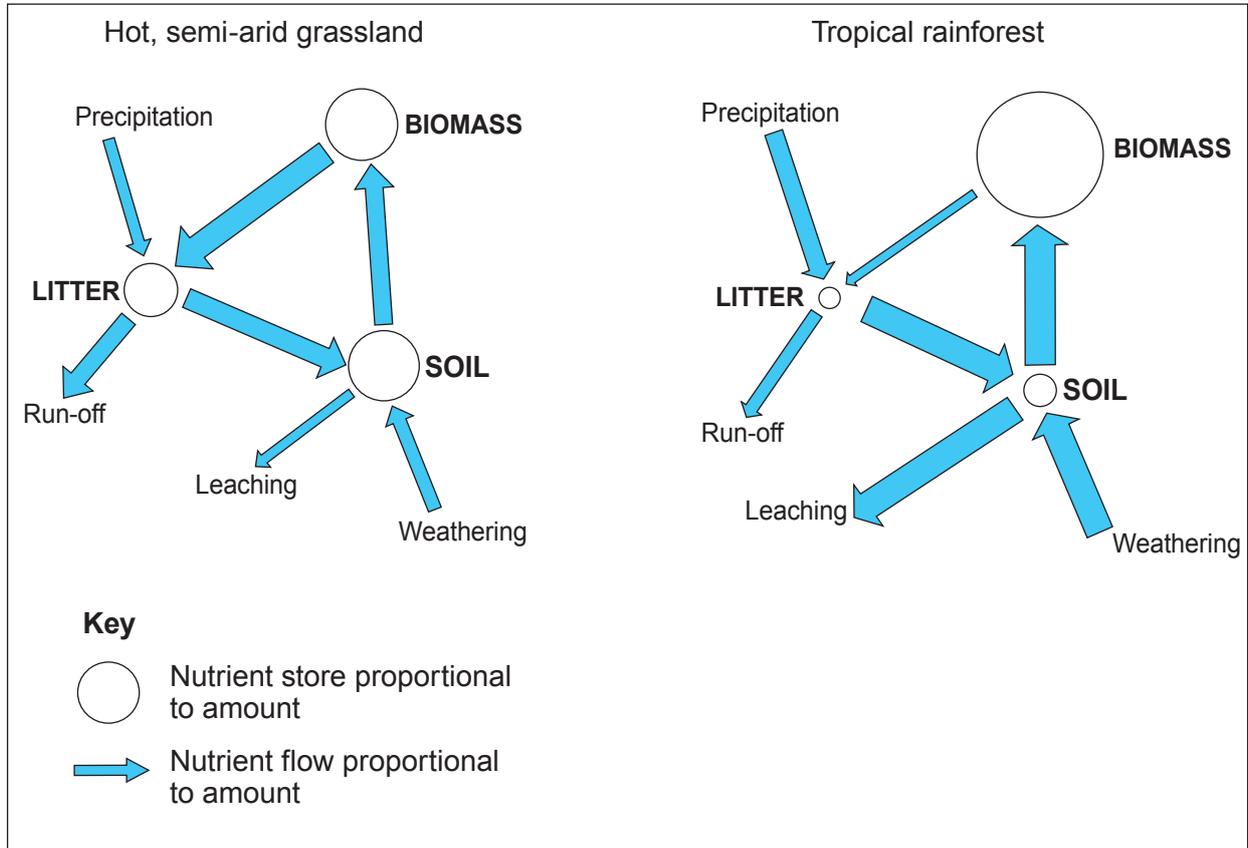
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(iv) Study **Figure 3.1**.

Figure 3.1 – Nutrient cycles in two major ecosystems.



Identify **three** differences between the two nutrient cycles shown in **Figure 3.1**. [3]

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3.

(b) Explain why human activities have negative impacts on hot semi-arid grasslands. [6]

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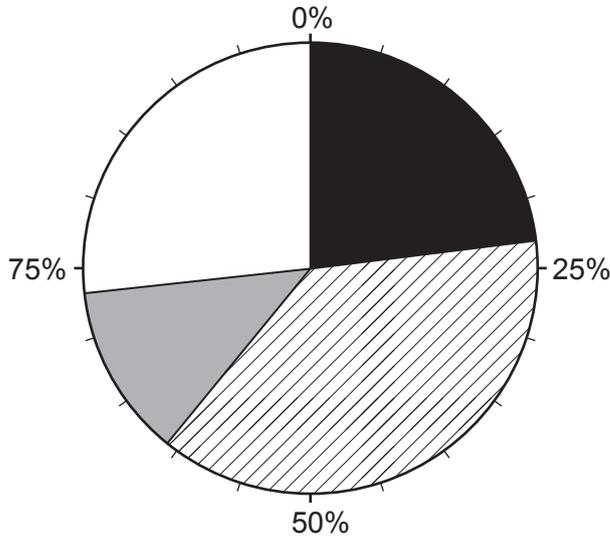
(c) Study **Figure 3.2**.

Figure 3.2 – Biodiversity hot spots in the world. (A biodiversity hot spot is a region with a great variety of organisms).

Region	% of world hot spots	Area of vegetation left intact in km ²
Africa	23	80 150
Asia-Pacific	38	82 000
Europe and Central Asia	12	54 600
North and Central America	12	90 000
South America	15	236 000
TOTAL	100	542 750



- (i) Complete the pie chart below using the data in **Figure 3.2** for percentage (%) of world biodiversity hot spots. [2]



Key:

	Africa
	Asia Pacific
	Europe and Central Asia
	North and Central America
	South America

- (ii) Give **one** reason to explain why a line graph would **not** be an appropriate technique for the percentage (%) world hot spots data. [1]

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- (iii) Use the information in **Figure 3.2** to calculate the percentage of global vegetation that remains intact in North and Central America. Show your working in the space below. [2]

..... %



(d) Describe how **one small scale** ecosystem you have studied in the UK benefits the local community. [4]

Name of Ecosystem

Location

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- (e) Study **Figure 3.3** which shows information about one marine ecosystem under threat. Coral reefs are made of millions of tiny animals called coral polyps. Reefs are a very complex and fragile ecosystem.

Figure 3.3

Location of Belize Barrier Reef



Fact Box – Belize Barrier Reef

- Described by Charles Darwin as a “most remarkable coral reef”
- 15 protected areas have been set up
- Over 100 different coral species and 500 fish species are found there
- Scientists say over 90% still to be researched
- Live coral declined from 30% in 1990s to 19% in 2020
- Over 260,000 visitors each year, many arrive on cruise ships



The 280 km reef is popular for scuba diving and snorkelling.



Half the population on Belize depend on fishing or tourism.

Evaluate the advantages and disadvantages of protecting vulnerable ecosystems such as the Belize Barrier Reef.

You may use the resources above and/or examples you have studied to support your answer. [8]

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