

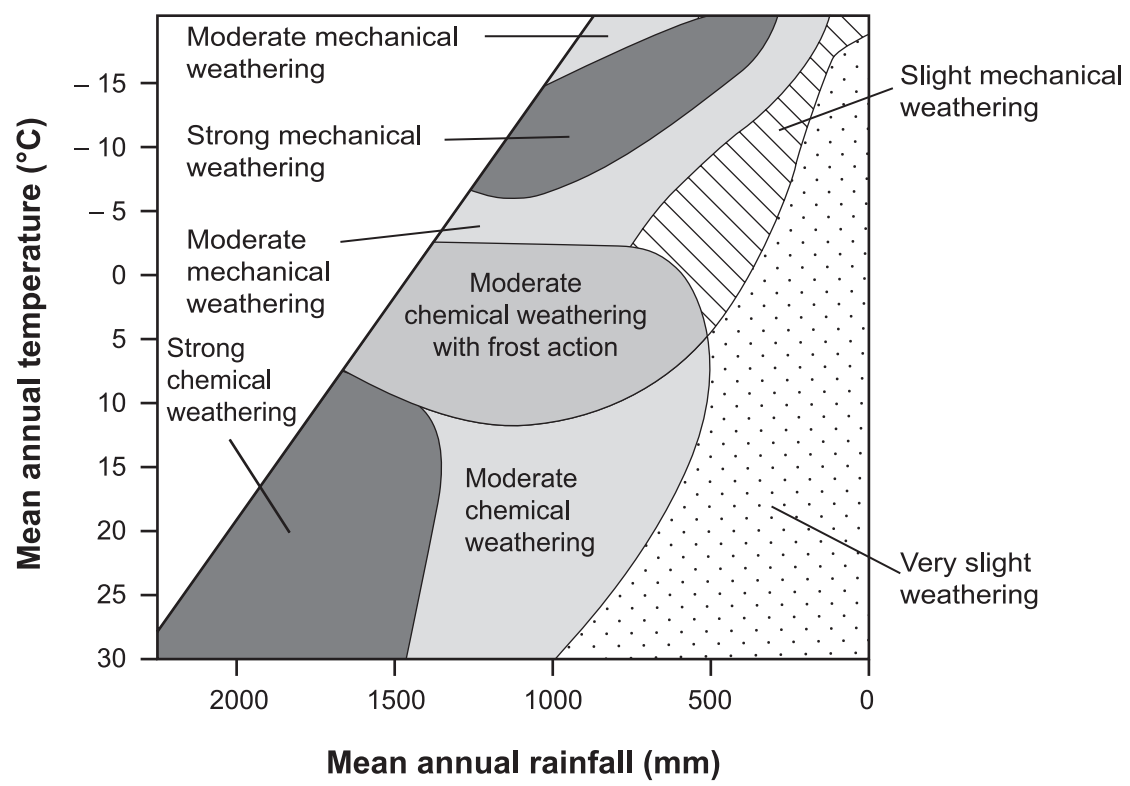
SECTION A

Answer EITHER Question 1 OR Question 2 from this section.

Write your answers in the spaces provided.

If you answer Question 1 put a cross in this box .

- 1. Study Figure 1 which shows the relationship between climate and the type and rate of weathering.



(Source: after Peltier, 1950)

Figure 1

- (a) With reference to Figure 1:

- (i) define the term **weathering**;

.....
.....
.....
.....

(2)



Leave
blank

(ii) state the maximum mean annual temperature at which strong mechanical weathering occurs;

..... (1)

(iii) state the minimum mean annual rainfall required for moderate chemical weathering;

..... (1)

(iv) explain why strong chemical weathering only occurs in warm and wet conditions.

.....
.....
.....
.....
.....
.....
.....
.....
..... (4)

(b) (i) Name two **physical** factors, other than climate, that also influence the type and rate of weathering.

1

2

(2)



Leave blank

(ii) Explain how rates of weathering may be **increased** by human activity.

.....

.....

.....

.....

.....

.....

.....

.....

(4)

(c) With reference to a located example, describe and explain the impact of weathering on a **limestone** landscape.

Located example

You may use a diagram to help your answer.





<p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p> <p style="text-align: center;">.....</p>	<p>Leave blank</p>		
<p>(6)</p>	<p>Q1</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 20px; height: 20px; margin-right: 5px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> </tr> </table>		
<p>(Total 20 marks)</p>			



M 2 1 5 6 0 A 0 5 2 8

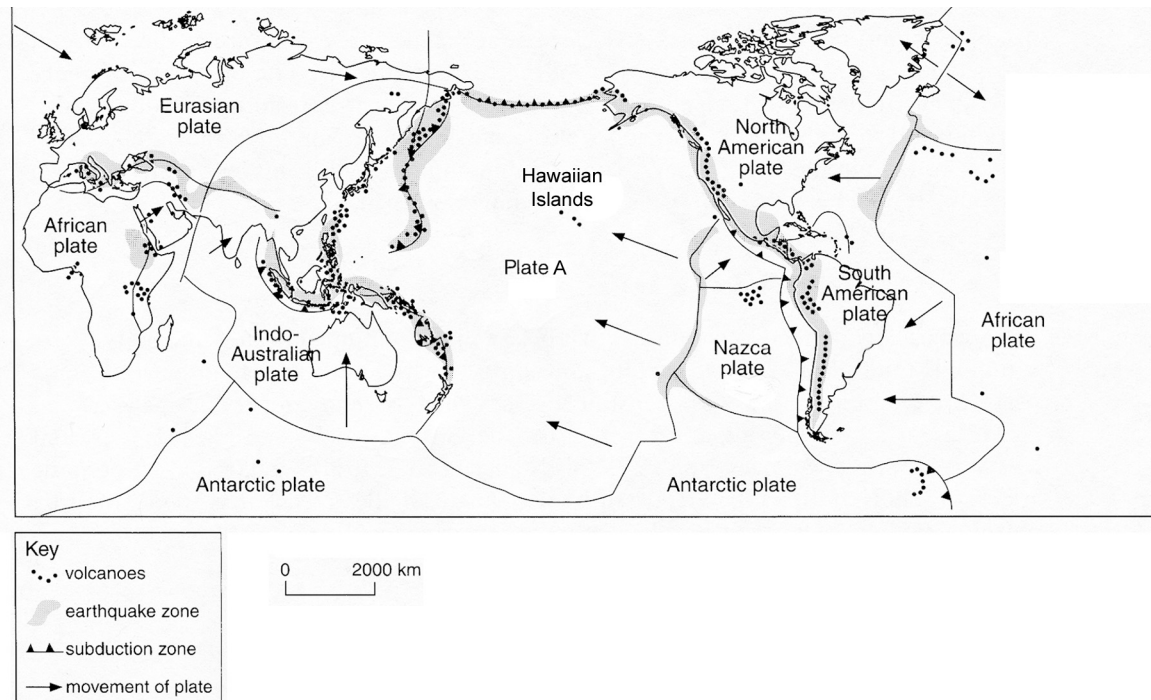


5

Turn over

If you answer Question 2 put a cross in this box .

2. Study Figure 2 which shows the global pattern of tectonic plates, earthquake zones and volcanoes.



(Source: adapted from Cliff Lines, Laurie Bolwell and Anne Fielding, *A Level Geography*, Letts, 1996)

Figure 2

- (a) With reference to Figure 2:

- (i) name tectonic Plate A;

..... (1)

- (ii) draw a bold arrow on Figure 2 to indicate the direction of movement of the Nazca plate; (1)

- (iii) describe the global pattern of volcanoes;

.....
.....
.....
.....
.....
..... (3)



Leave
blank

(iv) explain why volcanoes occur in the Hawaiian Islands.

.....
.....
.....
.....
.....
.....

(3)

(b) (i) What is meant by the term **extrusive igneous landforms**?

.....
.....
.....
.....

(2)

(ii) Explain how such landforms can provide economic benefits.

.....
.....
.....
.....
.....
.....
.....
.....
.....

(4)



Leave
blank

(c) Describe and explain the formation of **dykes** and **sills** and their impact on the landscape.

You may use a diagram to help your answer.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>(6)</p> <p>(Total 20 marks)</p>	<p>Leave blank</p> <p>Q2</p> <table border="1"><tr><td></td><td></td></tr></table>		
<p>TOTAL FOR SECTION A: 20 MARKS</p>			



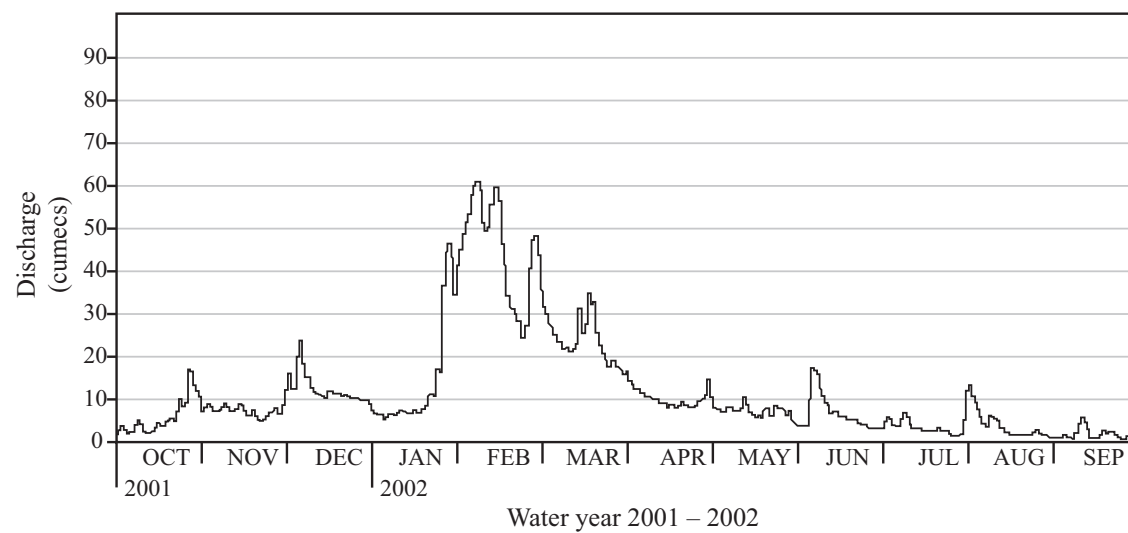
SECTION B

Answer EITHER Question 3 OR Question 4 from this section.

Write your answers in the spaces provided.

If you answer Question 3 put a cross in this box .

3. Study Figure 3 which shows the discharge of the River Thames at Eynsham during the water year 2001–2002.



(Source: The Environment Agency)

Figure 3

(a) With reference to Figure 3:

- (i) define the term **discharge**;

.....
.....
.....
.....

(2)

- (ii) state the **maximum** discharge in March;

.....

(1)



Leave blank

(iii) name the month which had the **greatest variation** in discharge;

..... (1)

(iv) suggest reasons why the discharge is highest in February.

.....
.....
.....
.....
.....
.....
.....
.....
.....
..... (4)

(b) (i) Name and outline three processes by which rivers transport their load.

1
.....
2
.....
3
..... (3)

(ii) Explain how rivers use their load in processes of erosion.

.....
.....
.....
.....
.....
..... (3)



Leave
blank

(c) Describe the appearance and explain the formation of a **delta**.

You may use a diagram to help your answer.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

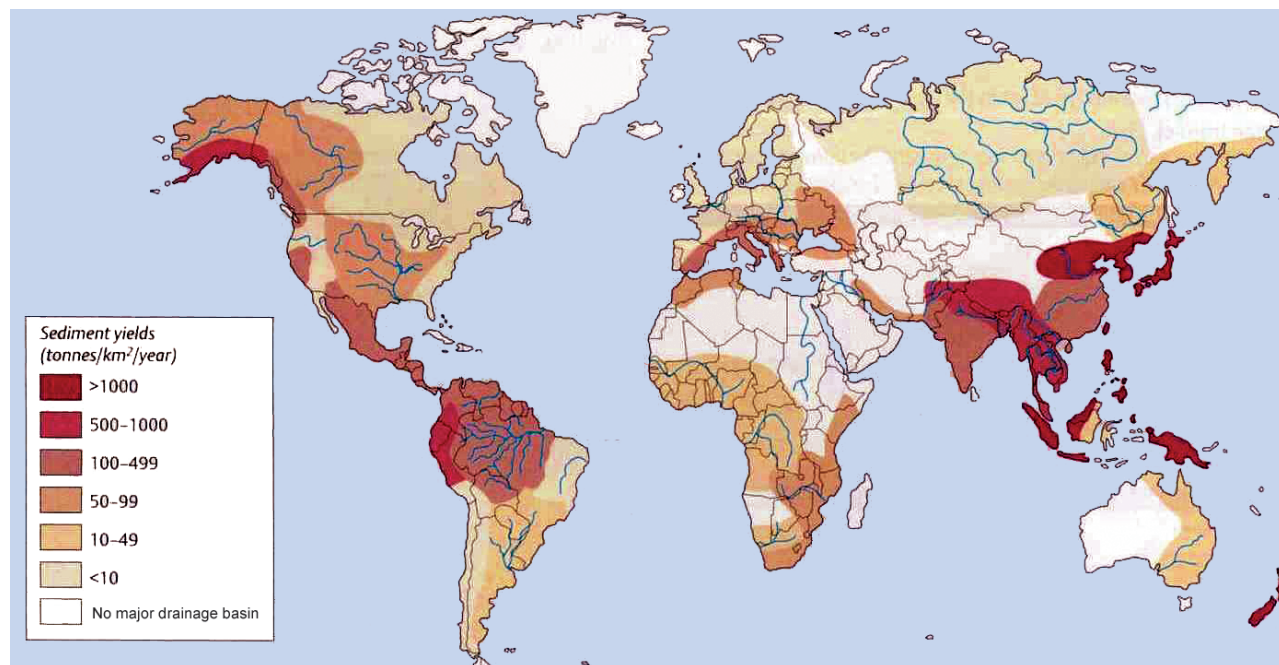


<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>(6)</p> <p>(Total 20 marks)</p>	Leave blank
	Q3



If you answer Question 4 put a cross in this box ☒.

4. Study Figure 4 which shows the annual sediment yield of major drainage basins.



(Source: Garrett Nagle, *Advanced Geography*, Oxford Press, 2000)

Figure 4

(a) With reference to Figure 4:

(i) define the term **drainage basin**;

.....
.....
.....
.....

(2)

(ii) state the annual sediment yield of the Mississippi drainage basin;

.....
.....

(1)



Leave
blank

(iii) describe the global pattern of annual sediment yield;

.....
.....
.....
.....
.....
.....

(3)

(iv) suggest **one** way in which climate may have influenced this pattern.

.....
.....
.....
.....

(2)

(b) (i) State how the efficiency (hydraulic radius) of a river channel is calculated.

.....
.....
.....
.....

(2)



Leave blank

(ii) Describe and explain the relationship between channel efficiency and river velocity.

.....
.....
.....
.....
.....
.....
.....
.....

(4)

(c) With reference to a named river, describe and explain the downstream changes in its **discharge**.

You may use a diagram or graph to help your answer.

Named river



Leave blank

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(6)

(Total 20 marks)

Q4

TOTAL FOR SECTION B: 20 MARKS



M 2 1 5 6 0 A 0 1 7 2 8

17

Turn over

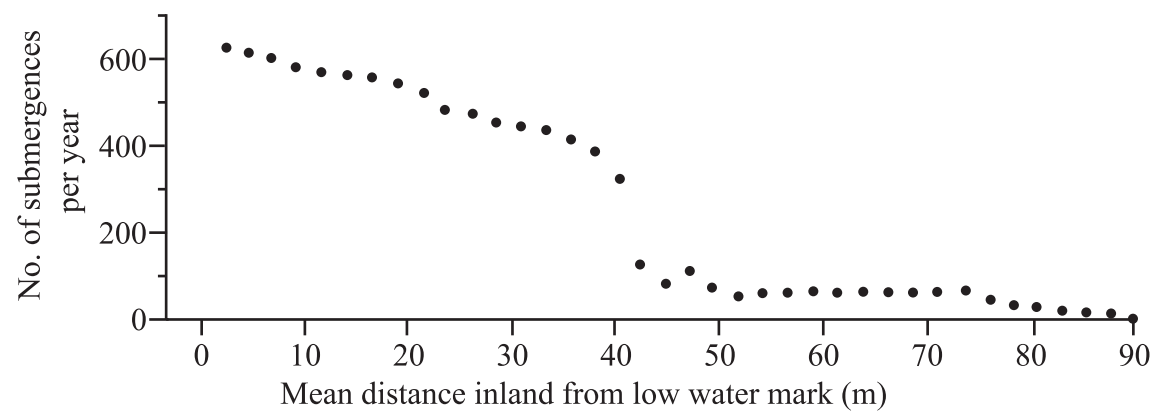
SECTION C

Answer EITHER Question 5 OR Question 6 from this section.

Write your answers in the spaces provided.

If you answer Question 5 put a cross in this box .

- 5. Study Figure 5 which shows the number of tidal submergences experienced per year along a transect across a salt marsh at Milford Haven (SW Wales).



(Source: adapted from Garrett Nagle, *Advanced Geography*, Oxford Press, 2000)

Figure 5

(a) With reference to Figure 5:

- (i) describe the relationship between the number of submergences and distance inland from the mean low water mark;

.....
.....
.....
.....
.....
.....
.....
.....

(3)

- (ii) name the type of plant succession found in a salt marsh environment;

.....

(1)



Leave blank

(iii) name two plant species commonly found below the mean high water mark in a salt marsh;

1

2

(2)

(iv) explain ONE way in which plants in a salt marsh adapt to environmental conditions.

.....

.....

.....

.....

(2)

(b) (i) Define the terms **swash** and **backwash**.

.....

.....

.....

.....

(2)

(ii) How do swash and backwash strength differ in a constructive wave?

.....

.....

(1)

(iii) What effect do constructive waves have on beaches?

.....

.....

.....

.....

.....

.....

(3)



Leave
blank

(c) With reference to a named example, describe and explain the formation and development of a **spit**.

Named example

You may use a diagram to help your answer.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>(6)</p> <p>(Total 20 marks)</p>	<p>Leave blank</p> <p>Q5</p> <table border="1"><tr><td></td><td></td></tr></table>		



Leave
blank

If you answer Question 6 put a cross in this box ☒ .

6. Study Figure 6 which is a photograph of Milford Sound, a fjord in New Zealand.



(Source: David Redfern and Malcolm Skinner, *Advanced Geography*, Philip Allan Updates, 2003)

Figure 6

(a) With reference to Figure 6:

(i) describe the shape of the fjord;

.....
.....
.....
.....

(2)



Leave
blank

(ii) suggest how fjords are formed;

.....
.....
.....
.....
.....
.....
.....
.....

(4)

(iii) identify two ways in which **rias** differ from **fjords**.

1

.....

2

.....

(2)

(b) (i) Outline how human activity might contribute to long-term rising sea level.

.....
.....
.....
.....

(2)



Leave
blank

(ii) Describe two effects of long-term rising sea level on human use of the coastline.

1

.....

.....

.....

2

.....

.....

.....

(4)

(c) With reference to a named example, describe the appearance and explain the formation and development of a **stack**.

Named example

You may use a diagram to help your answer.



Leave blank

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(6)

(Total 20 marks)

Q6

TOTAL FOR SECTION C: 20 MARKS

TOTAL FOR PAPER: 60 MARKS

END

Every effort has been made to contact the copyright holders where possible. In some cases, every effort to contact copyright holders has been unsuccessful and Edexcel will be happy to rectify any omissions of acknowledgements at the first opportunity.



M 2 1 5 6 0 A 0 2 5 2 8

BLANK PAGE



BLANK PAGE



BLANK PAGE

