

# X208/301

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NATIONAL  
QUALIFICATIONS  
2007

MONDAY, 28 MAY  
9.00 AM – 10.30 AM

GEOGRAPHY  
HIGHER  
Paper 1  
Physical and  
Human Environments

**Six** questions should be attempted, namely:

**all four** questions in **Section A** (Questions 1, 2, 3 and 4);

**one** question from **Section B** (Question 5 **or** Question 6);

**one** question from **Section C** (Question 7 **or** Question 8).

Write the numbers of the **six** questions you have attempted in the marks grid on the back cover of your answer booklet.

The value attached to each question is shown in the margin.

Credit will be given for appropriate maps and diagrams, and for reference to named examples.

Questions should be answered in sentences.

**Note** The reference maps and diagrams in this paper have been printed in black only: no other colours have been used.



**SECTION A: Answer ALL questions in this section**

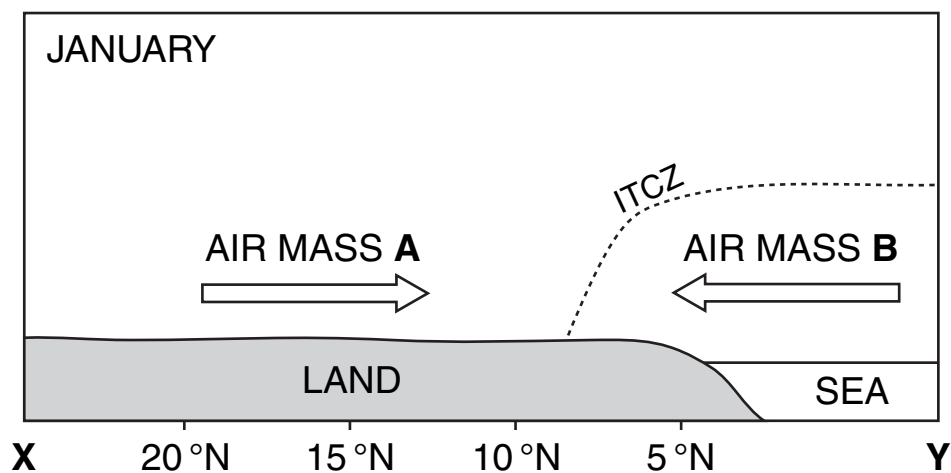
**Question 1: Atmosphere**

(a) Study Reference Diagram Q1A and Reference Map Q1A.

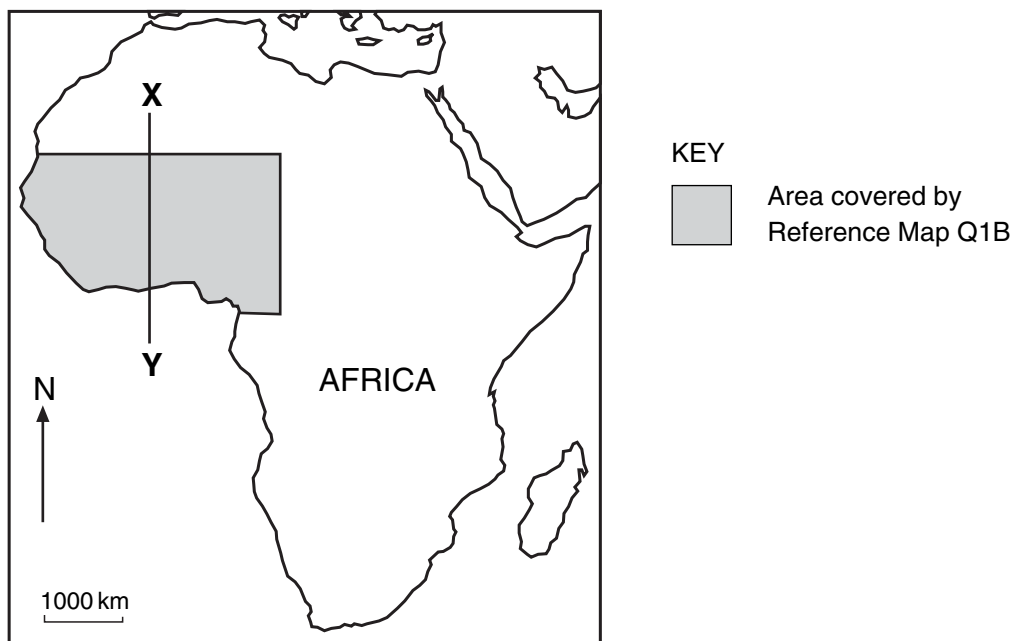
Identify air masses A and B, and **describe** their origin and nature.

3

**Reference Diagram Q1A (The Inter-tropical Convergence Zone (ITCZ))**



**Reference Map Q1A (Location of section X-Y)**



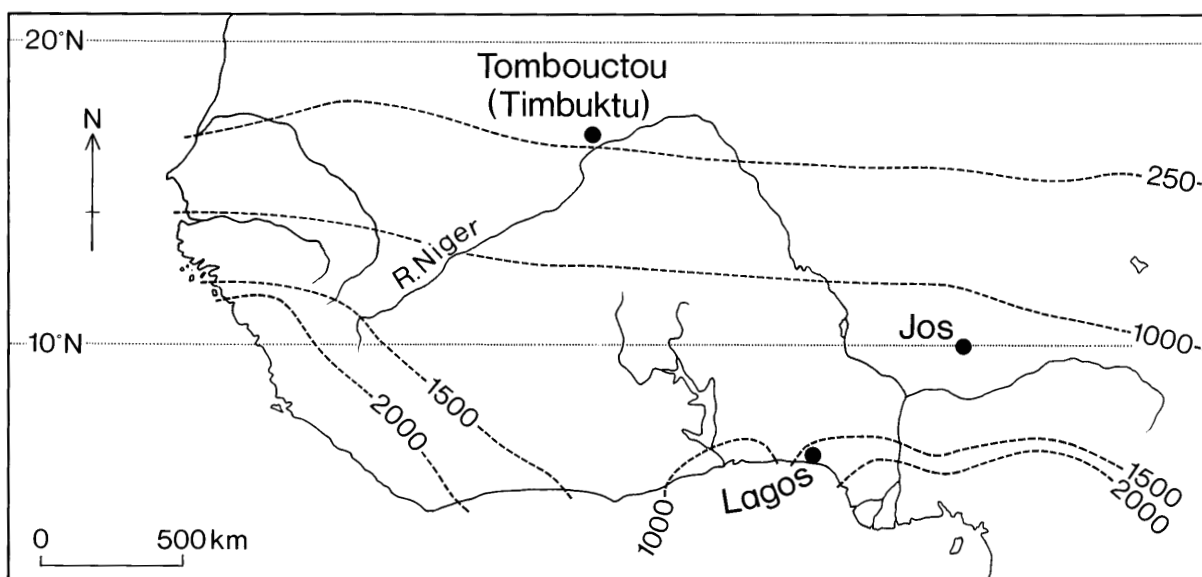
**Question 1 (continued)**

(b) Study Reference Map Q1B and Reference Diagram Q1B.

**Describe** and **explain** the varying rainfall patterns shown in Reference Diagram Q1B.

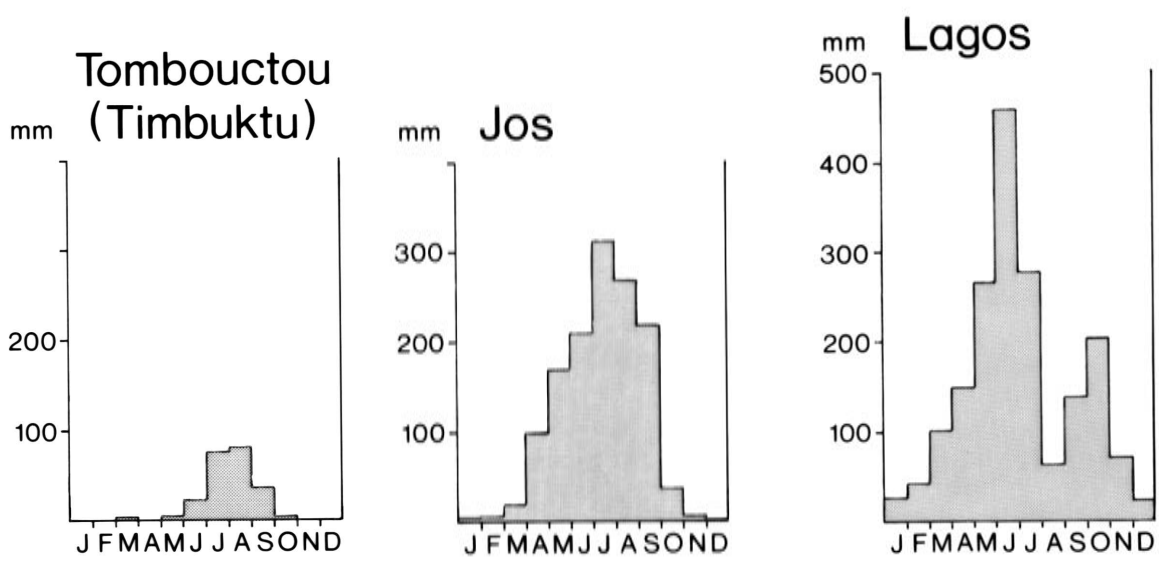
6

**Reference Map Q1B (Rainfall patterns in West Africa)**



KEY ——— Isohyets showing mean annual rainfall (mm)  
 ~~~~~ Rivers

**Reference Diagram Q1B (West Africa—selected rainfall graphs)**



[Turn over

**Question 2: Hydrosphere**

Study OS Map Extract number 1560/150: Worcester (*separate item*).

- (a) The River Teme is in the lower section of its course between 760545 and 850522. **Describe** the physical characteristics of the river and its valley in this section. **5**
- (b) Select **one** of the features that you have described for part (a) and **explain**, with the aid of a diagram or diagrams, how this feature is formed. **4**

**Question 3: Population Geography**

(a) **Describe** the ways in which countries can obtain accurate population data. **3**

(b) **Explain**

(i) why **ELDCs** (Economically Less Developed Countries) may find the collection of such data more difficult, and

(ii) why the quality of data obtained may be less reliable than that gathered in an **EMDC** (Economically More Developed Country). **6**

**[Turn over**

**Question 4: Industrial Geography**

(a) For South Wales, or any other industrial concentration in the European Union which you have studied, **describe** the physical and human factors which led to the growth of traditional industries before 1950.

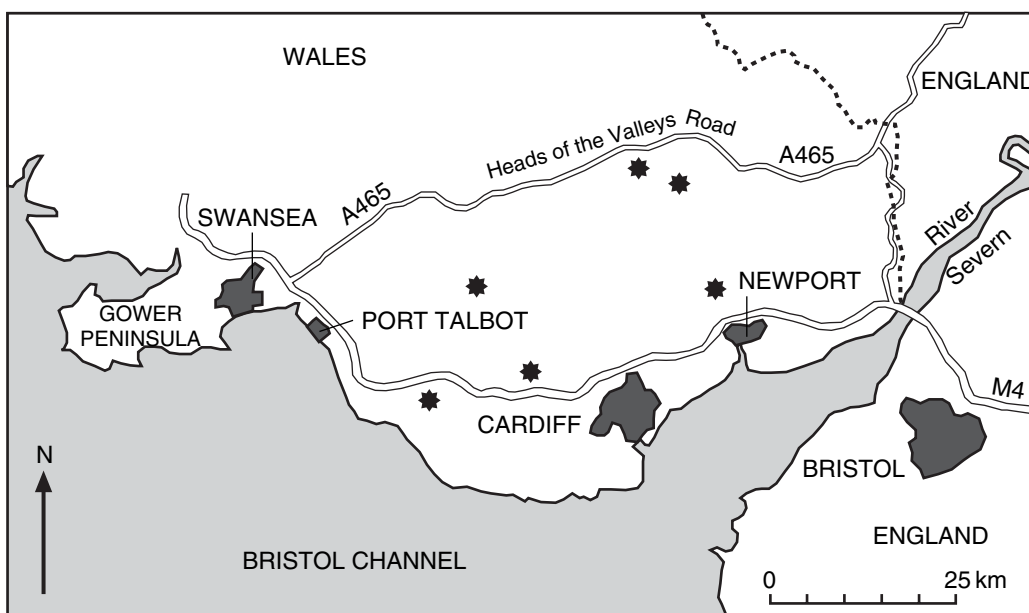
4

(b) Study Reference Map Q4.

**Describe** and **explain** the methods used to attract newer industries and investments to South Wales, or to any other industrial concentration in the European Union which you have studied.

5

**Reference Map Q4 (South Wales: Location of industrial developments since 1950)**



\* Location of industrial developments since 1950

**SECTION B: Answer ONE question from this section,  
ie either Question 5 or Question 6.**

**Question 5: Lithosphere**

Study Reference Photograph Q5 which shows a glaciated upland landscape in the Cairngorm Mountains.

- (a) **Describe** the evidence which suggests that the area shown in the photograph has been affected by the processes of glacial erosion. **3**
- (b) Choose **one** feature of glacial erosion visible in the photograph and, with the aid of an annotated diagram (or diagrams), **explain** how it was formed. **4**

**Reference Photograph Q5**



**[Turn over**

DO NOT ANSWER THIS QUESTION IF YOU HAVE  
ALREADY ANSWERED QUESTION 5

**Question 6: Biosphere**

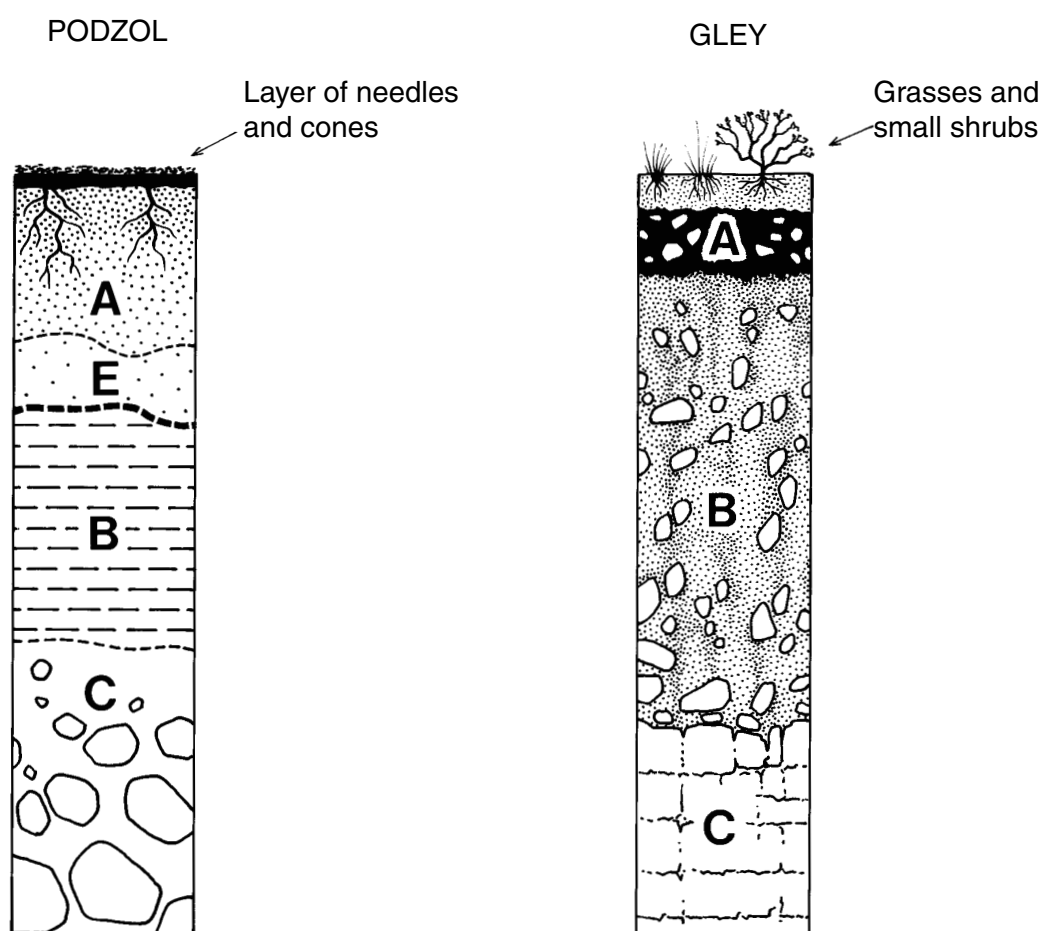
Study Reference Diagram Q6A which shows two soil profiles.

Choose **one** of the soil profiles.

- (i) **Describe** the characteristics of the soil, including horizons, colour, texture and drainage.

3

**Reference Diagram Q6A (Selected soil profiles)**



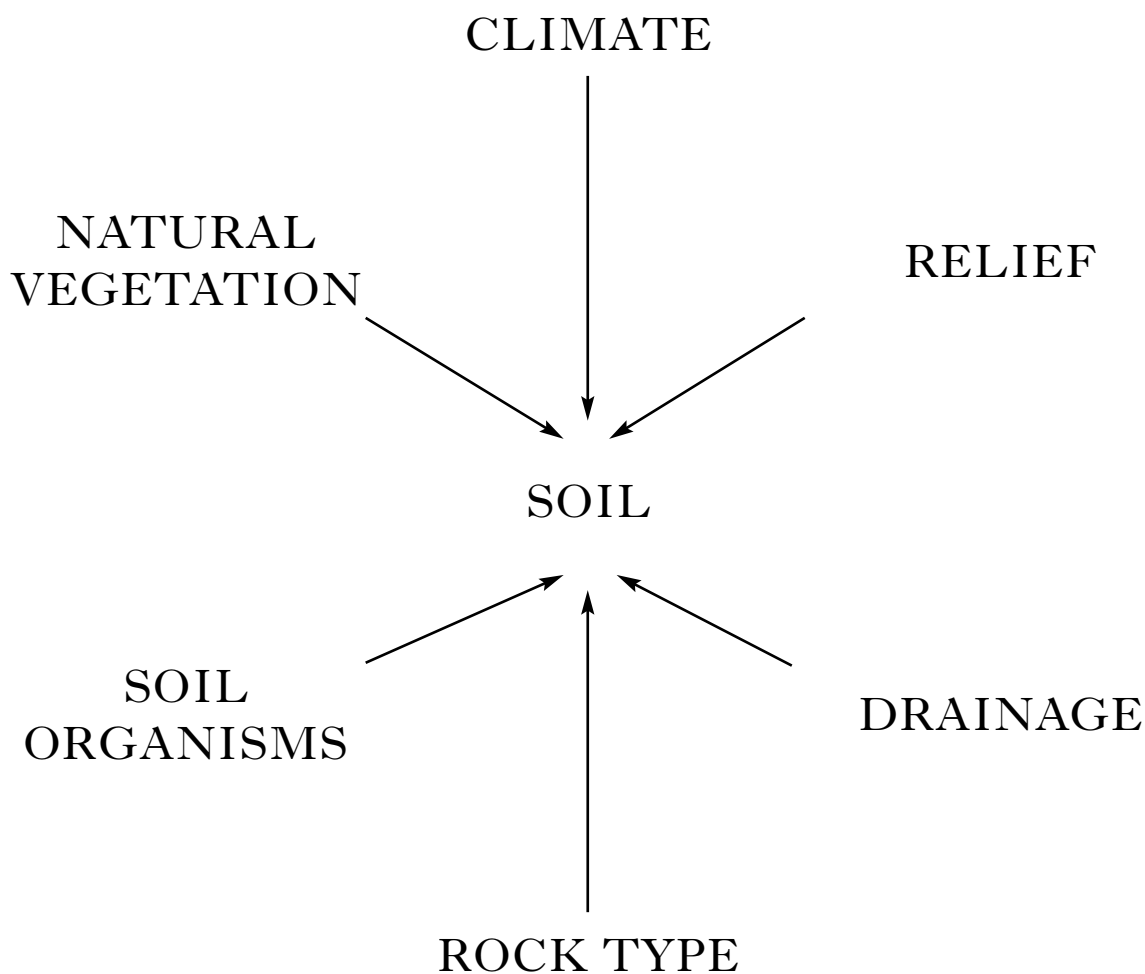
**Question 6 (continued)**

(ii) Study Reference Diagram Q6B.

**Explain** how the major soil forming factors shown in the diagram have contributed to the formation of your chosen soil profile.

**4**

**Reference Diagram Q6B (Main factors affecting soil formation)**



**[Turn over**

**SECTION C: Answer ONE question from this section,  
ie either Question 7 or Question 8.**

**Question 7: Rural Geography**

- (a) **Describe** the main characteristics of **shifting cultivation**. 3
- (b) *“In Central America, population density and loss of rainforest cover are closely related. During the last two decades, human activities have caused the deforestation of more than 120 000 square kilometres each year.”*

Referring to a named area where shifting cultivation is carried out, **explain** the **impact** which deforestation and increased population density have had on the environment and way of life of the shifting cultivators. 4

**DO NOT ANSWER THIS QUESTION IF YOU HAVE  
ALREADY ANSWERED QUESTION 7**

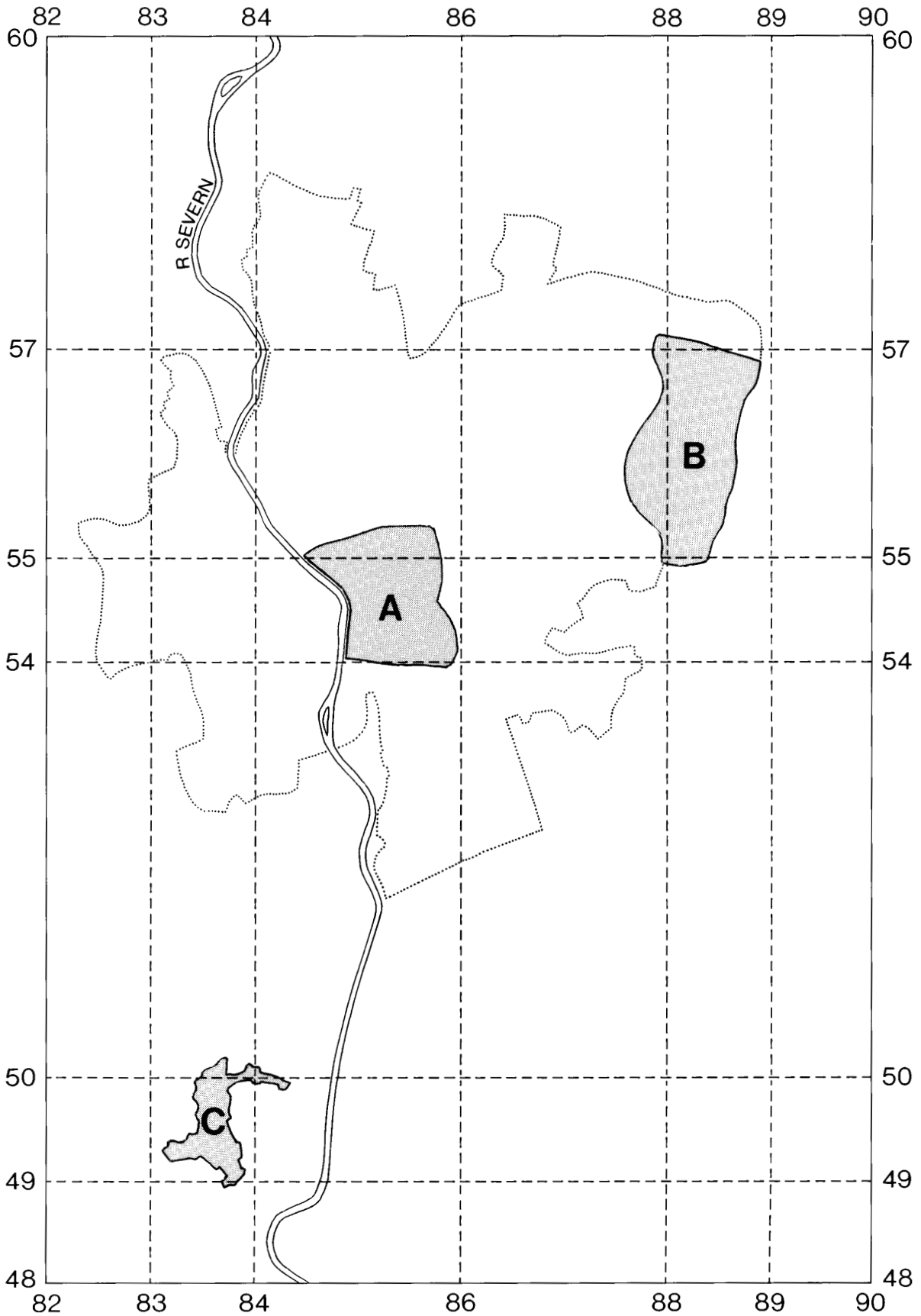
**Question 8: Urban Geography**

Study OS Map Extract number 1560/150: Worcester (*separate item*), and Reference Map Q8.

- (a) **Describe** the urban environment of Area A and **explain** its location. 4
- (b) For **either** Area B **or** Area C, **explain** the advantages of the residential environment. 3

**Question 8 (continued)**

**Reference Map Q8 (Location of urban areas in Worcester)**



[END OF QUESTION PAPER]

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