

**JUNIOR CERTIFICATE EXAMINATION, 2007  
GEOGRAPHY - HIGHER LEVEL - SECTION 1**

**1. ROCKS**

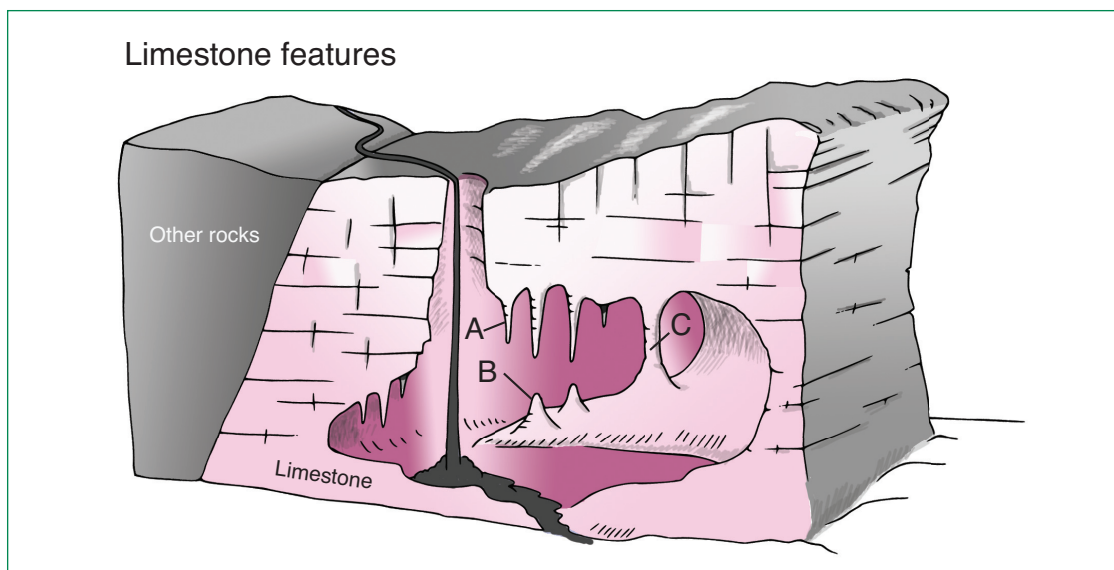
Choose **three** terms from the selection box to fill in the spaces in the extract below.

Selection Box		
<b>Metamorphic</b>	Basalt	Sandstone
<b>Sedimentary</b>	Quartzite	Limestone
<b>Igneous</b>	Marble	Shale

“There are many different types of rock in Ireland. These range from regular-shaped columns of Basalt in Antrim’s Giant’s Causeway to multi-coloured Granite on the Wicklow Mountains. Both of these rock types are Igneous, which means they were once formed from hot, volcanic material. The centre of Ireland consists mostly of Limestone, in which fossils of ancient sea creatures can sometimes be found.”

**2. THE BURREN**

The diagram shows underground features in a Karst region. In the spaces provided, name the **three** limestone features labelled A, B and C on the diagram.



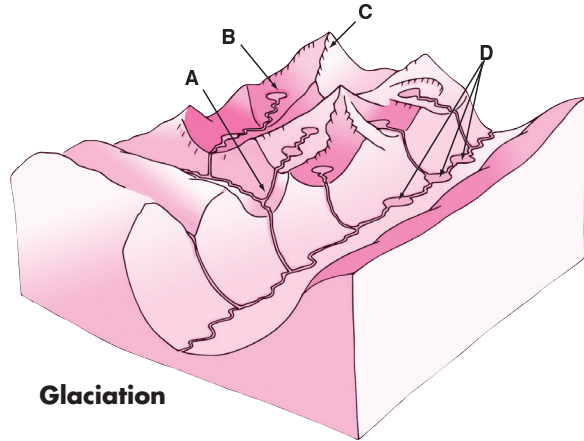
A Stalactites      B Stalagmite      C Pillar/Column

ANSWER EITHER 3A OR 3B

**3A. FEATURES OF GLACIAL EROSION**

Examine the diagram, which shows features of glacial erosion. In the grid provided, match **each** of the numbers 1 to 4 in **Column X** with the **Letter** of its pair on the diagram. One pair has been completed for you.

Column X		X	Letter
1	Cirque/Corrie	1	B
2	Ribbon lakes	2	D
3	Pyramidal peak	3	C
4	Hanging valley	4	A



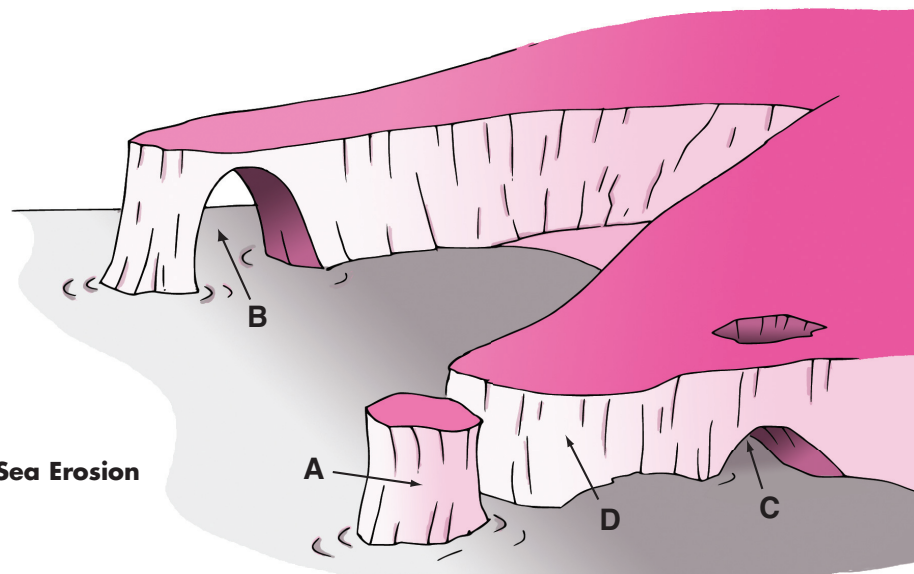
Glaciation

OR

**3B. FEATURES OF SEA EROSION**

Examine the diagram, which shows features of sea erosion. In the grid provided, match **each** of the numbers 1 to 4 in **Column X** with the **Letter** of its pair on the diagram. One pair has been completed for you.

Column X		X	Letter
1	Sea Arch	1	B
2	Sea Cave	2	C
3	Sea Stack	3	A
4	Sea Cliff	4	D



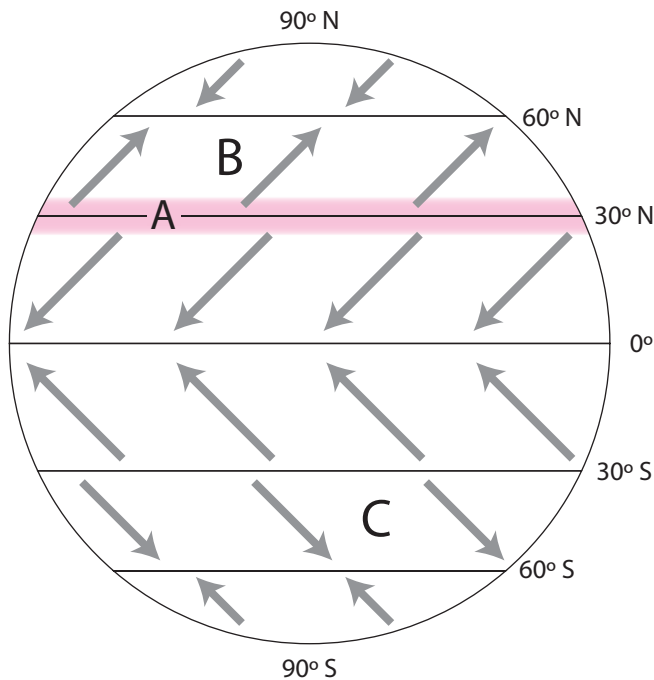
Features of Sea Erosion

ANSWER EITHER 4A OR 4B

4A. GLOBAL WIND PATTERNS

Examine the diagram, which shows global pressure belts and air movements.

World Wind System



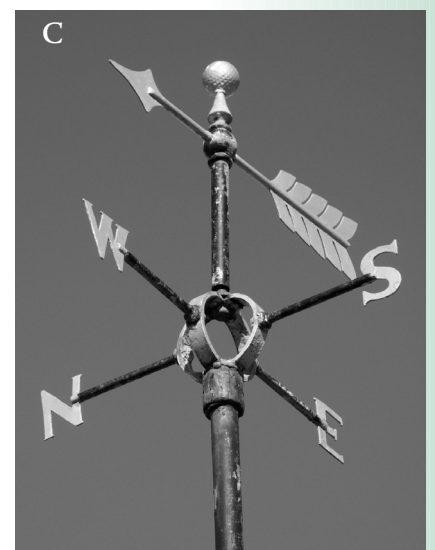
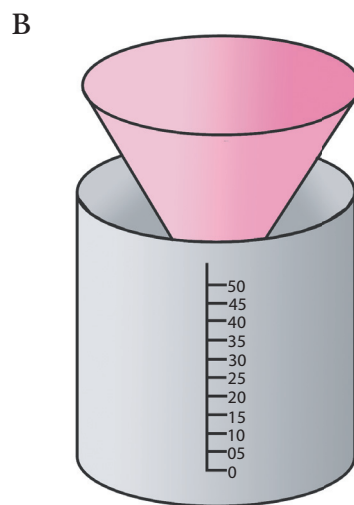
Circle the correct answer in each of the following statements:

- (i) A belt of high pressure / low pressure exists at the place labelled A.
- (ii) The winds at B are the south-westerly anti-trades / the north-easterly trades.
- (iii) The winds at C are referred to as cold winds / warm winds.

OR

4B. MEASURING WEATHER

In the spaces provided, name each of the weather instruments that are labelled A to C in the diagrams.



*Campbell-Stokes  
sunshine recorder*

*Rain gauge*

*Wind vane*

A \_\_\_\_\_ B \_\_\_\_\_ C \_\_\_\_\_

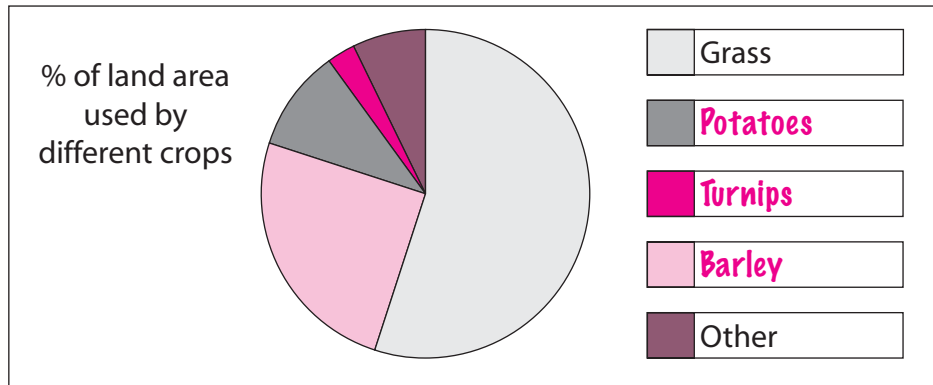
ANSWER EITHER 5A OR 5B

5A. FARMING

The table shows the land area taken up by different crops in an Irish mixed farm. This information is represented on the pie chart below.

Complete the pie chart by writing in the names of the crops in their correct spaces.

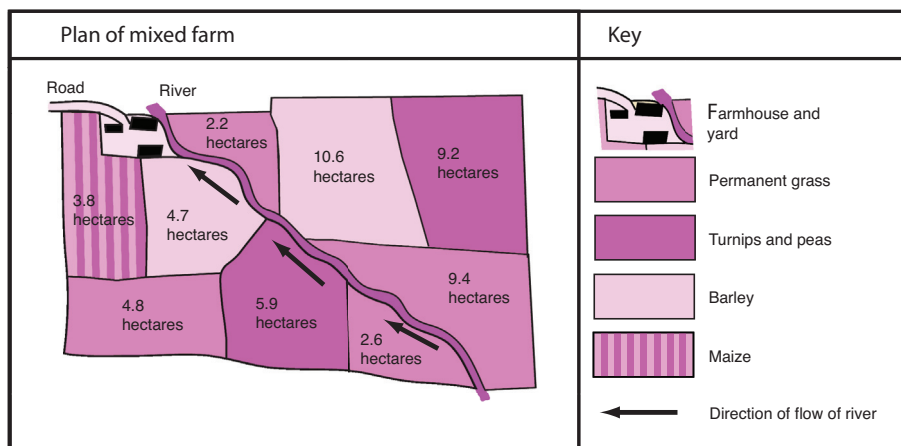
Crop	Grass	Barley	Potatoes	Turnips	Other
% of land used by different crops	55	25	10	3	7



OR

5B. FARMING

Examine the plan of a mixed farm in Ireland.



- (a) How many hectares in total are used for permanent grass? 19 Hectares
- (b) Of the tillage crops shown, which takes up most land? Barley
- (c) A river flows through the farm.  
In which direction does it flow? North Westerly

6. POPULATION CHANGE

The table of figures shows birth rates, death rates and natural population changes in a selection of countries.

	Birth Rate*	Death Rate*	Natural Change*
Country A	8	10	2
Country B	39	19	20
Country C	10	13	
Country D		8	0

\*Given per thousand

(i) Calculate the natural change in Country C. -3

(ii) Calculate the birth rate in Country D. 8

(iii) Which one of the countries A–D is an economically developing Third World country?

Country B, because it has a much higher birth rate (39) than some of the other countries, e.g. Country A (8).

7. HUMAN MIGRATION

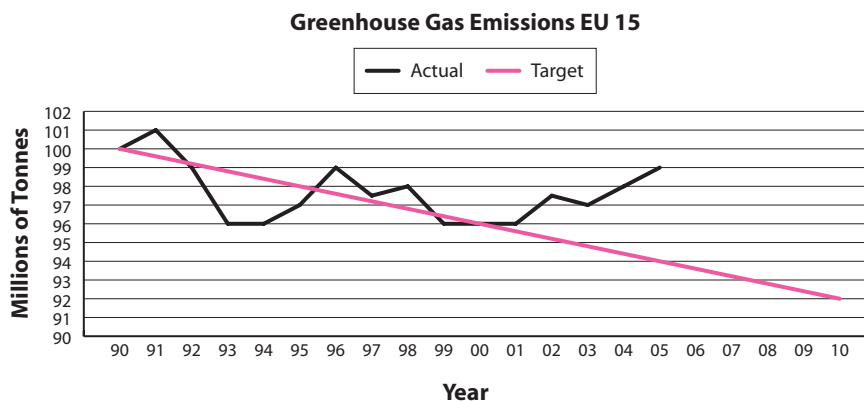
The terms “push factor”, “pull factor” and “barrier to migration” are used when describing human migration. Choose words from the selection box to fill in the spaces in the three other boxes provided.

High cost of travel	Lively social life	War and unrest
Good job opportunities	Famine	Government immigration laws

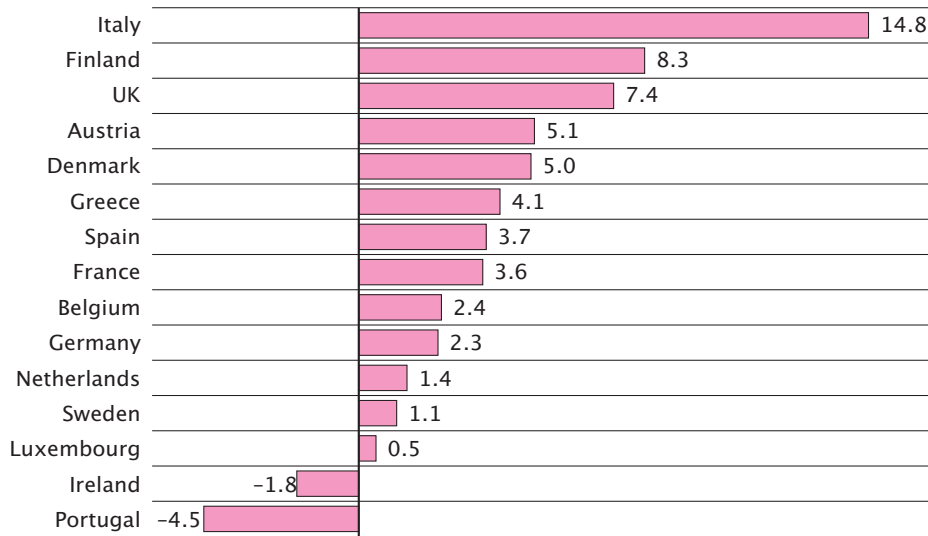
Push Factor	Pull Factor	Barrier to Migration
<i>Famine</i>	<i>Good job opportunities</i>	<i>High cost of travel</i>

8. GAS EMISSIONS IN THE EUROPEAN UNION (EU)

The graphs give information on the emission of CO<sub>2</sub> and other gases in the European Union (EU). The statements refer to the information given in the graphs. Not all of the statements are true.



Greenhouse Gas Emissions: Change by Country 2003–2004  
Millions of Tonnes



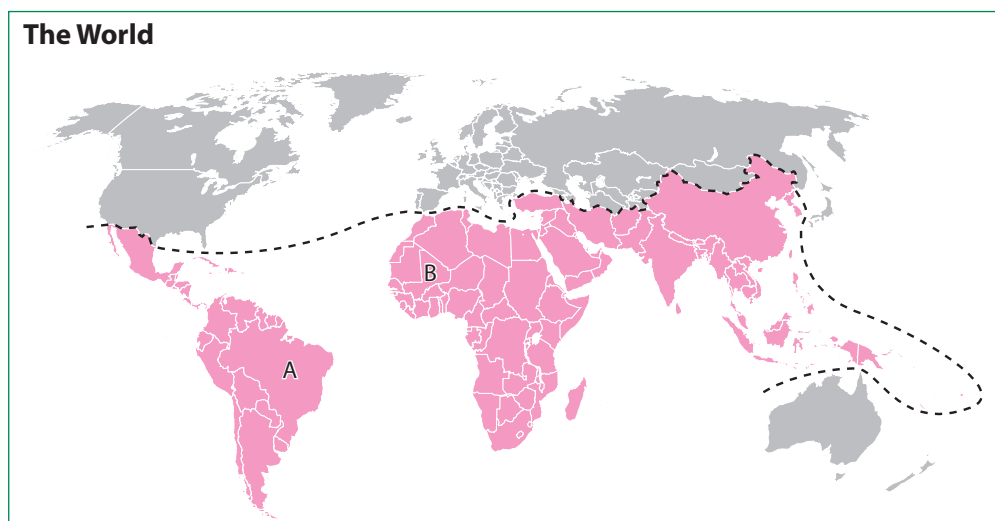
The correct statements are: Tick (✓) the correct box.

1. The European Union aimed (targeted) to reduce gas emissions to zero by the year 2010.
2. By 2004, actual emissions were higher than the target set.
3. Actual emissions were on or close to target in the year 2000.
4. Ireland had an increase of 1.8 million tonnes in its emissions in 2003–2004.
5. Italy had the greatest increase in emissions in 2003–2004.

1, 2, 4       2, 3, 4       2, 3, 5       3, 4, 5

#### 9. PLACES IN THE WORLD

Examine the map. Then, on the spaces provided, write in each of the following:



- (i) The name given to the general area shaded yellow on the map \_\_\_\_\_ *The South/Developing world*
- (ii) The name of the country labelled A \_\_\_\_\_ *Brazil*
- (iii) The name of the country labelled B \_\_\_\_\_ *Mali*

**10. INTERNATIONAL AID**

In the boxes provided, match **each** letter in **Column X** with the number of its pair in **Column Y**. One pair has been completed for you.

Column X		Column Y		X	Y
<b>A</b>	Aid given by the Government of Ireland to the Government of Ethiopia	<b>1</b>	Bilateral Aid	<b>A</b>	<b>1</b>
<b>B</b>	Trócaire, Concern, Oxfam	<b>2</b>	Emergency Aid	<b>B</b>	<b>2</b>
<b>C</b>	Aid given through organizations such as the United Nations	<b>3</b>	NGOs	<b>C</b>	<b>3</b>
<b>D</b>	Medicine, Shelter and food	<b>4</b>	Multilateral Aid	<b>D</b>	<b>4</b>

**11. PAST AND PRESENT SETTLEMENT**

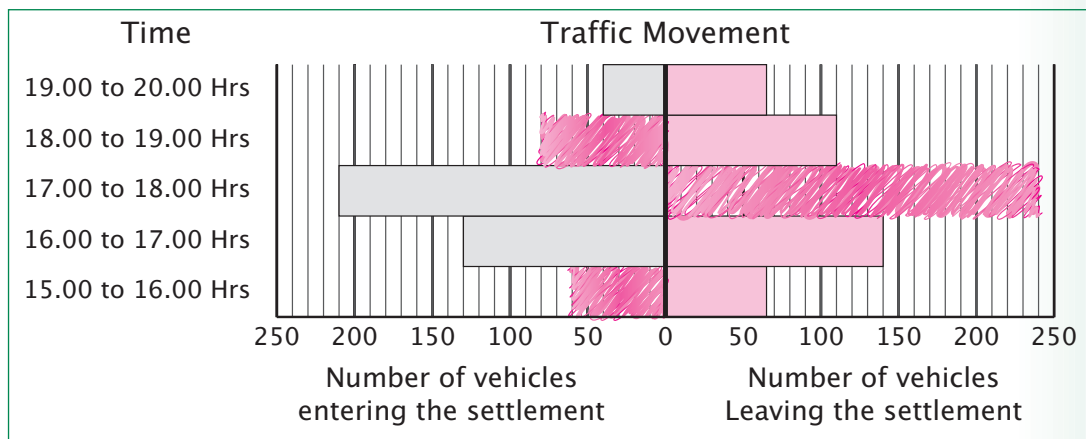
In the boxes provided, match **each** letter in **Column X** with the number of its pair in **Column Y**. One pair has been completed for you.

Column X		Column Y		X	Y
<b>A</b>	Shanty town	<b>1</b>	Ancient lake dwelling	<b>A</b>	<b>3</b>
<b>B</b>	Crannóg	<b>2</b>	New Town	<b>B</b>	<b>1</b>
<b>C</b>	Polder as the United Nations	<b>3</b>	Slum	<b>C</b>	<b>4</b>
<b>D</b>	Tallaght / Shannon	<b>4</b>	Reclaimed Land	<b>D</b>	<b>2</b>

**12. TRAFFIC MOVEMENT TO AND FROM AN IRISH SETTLEMENT**

The bar graphs show the numbers of vehicles that entered and left an Irish settlement on a certain day. Complete the bar graphs so as to show **each** of the following pieces of information:

- 60 vehicles entered the settlement between 15.00 and 16.00 hours
- 240 vehicles left the settlement between 17.00 and 18.00 hours
- 80 vehicles entered the settlement between 18.00 and 19.00 hours



13. ECONOMIC ACTIVITIES

Which of the following are all examples of people involved in **tertiary activities**?

Tick (✓) the correct box.

Hairdresser; teacher; farmer; truck driver; doctor.

Priest; pop singer; chimney sweep; taxi driver; teacher.

Taxi driver; professional footballer; shipyard worker; miner; travel agent.

Forestry worker; shopkeeper; mechanic; solicitor; bakery worker.

14. NON-RENEWABLE NATURAL RESOURCES

An example of a non-renewable natural resource is:

Tick (✓) the correct box.

Water

Oil

Fish

Forests

15. TOOLS AND MACHINES USED IN IRELAND'S BOGS

Name the machines and the tool described below.

1. A machine, rather like a bulldozer, now used to level the surface of bog: Grader.

2. A hand-tool once used to cut sods of turf from bogs: Slean.

3. A machine now used to scrape peat from the surface of bogs: Miller.

16. INTERNATIONAL TRADE

The cartoon refers to aspects of trade between powerful and poor countries. Examine the cartoon and read the statements relating to it. Not all of the statements are true.

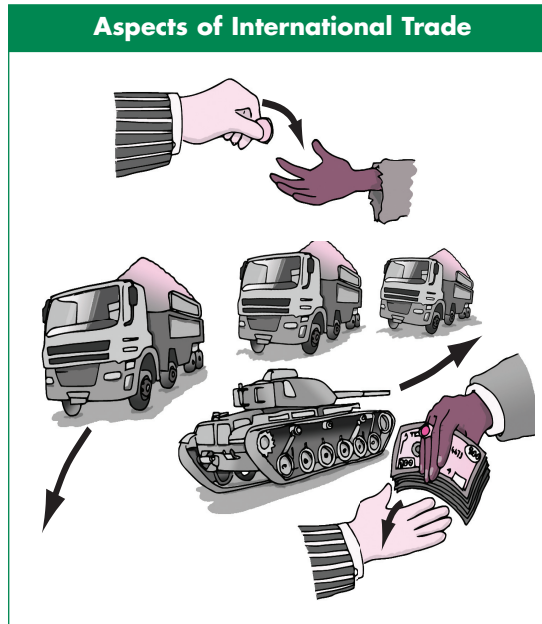
1. Poor countries receive little for their exports but pay dearly for their imports.
2. International trade favours powerful countries at the expense of poor countries.
3. International trade benefits both powerful and poor countries equally.
4. Many poor countries export raw materials and import manufactured products.



The true statements are:

Tick (✓) the correct box.

- 1, 2, 4
- 1, 3, 4
- 1, 2, 3
- 2, 3, 4



17. ORDNANCE SURVEY

Examine the Ordnance Survey map supplied (see page xxx).

State in square kilometres the area represented by the map extract. 108 km<sup>2</sup>

18. ORDNANCE SURVEY

Examine the Ordnance Survey map supplied (see page xxx).

The settlement pattern found along the R132 at O 12 71 on the Ordnance Survey map is

Tick (✓) the correct box.

- Nucleated/Clustered  Linear/Ribboned  Dispersed

19. ORDNANCE SURVEY

Examine the Ordnance Survey map supplied (see page xxx).

In the boxes provided, match **each** letter in **Column X** with the number of its pair in **Column Y**. One pair has been completed for you.

Column X		Column Y		X	Y
<b>A</b>	○ 159 743	<b>1</b>	Spot Height	<b>A</b>	2
<b>B</b>	○ 071 773	<b>2</b>	Golf Course	<b>B</b>	4
<b>C</b>	○ 152 715	<b>3</b>	Road Junction	<b>C</b>	1
<b>D</b>	○ 092 780	<b>4</b>	Reservoir	<b>D</b>	3

20. AERIAL PHOTOGRAPH AND ORDNANCE SURVEY

Examine the aerial photograph and the Ordnance Survey map supplied (see page xxx).

Use the Ordnance Survey map to give the grid reference of the bridge shown in the right background of the photograph.

0098 754