| Surname | Centre Number | Candidate Number |
|---|---|---|
| First name(s) | | 0 |

**GCSE**

C112U10-1

O21-C112U10-1

**WEDNESDAY, 17 NOVEMBER 2021 – AFTERNOON**

# 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** | |

C112U101
01

### 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***(d)*.

OCT21C112U10101

© WJEC CBAC Ltd.

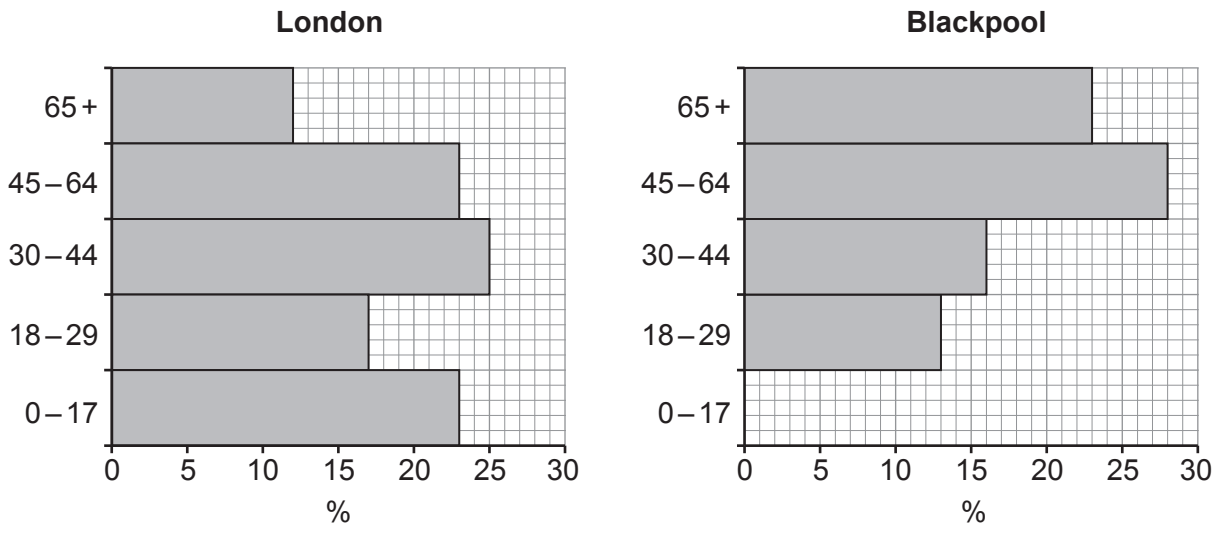
Examiner only

## Theme 1: Changing Places – Changing Economies

*Answer* **all** *questions.*

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

**Figure 1.1 – Age structure of two UK urban areas.**




(i) Complete the graph for Blackpool by drawing the bar to show the following: [1]

| | |
|---|---|
| 0 – 17 yr olds | 20% |

(ii) Compare the age structure of London and Blackpool. Use figures in your answer. [3]

.....

.....

.....

.....

.....

.....



© WJEC CBAC Ltd.

Examiner only

(iii) There are a number of processes that contribute to urban change in the UK.

Read the definitions below.

| Letter | Definition |
|---|---|
| A | The outward spread of a city |
| B | The movement of people from large cities to small towns and villages |
| C | The reuse of derelict land in a city |
| D | The movement of people back to cities |

Add the letter of the correct definition to each of the following terms below. [4]

| Term | Letter |
|---|---|
| Suburbanisation | |
| Re-urbanisation | |
| Counterurbanisation | |
| Infill | |

(iv) Over 33% of London's population are international migrants.

Explain why international migration can have social and economic consequences for urban areas in the UK. [4]

.....

.....

.....

.....

.....

.....

.....

.....

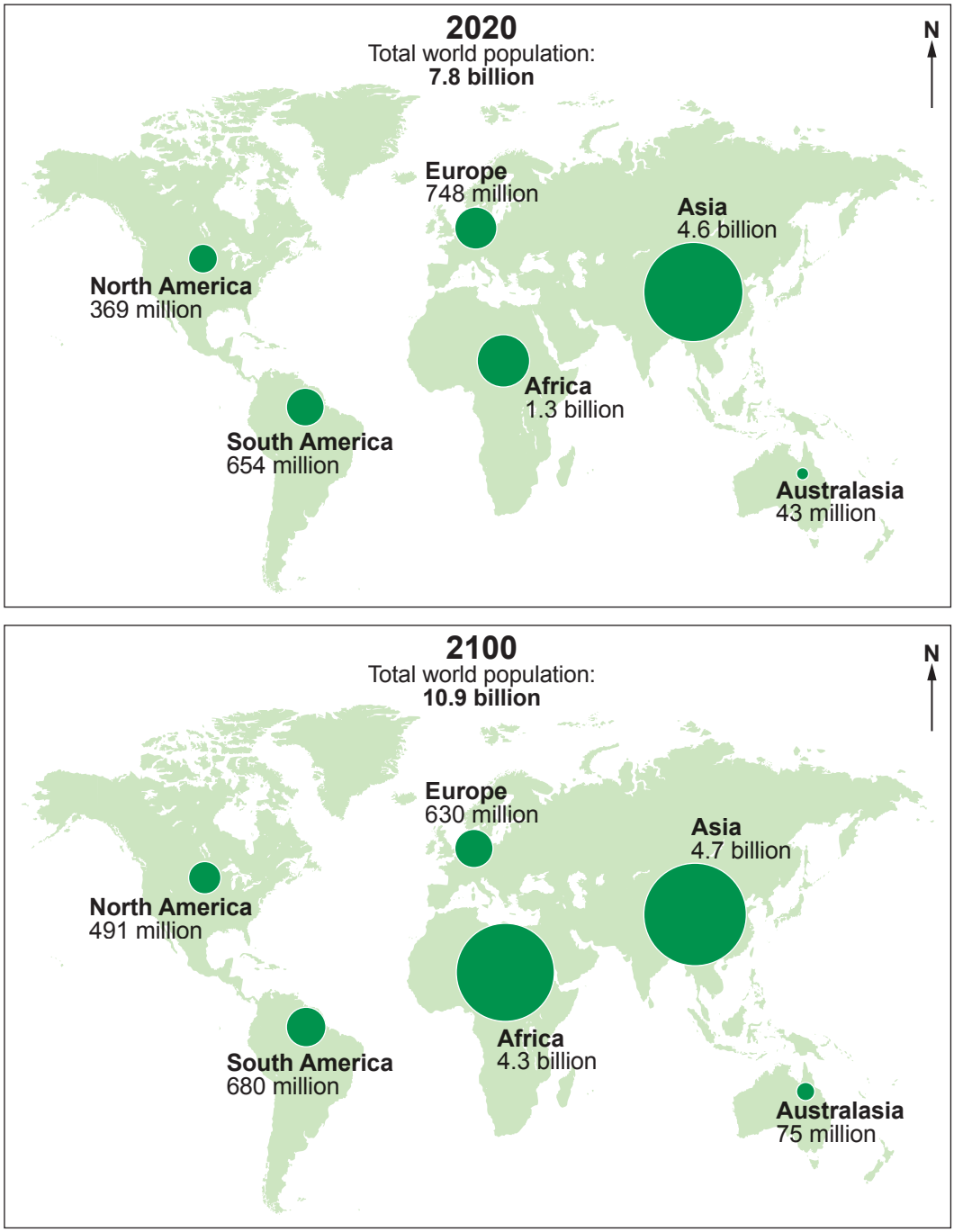
C112U101 03



© WJEC CBAC Ltd.

*(b)* Urbanisation has contributed to population change on a global scale. Study **Figure 1.2** below.

**Figure 1.2 – Estimated changes in world population between 2020 and 2100.**





© WJEC CBAC Ltd.

Examiner only

(i) Complete the sentences by adding the correct information from the box below. [2]

| | | |
|---|---|---|
| **3.6** | **Europe** | **7.8** |
| **Asia** | **3.1** | **North America** |

By 2100, the world's population will have increased by ..... billion.

The continent which will have a decrease in population is .....

(ii) Calculate the percentage change in the population of Australasia between 2020 and 2100. [2]

Show your working below.

Answer ..... %

C112U101 05



© WJEC CBAC Ltd.

Examiner only

*(c)* (i) Rapid urbanisation is taking place in some parts of the world. Give **two** reasons why. [4]

Reason 1

.....

.....

.....

.....

Reason 2

.....

.....

.....

.....

(ii) One challenge of urban growth is waste disposal.

Describe how **one** global city you have studied is dealing with the problem of waste disposal. [4]

Name of global city .....

.....

.....

.....

.....

.....

.....

.....

.....



© WJEC CBAC Ltd.

*(d)* Both slum clearance and self-help schemes are possible solutions to housing problems in LICs/NICs.

Study **Figure 1.3** below.

**Figure 1.3 – Slum clearance and self-help housing schemes.**

SLUM CLEARANCE SCHEMES

Clearing slums in China

Low-cost housing replacing slums in India

SELF-HELP SCHEMES

Self-help house building in Kenya

House built with loan in Cambodia



© WJEC CBAC Ltd.

Examiner only

Do you consider slum clearance schemes or self-help schemes to be the better option? Justify your choice.

Refer to both types of scheme in your answer. [8]

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



© WJEC CBAC Ltd.

Examiner only

.....

.....

.....

.....

.....

.....

.....

Additional space for **1***(d)* only:

.....

.....

.....

.....

.....

.....

**End of Question 1**

C112U101 09



© WJEC CBAC Ltd.

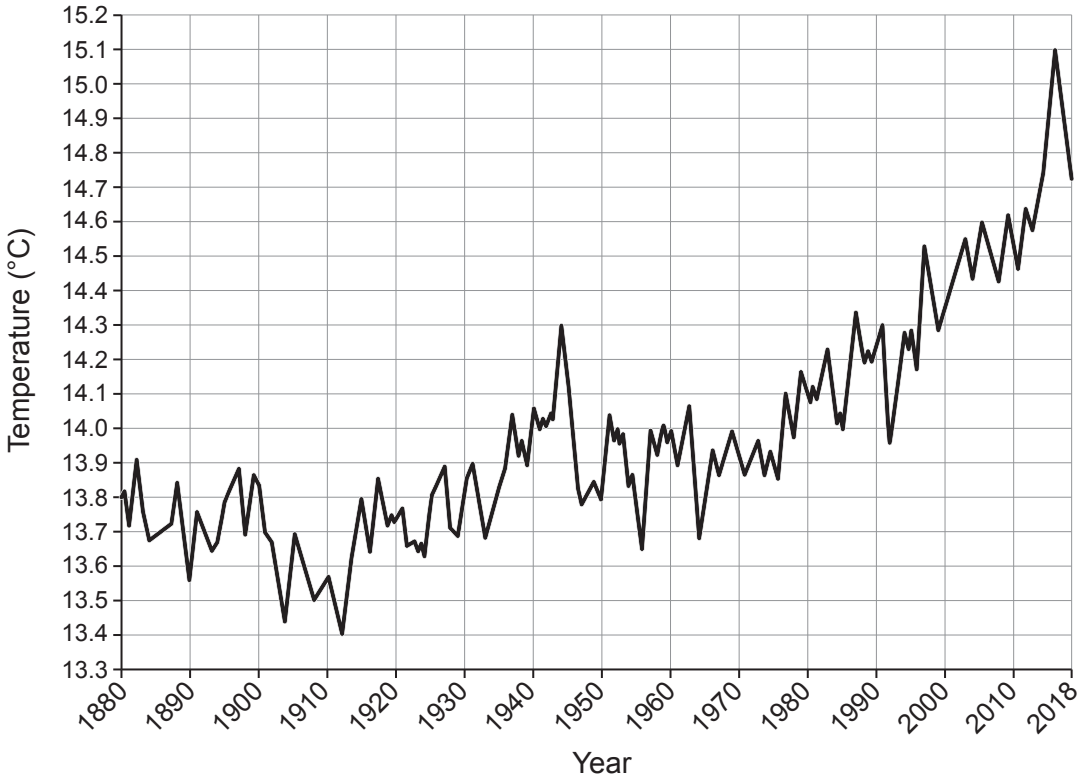
Examiner only

## Theme 2: Changing Environments

*Answer* **all** *questions.*

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

**Figure 2.1 – Average global temperature change 1880 – 2018.**




(i) Describe the pattern of temperature change shown on **Figure 2.1**. Use figures in your answer. [4]

.....

.....

.....

.....

.....

.....

.....

.....



© WJEC CBAC Ltd.

Examiner only

(ii) Describe **one** human cause of global warming. [2]

.....

.....

.....

(iii) Give **two** reasons why it is difficult to get agreement on ways to reduce the impact of climate change. [4]

Reason 1

.....

.....

.....

.....

Reason 2

.....

.....

.....

.....

(iv) Give **four** ways individuals in the UK can reduce the risk of climate change. [4]

1. .....

2. .....

3. .....

4. .....

C112U101 11



© WJEC CBAC Ltd.

Examiner only

(v) The UK Government can also reduce the risk of climate change.

**Tick (✓) two** correct statements from the list below. [2]

| To reduce the risk of climate change the government can: | Tick (✓) |
|---|---|
| Encourage the use of fossil fuels | |
| Increase the cost of public transport | |
| Increase the tax on air travel | |
| Build more roads | |
| Invest in renewable sources of energy | |

*(b)* Study **Figure 2.2** which shows information about how severe tropical storms (hurricanes and cyclones) are measured.

**Figure 2.2 – Saffir-Simpson Hurricane Scale.**

| Category | Wind speed (km per hour) | Likely damage | Average frequency of storms in every 10 years affecting USA |
|---|---|---|---|
| **5** | 252+ | **Catastrophic** | 0.2 |
| **4** | 209 – 251 | **Extreme** | 1.2 |
| **3** | 178 – 208 | **Extensive** | 4.6 |
| **2** | 154 – 177 | **Moderate** | 4.7 |
| **1** | 119 – 153 | **Little** | 7.1 |

(i) Describe the relationship between the category of storm and the frequency with which they have occurred. [2]

.....

.....

.....

.....



© WJEC CBAC Ltd.

Examiner only

(ii) Study **Figure 2.3** below. It shows the number of Category 5 storms that have occurred globally between 2010 and 2018.

**Figure 2.3 – Global Category 5 Storms 2010-2018.**

| Year | Number of Category 5 Storms |
|---|---|
| 2010 | 4 |
| 2011 | 3 |
| 2012 | 3 |
| 2013 | 4 |
| 2014 | 9 |
| 2015 | 9 |
| 2016 | 8 |
| 2017 | 3 |
| 2018 | 11 |
| **Total** | **54** |

Calculate the **mean** number of Category 5 storms that have occurred between 2010 and 2018. [2]

Show your working below.

Mean number of Category 5 storms = .....

(iii) Increased frequency of storms leads to management challenges in coastal areas. Explain why. [4]

.....

.....

.....

.....

.....

.....

.....

.....

C112U101 13



© WJEC CBAC Ltd.

*(c)* Study the information in **Figure 2.4** below.

**Figure 2.4 – The effects of Cyclone Idai which affected the African countries of Mozambique, Zimbabwe and Malawi in March 2019.**

Flooded farmland after the storm

**Tropical Cyclone Idai**

Some emergency aid arrives

Damaged bridge

**Effects of Cyclone Idai**

447 deaths

1.85 million people in need of aid

72 000 houses damaged or destroyed

1.2 million acres of crops damaged

Diseases such as cholera and malaria widespread



© WJEC CBAC Ltd.

Examiner only

'The impacts of tropical storms like Cyclone Idai affect all groups of people equally.'
How far do you agree with this statement? [8]



© WJEC CBAC Ltd.

Examiner only

.....

.....

.....

.....

.....

Additional space for **2***(c)* only:

.....

.....

.....

.....

.....

.....

**End of Question 2**



© WJEC CBAC Ltd.

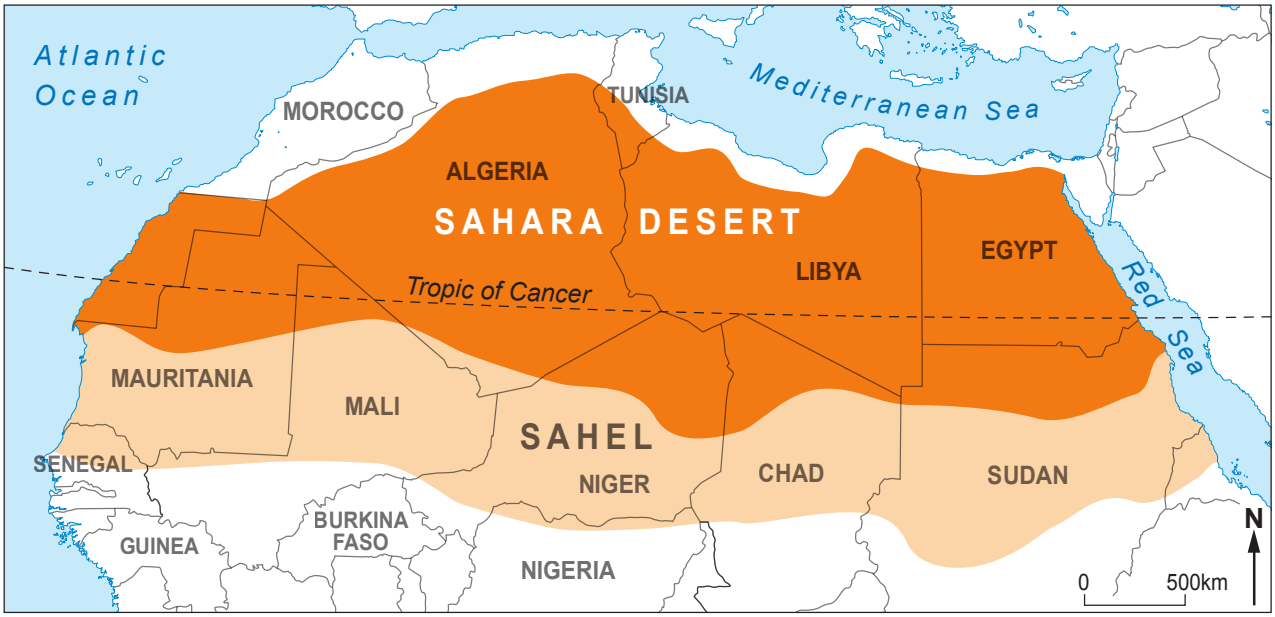
Examiner only

## Theme 3: Environmental Challenges

*Answer* **all** *questions.*

**3.** *(a)* Study **Figure 3.1** below.

**Figure 3.1 – Location of the Sahel Region of Africa.**




**Key:** Sahara Desert Sahel

(i) Use the information in **Figure 3.1**. **Tick (✓)** the **two** correct facts about the location of the Sahel in the table below. [2]

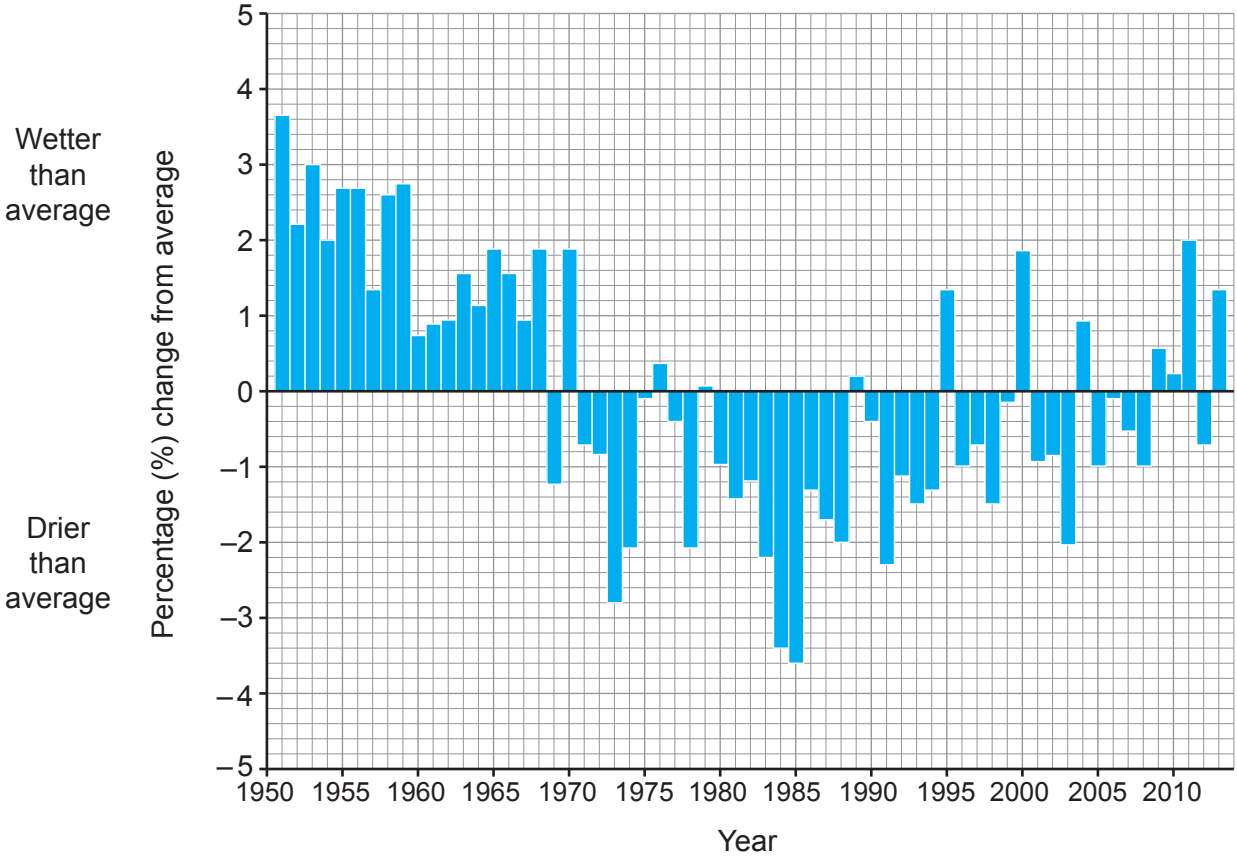
| Facts about the location of the Sahel | Tick (✓) |
|---|---|
| North of the Tropic of Cancer | |
| South of the Sahara Desert | |
| Extends from the Atlantic Ocean to the Mediterranean Sea | |
| Includes parts of Mali, Chad and Egypt | |
| North of Burkina Faso | |
| South of Nigeria | |


© WJEC CBAC Ltd.

Examiner only

(ii) Study **Figure 3.2** below.

**Figure 3.2 – Graph showing variations in rainfall in the Sahel 1950 – 2013.**




Use **Figure 3.2** to decide if each of the statements below is **true** or **false**. [4]

| Statement | True Tick (✓) | False Tick (✓) |
|---|---|---|
| 1950 – 1959 was the wettest 10-year period | | |
| 1970 – 1979 was the driest 10-year period | | |
| In 2013, rainfall was higher than average | | |
| Between 2000 and 2009 rainfall was mostly lower than average | | |



© WJEC CBAC Ltd.

Examiner only

*(b)* Desertification is caused by both physical and human actions.

(i) Complete the sentences below by adding the correct words from the box. [4]

| | | | | |
|---|---|---|---|---|
| **moisture** | **deposition** | **nutrient** | **evaporated** | **erosion** |
| **intercepted** | **management** | **condensed** | **salt** | |

Increases in temperature mean more rainfall is ..... which means that less ..... is retained in the soil. If trees are cut down, then the ..... cycle is broken and the roots no longer hold the soil together. This increases the process of .....

(ii) Explain why overgrazing can lead to desertification. [4]

.....

.....

.....

.....

.....

.....

.....

.....

(iii) Drip irrigation is used in areas vulnerable to desertification.
Describe how drip irrigation works. [4]

.....

.....

.....

.....

.....

.....

.....

.....

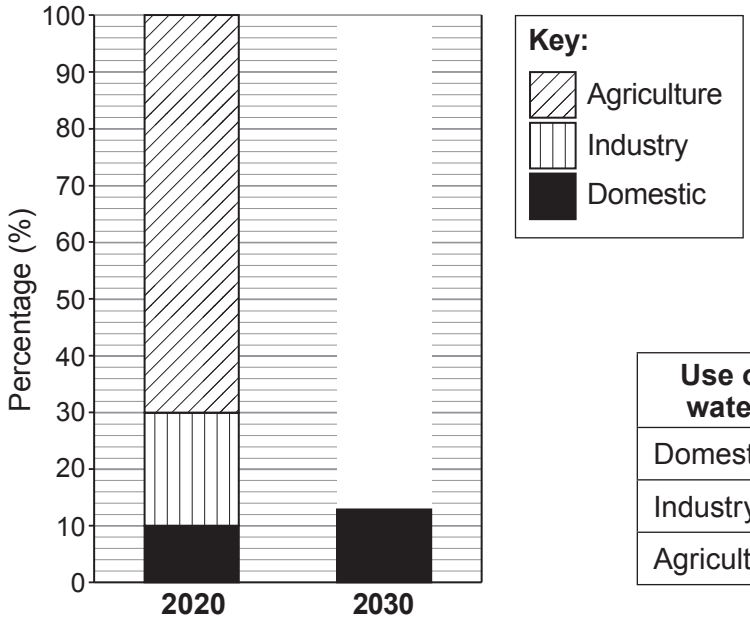


© WJEC CBAC Ltd.

Examiner only

*(c)* Study **Figure 3.3** below.

**Figure 3.3 – Graph to show predicted changes in the global use of water between 2020 and 2030.**




| Use of water | 2020 % | 2030 % |
|---|---|---|
| Domestic | 10 | 13 |
| Industry | 20 | 33 |
| Agriculture | 70 | 54 |

(i) Use the information in the table to complete the graph for 2030. [2]

(ii) Give **two** reasons why economic growth leads to an increased demand for water. [4]

Reason 1

.....

.....

.....

.....

Reason 2

.....

.....

.....

.....



© WJEC CBAC Ltd.

Examiner only

*(d)* Study the resources in **Figure 3.4** below. The Mekong river crosses six countries.

**Figure 3.4 – Water Management on the Mekong River.**

Dams along the Mekong River

Dam producing electricity in Laos

Fishing near the mouth of the Mekong River in Vietnam

**Evaluate** the impacts of water management across national boundaries.

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



© WJEC CBAC Ltd.

Examiner only

Additional space for **3***(d)* only:



© WJEC CBAC Ltd.

Examiner only

.....

.....

**End of Question 3**

**END OF PAPER**



© WJEC CBAC Ltd.

# BLANK PAGE

# PLEASE DO NOT WRITE ON THIS PAGE


© WJEC CBAC Ltd.

| Question number | Additional page, if required.<br>Write the question number(s) in the left-hand margin. |
|---|---|
| | |

Examiner only



© WJEC CBAC Ltd.

| Question number | Additional page, if required.<br>Write the question number(s) in the left-hand margin. | Examiner only |
|---|---|---|
| | | |



© WJEC CBAC Ltd.

# BLANK PAGE

# PLEASE DO NOT WRITE ON THIS PAGE



© WJEC CBAC Ltd.

# BLANK PAGE

# PLEASE DO NOT WRITE ON THIS PAGE


© WJEC CBAC Ltd.