



Oxford Cambridge and RSA

# GCSE (9–1) Geography B

## J386/03 Geographical Exploration

### Sample Resource Booklet

This qualification is in draft form and has not yet been accredited by The Regulator, Ofqual. It is published to enable teachers to have an early sight of our proposed approach to this qualification. Further changes may be required and no assurance can be given at this time that the proposed qualification will be made available in its current form, or that it will be accredited in time for first teaching in 2025.

Time allowed: 1 hour 30 minutes

#### INSTRUCTIONS

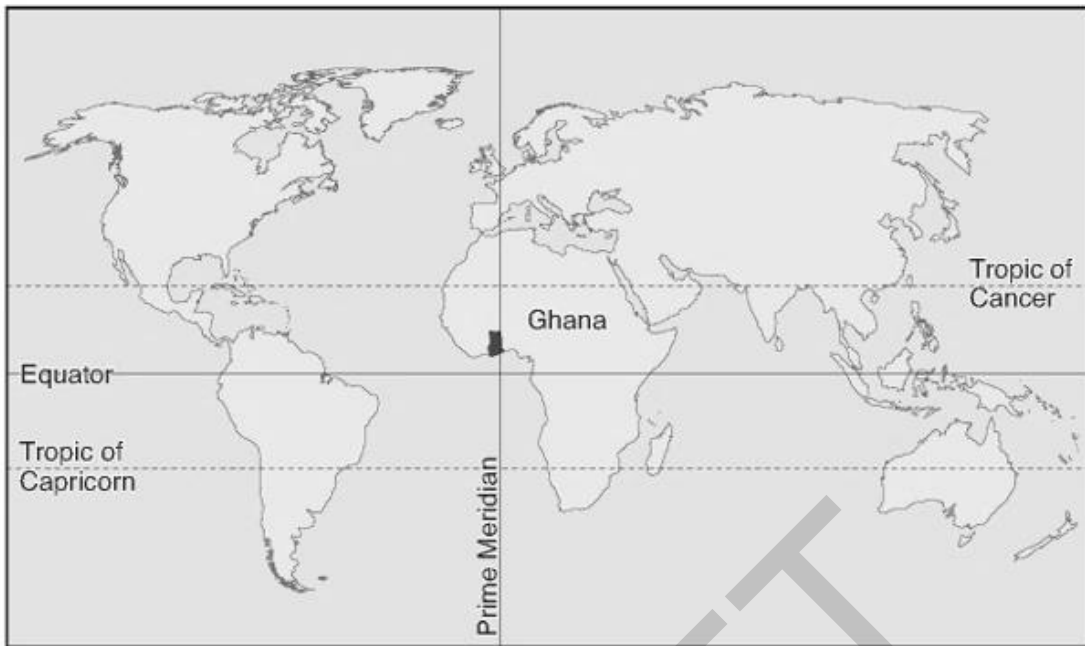
- Do not send this Resource Booklet for marking. Keep it in the centre or recycle it.

#### INFORMATION

- This document has 8 pages.

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**Fig 1.1 Location of The Republic of Ghana**



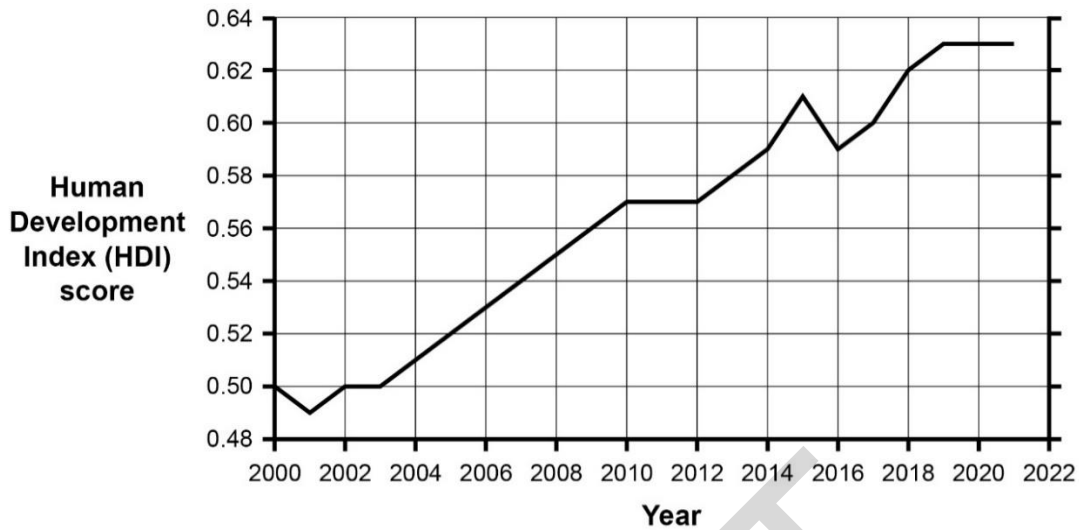
**Fig 1.2**

**Figure 1.2** is a political map of Ghana showing its location and surrounding countries. The map is taken from the website *Exploring Africa*, a resource produced by the African Studies Center at Michigan State University. This item has been removed due to third party copyright restrictions.

The map can be found using the following link: [Exploring Africa \(msu.edu\)](http://Exploring Africa (msu.edu))

The map shows the country's borders, surrounding countries, urban centres, coasts, lakes and rivers. The capital city 'Accra' is labelled in bold to indicate that it is the capital city. The scale of the map is shown in miles and kilometres.

### Human Development Index (HDI) score



**Fig. 3 Unemployment rate for Ghana by percentage (%), from 2000 to 2020**

The unemployment rate is an economic measure of development. It is the percentage of a country's labour force that are without work.

Year	Percentage (%)
2000	10.46
2005	5.61
2010	5.38
2015	6.81
2020	3.77

**Fig. 4 The President of Ghana's speech about the country's development from 2020 to 2024. The President was speaking to Parliament about social and economic progress.**

Despite a financial crisis in 2021, we have seen growth in our economy from 2022-2024.

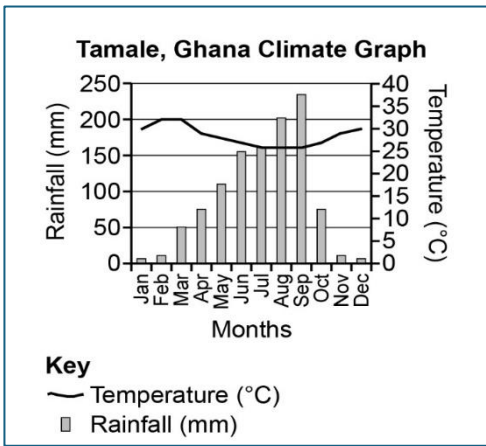
We have reduced extreme poverty; however, development gains are unevenly distributed.

There are still challenges with inequality in poverty and nutrition, but we have targeted zero hunger by supporting farmers.

There have been improvements in infrastructure, particularly transport, access to water, sanitation, hospitals, and schools. We continue to make information digital so that we have records in schools, hospitals, and government.

Thank you for listening. (President Nana Addo Dankwa Akufo-Addo)

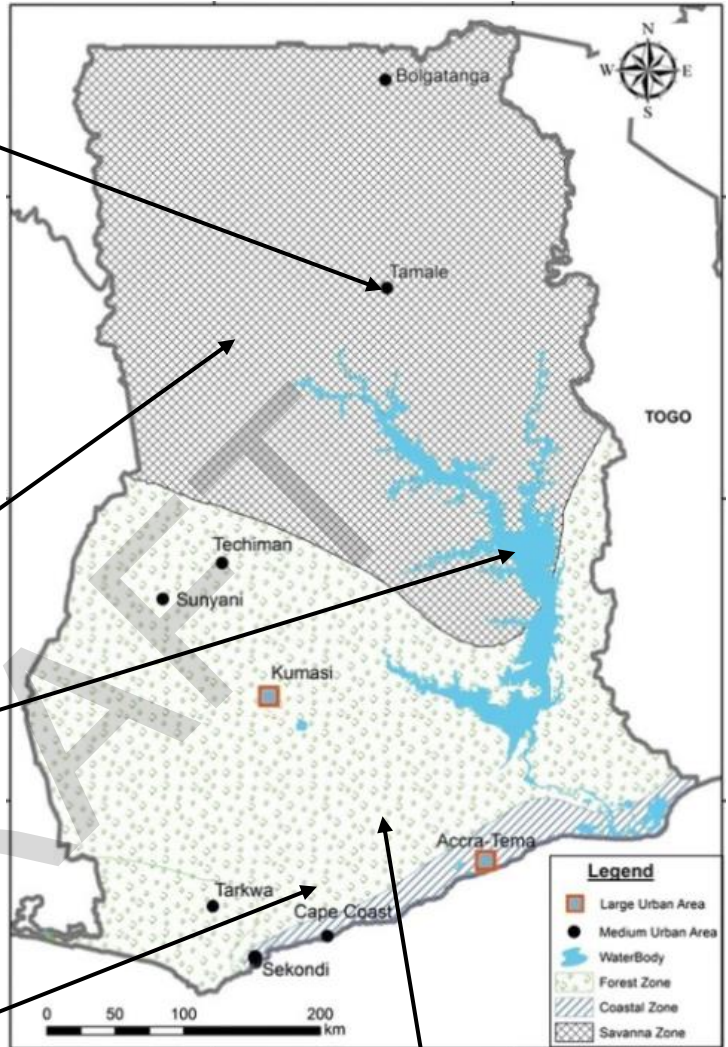
**Fig. 5** This factfile about Ghana, includes a map of the main ecosystem areas with information boxes, a climate graph for Tamale and a photograph showing a rainforest area.



**Savannah zone:** Hot and dry area with low yearly rainfall.  
 Vegetation is mostly grassland and drought resistant trees.

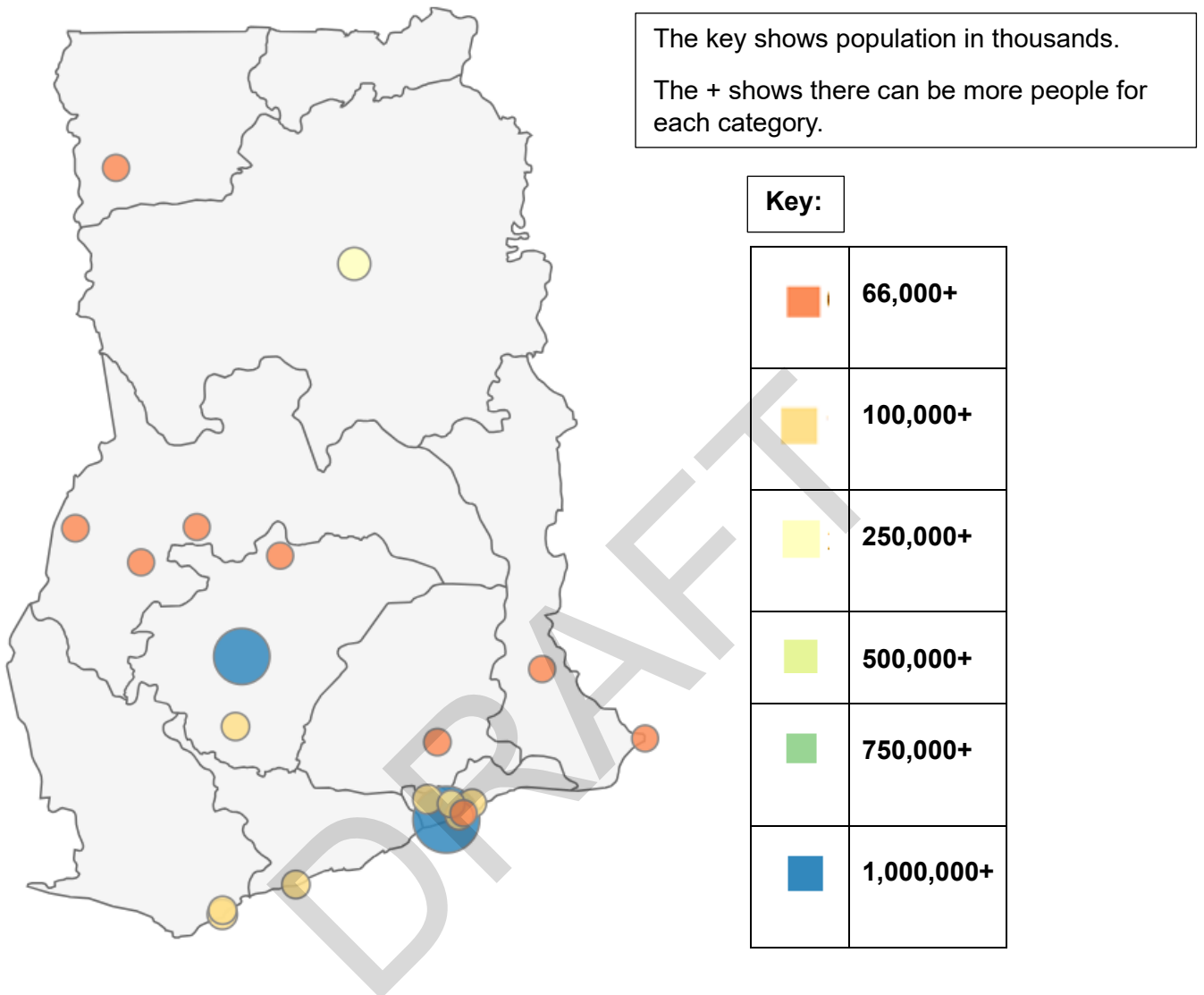
**Lake Volta** is an artificial lake, covering about 3.5% of Ghana's land area. Important for fishing. Water is used for farming in the drier Accra & Tema area.

This is a tropical rainforest area called Kakum National Park.

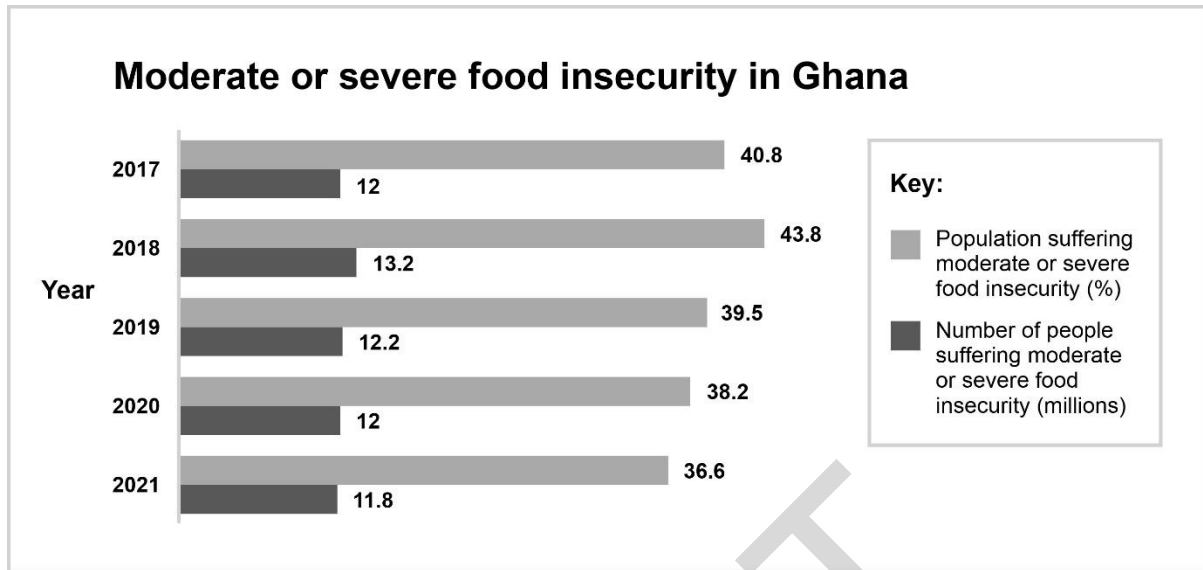


**Forest zone:** rainfall happens through the year with no dry season.  
 Tropical rainforest can be found in the southern area near Cape coast.

**Fig 6. A map of Ghana's urban population density**



**Fig. 7 Graph showing moderate or severe food insecurity in Ghana**



**Fig. 8 Summary of the Dawadawa initiative in Ghana to help farmers become more food secure**

This initiative is owned and led by small farmers. Farmers can now access affordable farming equipment, products, and services to maintain the quality of what they produce. The amount of food they produce has increased and the cost of doing this has decreased.

An innovation has been the use of food waste to produce compost which fertilises the crops, this is a sustainable approach as it provides jobs for local people and reduces hunger as there is more food available.

Once farmers have produced crops, they can access training and services on packaging, cool storage and transportation, food safety and marketing. Farmers can sell their crops both locally and globally, improving their access to income.

Solar powered cooling rooms enable smallholder farmers to extend the life of their crops and reduce their losses by up to 90%.

**Fig. 9 Land use changes in the capital city of Accra**

Land use	1991 Area (km <sup>2</sup> )	2011 Area (km <sup>2</sup> )	2018 Area (km <sup>2</sup> )
Dense vegetation	52.18	30.08	19.61
Water	3.22	1.68	0.084
Built-up area	77.08	103.94	117.21

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Human Development Index Score of Ghana, 2000 to 2021', <https://www.statista.com/statistics/124455/human-development-index-of-ghana/>, copyright © Statista 2024

Ghana Unemployment rate from 1999 to 2023', <https://www.statista.com/statistics/808481/unemployment-rate-in-ghana/> copyright © Statista 2024

Image ID: KJ3N84 Felix Lipov / Alamy Stock Photo

Graph from Ghana: Inequalities in Food Insecurity <https://reliefweb.int/report/ghana/ghana-inequalities-food-insecurity>, December 2023, copyright © Cooperative for Assistance and Relief Everywhere, Inc. (CARE)

Map adapted from Ghana's population density, Ghana Population 2024, <https://worldpopulationreview.com/countries/ghana-population>. Reproduced with permission of World Population Review

Extract adapted from "Dawadawa impact initiative, a solution to the food crisis in Ghana", 24/04/2023, <https://farmersreviewafrica.com/dawadawa-impact-initiative-a-solution-to-the-food-crisis-in-ghana/>. Reproduced with permission

Data from "Exploring the impacts of urban expansion on green spaces availability and delivery of ecosystem services in the Accra metropolis" by Dzifa Adimle Puplampu, Yaw Agyeman Bofo, Environmental Challenges, Elsevier B.V. December 2021, copyright © Dzifa Adimle Puplampu, Yaw Agyeman Bofo, 2021

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## Sample Question Paper

### GCSE Geography B

J386/03 Geographical Exploration

Time allowed: 1 hour 30 minutes

**You must have:**

- the Resource Booklet (inside the document)

**You can use:**

- a ruler (cm/mm)
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s) \_\_\_\_\_

Last name \_\_\_\_\_

#### INSTRUCTIONS

- Use black ink. You may use an HB pencil for graphs and diagrams.
- Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.
- Where appropriate, your answer should be supported with working. Marks might be given for using a correct method, even if your answer is wrong.

#### INFORMATION

- The total mark for this paper is **60**.
- The marks for each question are shown in brackets [ ].
- Quality of extended responses will be assessed in questions marked with an asterisk (\*).
- Spelling, punctuation and grammar and the use of specialist terminology (SPaG) will be assessed in questions marked with a pencil (✎).
- This document has **12** pages.

#### ADVICE

- Read each question carefully before you start your answer.

1

(a) Look at **Fig. 1.1 and 1.2**, showing the location of the Republic of Ghana.

Complete the sentences to describe the location of Ghana.

Ghana is north of the equator. It is located in the continent of \_\_\_\_\_. Ghana has countries on three of its borders. Togo is \_\_\_\_\_ of Ghana.

[2]

(b) Look at **Fig. 2**, showing Human Development Index (HDI) data.

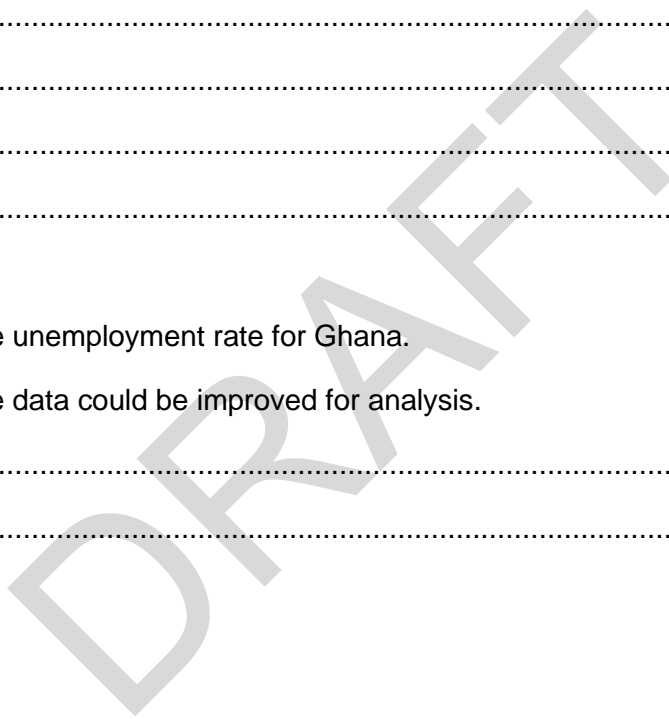
Describe how Ghana's HDI has changed between 2000 and 2021.

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.....  
.....  
..... [2]

(c) Look at **Fig. 3**, the unemployment rate for Ghana.

State **one** way the data could be improved for analysis.

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..... [1]



(d) Use **Fig. 4**, the President of Ghana's speech.

Suggest how the President's speech shows bias about the development of Ghana.

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..... [1]

(e)\* Use **Figs. 2, 3 and 4** and your own understanding.

Explain Ghana's progress towards **one** Sustainable Development Goal.

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2

(a) Look at **Fig. 5**, the Tamale climate graph.

The statements describe the climate of Tamale.

Complete the table to show whether each statement is true or false.

Climate of Tamale	True or false
The temperature is high all year, averaging 29°C.	
The temperature is low all year, averaging 15°C.	
There is rainfall throughout the year, with the lowest amounts of rainfall between June and September.	
There is rainfall throughout the year, with the highest amounts of rainfall between June and September.	

[2]

(b) Use **Figs. 1.1 and 5**, and your own understanding.

Suggest why tropical rainforests can be found in Ghana.

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..... [4]

(c) Look at **Fig. 6**, a map of Ghana's population density, which is the number of people living in a particular area.

Outline what the map shows for population density in Ghana.

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..... [2]



3

(a) Explain **one** physical factor influencing food security.

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..... [2]

(b) Look at **Fig. 7**, a graph of moderate or severe food insecurity.

State a prediction about future levels of food insecurity in Ghana and give a reason for your answer.

Prediction.....  
Reason .....  
..... [2]

(c) Look at **Fig. 8**, describe **three** ways the Dawadawa project in Ghana, has made farmers more food secure.

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[3]

**(d)\*** Use **Figs. 1 to 8** and your own understanding.

To what extent is physical geography the cause of food insecurity in Ghana?

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[9]

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4

(a) Look at **Fig. 9** calculate the growth in land use of built-up areas.

Built-up area = ..... sq. km **[2]**

(b) State **and** explain **two** challenges that affect life in cities such as Accra.

1 State .....

1 Explain.....

.....

2 State .....

2 Explain .....

.....

**[4]**

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**Sample Mark Scheme**

**GCSE Geography B**

**J386/03 Geographical Exploration**

MARK SCHEME

Duration: 1 hour 30 minutes

MAXIMUM MARK 60

Version:

Last updated:

(FOR OFFICE USE ONLY)

**This document has 24 pages**

## MARKING INSTRUCTIONS

### PREPARATION FOR MARKING

#### RM ASSESSOR

1. Make sure that you have accessed and completed the relevant training packages for on-screen marking: *RM Assessor Online Training*; *OCR Essential Guide to Marking*.
2. Make sure that you have read and understood the mark scheme and the question paper for this unit. These are posted on the RM Cambridge Assessment Support Portal <http://www.rm.com/support/ca>
3. Log-in to RM Assessor and mark the **required number** of practice responses (“scripts”) and the **number of required** standardisation responses.

YOU MUST MARK 10 PRACTICE AND 10 STANDARDISATION RESPONSES BEFORE YOU CAN BE APPROVED TO MARK LIVE SCRIPTS.

### MARKING

1. Mark strictly to the mark scheme.
2. Marks awarded must relate directly to the marking criteria.
3. The schedule of dates is very important. It is essential that you meet the RM Assessor 50% and 100% (traditional 40% Batch 1 and 100% Batch 2) deadlines. If you experience problems, you must contact your Team Leader (Supervisor) without delay.
4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone or the RM Assessor messaging system, or by email.
5. **Crossed Out Responses**  
Where a candidate has crossed out a response and provided a clear alternative then the crossed out response is not marked. Where no alternative response has been provided, examiners may give candidates the benefit of the doubt and mark the crossed out response where legible.

**Rubric Error Responses – Optional Questions**

Where candidates have a choice of question across a whole paper or a whole section and have provided more answers than required, then all responses are marked and the highest mark allowable within the rubric is given. Enter a mark for each question answered into RM assessor, which will select the highest mark from those awarded. *(The underlying assumption is that the candidate has penalised themselves by attempting more questions than necessary in the time allowed.)*

**Multiple Choice Question Responses**

When a multiple choice question has only a single, correct response and a candidate provides two responses (even if one of these responses is correct), then no mark should be awarded (as it is not possible to determine which was the first response selected by the candidate).

*When a question requires candidates to select more than one option/multiple options, then local marking arrangements need to ensure consistency of approach.*

**Contradictory Responses**

When a candidate provides contradictory responses, then no mark should be awarded, even if one of the answers is correct.

**Short Answer Questions** (requiring only a list by way of a response, usually worth only **one mark per response**)

Where candidates are required to provide a set number of short answer responses then only the set number of responses should be marked. The response space should be marked from left to right on each line and then line by line until the required number of responses have been considered. The remaining responses should not then be marked. Examiners will have to apply judgement as to whether a 'second response' on a line is a development of the 'first response', rather than a separate, discrete response. *(The underlying assumption is that the candidate is attempting to hedge their bets and therefore getting undue benefit rather than engaging with the question and giving the most relevant/correct responses.)*

**Short Answer Questions** (requiring a more developed response, worth **two or more marks**)

If the candidates are required to provide a description of, say, three items or factors and four items or factors are provided, then mark on a similar basis – that is downwards (as it is unlikely in this situation that a candidate will provide more than one response in each section of the response space.)

**Longer Answer Questions** (requiring a developed response)

Where candidates have provided two (or more) responses to a medium or high tariff question which only required a single (developed) response and not crossed out the first response, then only the first response should be marked. Examiners will need to apply professional judgement as to whether the second (or a subsequent) response is a 'new start' or simply a poorly expressed continuation of the first response.

6. Always check the pages (and additional objects if present) at the end of the response in case any answers have been continued there. If the candidate has continued an answer there, then add a tick to confirm that the work has been seen.

7. Award No Response (NR) if:
- there is nothing written in the answer space

Award Zero '0' if:

- anything is written in the answer space and is not worthy of credit (this includes text and symbols).

Team Leaders must confirm the correct use of the NR button with their markers before live marking commences and should check this when reviewing scripts.

8. The RM Assessor **comments box** is used by your team leader to explain the marking of the practice responses. Please refer to these comments when checking your practice responses. **Do not use the comments box for any other reason.**  
If you have any questions or comments for your team leader, use the phone, the RM Assessor messaging system, or e-mail. **Do not refer to any confidential content in email.**
9. Assistant Examiners will send a brief report on the performance of candidates to their Team Leader (Supervisor) via email by the end of the marking period. The report should contain notes on particular strengths displayed as well as common errors or weaknesses. Constructive criticism of the question paper/mark scheme is also appreciated.
10. For answers marked by levels of response:  
Read through the whole answer from start to finish, using the Level descriptors to help you decide whether it is a strong or weak answer. The indicative content in the Guidance column indicates the expected parameters for candidates' answers, but be prepared to recognise and credit unexpected approaches where they show relevance. Using a 'best-fit' approach based on the skills and geographical content evidenced within the answer, first decide which set of level descriptors, Level 1, Level 2 or Level 3 (or Level 4), best describes the overall quality of the answer.  
Once the level is located, award the higher or lower mark:  
**The higher mark** should be awarded where the level descriptor has been evidenced and all aspects of the communication statement (in italics) have been met.  
**The lower mark** should be awarded where the level descriptor has been evidenced but most of the aspects of the communication statement (in italics) are missing.  
In Level 4, where there are three marks in the level, the middle mark should be awarded where most of the aspects of the communication statement (in italics) have been met.

**In summary:**







**The skills and geographical content determines the level.**

**The communication statement determines the mark within a level.**

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## 11. Annotations

Annotation	Meaning
	Tick
	Cross
	Unclear
<b>BOD</b>	Benefit of the doubt
<b>IR</b>	Irrelevant
<b>L1</b>	Level one
<b>L2</b>	Level two
<b>L3</b>	Level three
<b>NAQ</b>	Not answered question
<b>OFR</b>	Own figure rule
<b>SEEN</b>	Noted but no credit given.
<b>TV</b>	Too vague
	Omission mark
<b>BP</b>	Blank page

**Highlighting** is also available to highlight any points on the script.

**BP** to be inserted on every blank page.

**SEEN** to be inserted in every question space where NR is the mark.

## 12. Subject Specific Marking Instructions

Levels of response	AO1	AO2	AO3	Quality of extended response
<b>Comprehensive</b>	A range of detailed and accurate knowledge that is fully relevant to the question.	A range of detailed and accurate understanding that is fully relevant to the question.	Detailed and accurate interpretation through the application of relevant knowledge and understanding. Detailed and accurate analysis through the application of relevant knowledge and understanding. Detailed and substantiated evaluation through the application of relevant knowledge and understanding. Detailed and substantiated judgement through the application of relevant knowledge and understanding.	There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.
<b>Thorough</b>	A range of accurate knowledge that is relevant to the question.	A range of detailed and accurate understanding that is relevant to the question.	Accurate interpretation through the application of relevant knowledge and understanding. Accurate analysis through the application of relevant knowledge and understanding. Supported evaluation through the application of relevant knowledge and understanding. Supported judgement through the application of relevant knowledge and understanding.	There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.
<b>Reasonable</b>	Some knowledge that is relevant to the question.	Some understanding that is relevant to the question.	Some accuracy in interpretation through the application of relevant knowledge and understanding. Some accuracy in analysis through the application of relevant knowledge and understanding. Partially supported evaluation through the application of relevant knowledge and understanding. Partially supported judgement through the application of relevant knowledge and understanding.	The information has some relevance and is presented with limited structure. The information is supported by limited evidence.

<b>Basic</b>	Limited knowledge that is relevant to the topic or question.	Limited understanding that is relevant to the question.	<p>Limited accuracy in interpretation through the application of relevant knowledge and understanding.</p> <p>Limited accuracy in analysis through the application of relevant knowledge and understanding.</p> <p>Un-supported evaluation through the application of relevant knowledge and understanding.</p> <p>Un-supported judgement through the application of relevant knowledge and understanding.</p>	<p>The information is basic and communicated in an unstructured way.</p> <p>The information is supported by limited evidence and the relationship to the evidence may not be clear.</p>
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Question		Answer	Mark	Guidance
1	(a)	(i)		
1	(a)	(i)		
1	(b)			
1	(c)			
1	(d)			
1	(e)*			

Question	Answer	Mark	Guidance
	<p>This will be shown by including <b>well-developed</b> ideas about Ghana's progress towards one sustainable development goal.</p> <p><i>There is a <b>well-developed</b> line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> <p><b>Level 2 (3–4 marks)</b> An answer at this level demonstrates <b>reasonable</b> understanding of sustainable development goals (AO2) and a <b>reasonable</b> analysis of information provided to show Ghana's progress towards one sustainable development goal (AO3).</p> <p>This will be shown by including <b>developed</b> ideas about Ghana's progress towards one sustainable development goal.</p> <p><i>There is a line of reasoning which is clear and logically structured. The information presented is in the most-part relevant and supported by some evidence.</i></p> <p><b>Level 1 (1–2 marks)</b> An answer at this level demonstrates <b>basic</b> understanding of sustainable development goals (AO2) and <b>basic</b> analysis of information provided to show Ghana's progress towards one sustainable development goal (AO3). This will be shown by including <b>simple</b> ideas about Ghana's progress towards one sustainable development goal.</p>		<ul style="list-style-type: none"> <li>• Changes in Ghana will have improved life expectancy, health and quality of life such as access to clean water and sanitation as well as food supplies.</li> </ul> <p>The following SDGs would be relevant to discuss in relation to the figures:</p> <ul style="list-style-type: none"> <li>• SDG 1: No poverty</li> <li>• SDG 3: Good health and well-being</li> <li>• SDG 4: Quality education</li> <li>• SDG 6: Clean water and sanitation</li> <li>• SDG 8: Decent work and economic data</li> </ul> <p>Candidates can refer to any other relevant SDGs from their own understanding. This will depend on the case study they have studied.</p> <p>Examples of <b>well-developed</b> ideas: In Ghana the HDI score has been steadily increasing, this includes data on knowledge, e.g., mean years of schooling. Like many LIDCs, the government have focused on free primary and secondary school for students to access education. This will take time to improve, especially as there are people living in rural areas (northern and central Ghana) where access to schools could be difficult. The changes to unemployment rates in Ghana show that education levels are improving, as well as the availability of jobs. This will be more focused in city areas such as Accra.</p>

Question		Answer	Mark	Guidance
		<p><i>The information is <b>basic</b> and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the question may not be clear.</i></p> <p><b>0 marks</b> No response or no response worthy of credit.</p>		<p>Investment and improvements in infrastructure, including digital information require more skills, which can only be gained through education and training.</p> <p>Examples of <b>developed</b> ideas: In Ghana the HDI score has been steadily improving as the government wants children in primary and secondary schools. This will take time to improve, as lots of people live in the countryside and their life can be focused on farming. There are more jobs available, and people are taking them as they have better schooling. The city areas like Accra will have more jobs and transport to get there.</p> <p>Example of <b>simple</b> ideas: Children want to get a good job so going to school will help with this. The cities have lots of jobs so people will want to live there to get some money.</p>

Question		Answer		Mark	Guidance										
2	(a)	<table border="1"> <thead> <tr> <th>Climate of Tamale</th> <th>True or false</th> </tr> </thead> <tbody> <tr> <td>The temperature is high all year, averaging 29°C.</td> <td>T</td> </tr> <tr> <td>The temperature is low all year, averaging 15°C.</td> <td>F</td> </tr> <tr> <td>There is rainfall throughout the year, with the lowest amounts of rainfall between June and September.</td> <td>F</td> </tr> <tr> <td>There is rainfall throughout the year, with the highest amounts of rainfall between June and September.</td> <td>T</td> </tr> </tbody> </table>	Climate of Tamale	True or false	The temperature is high all year, averaging 29°C.	T	The temperature is low all year, averaging 15°C.	F	There is rainfall throughout the year, with the lowest amounts of rainfall between June and September.	F	There is rainfall throughout the year, with the highest amounts of rainfall between June and September.	T		2	2 x 1 (✓) for identifying the true statements.
Climate of Tamale	True or false														
The temperature is high all year, averaging 29°C.	T														
The temperature is low all year, averaging 15°C.	F														
There is rainfall throughout the year, with the lowest amounts of rainfall between June and September.	F														
There is rainfall throughout the year, with the highest amounts of rainfall between June and September.	T														
2	(b)	<p>Fig. 1.1 Ghana is close to the equator, tropical climate/ (✓)</p> <p>Fig 1.1 Ghana is between The Tropics of Cancer and Capricorn, high temperatures all year round. (✓)</p> <p>These locations receive more sunlight, which is intense and high temperatures lead to evaporation and frequent showers. (✓)</p> <p>The soil quality is poor but hot &amp; damp conditions help decomposition, making nutrients available. (✓)</p> <p>Coastal location, prevailing winds blow onshore bringing a wetter climate. (✓)</p>		4	4 x 1 (✓) using valid information from the figures and / or their own understanding.										
2	(c)	<p>Greater population densities in central and southern areas. (✓)</p> <p>Highest population densities, over 1 million people in central and coastal areas/ (✓)</p>		2	2 x 1 (✓) for valid patterns shown on the map.										



Question		Answer	Mark	Guidance
		Northern Ghana has the lowest population densities, with far fewer dots. (✓) The very lowest densities can be found scattered in the central area and the southeast. (✓)		
2	(d)*	<p><b>Reasons for Ghana's population distribution</b></p> <p><b>Level 3 (5-6 marks)</b> An answer at this level demonstrates a <b>thorough</b> understanding of population distribution (AO2). There will be a <b>thorough</b> evaluation of the information provided to show the reasons for Ghana's population distribution (AO3).</p> <p>This will be shown by including <b>well-developed</b> ideas about the reasons for Ghana's population distribution.</p> <p><i>There is a <b>well-developed</b> line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> <p><b>Level 2 (3-4 marks)</b> An answer at this level demonstrates a <b>reasonable</b> understanding of population distribution (AO2). There will be a <b>reasonable</b> evaluation of the information provided to show the reasons for Ghana's population distribution (AO3).</p> <p>This will be shown by including <b>developed</b> ideas about the reasons for Ghana's population distribution.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</i></p>	6	<p><b>Indicative content</b> This question is about linking the physical and human characteristics of Ghana to the spread of the population.</p> <p>Location of population.</p> <ul style="list-style-type: none"> <li>• Clear north—south divide in population; lower population densities in the north.</li> <li>• Majority of people located near the coast, specifically around Accra, the capital city.</li> <li>• Higher urban population density in southern central area .</li> <li>• Widely spread lower densities in central / southern areas.</li> </ul> <p>Physical Factors</p> <ul style="list-style-type: none"> <li>• Savanna grasslands in most of the north, so difficult to grow crops due to lack of rain.</li> <li>• Tropical rainforest shows a hot and wet climate.</li> <li>• Climate more favourable in the south in the forest zone. Wetter conditions from coastal area</li> </ul> <p>Human factors</p> <ul style="list-style-type: none"> <li>• Coast to the south, good for trade. Trade of crops grown down south and import of goods.</li> <li>• Capital city Accra in south, key area for jobs, resources and infrastructure.</li> <li>• Lake Volta provides water and food supplies to population.</li> </ul>

Question	Answer	Mark	Guidance
	<p><b>Level 1 (1-2 marks)</b> An answer at this level demonstrates <b>basic</b> understanding of population distribution (AO2). There may be a <b>basic</b> evaluation the information provided to show the reasons for Ghana’s population distribution (AO3).</p> <p>This will be shown by including <b>simple</b> ideas about the reasons for Ghana’s population distribution.</p> <p><i>The information is <b>basic</b> and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the question may not be clear.</i></p> <p><b>0 marks</b> No response worthy of credit.</p>		<p>Examples of <b>well-developed</b> ideas: The map shows that there is a north—south divide in terms of the urban population density. Most regions have a population of below 66,000 people per square km. The exception to this is in the central and southern areas, where population densities are more than a million people per square km. The north of Ghana has savanna grasslands and lower rainfall; therefore, it is difficult to grow crops. It’s physical distance to the capital city of Accra, means it’s a long way for food to be transported. The south has a coastline where you will find the city of Accra. Here, the highest population density can be found. This would be ideal for trade, where goods can be imported and exported. Lake Volta to the north, provides water and food supplies to support the population.</p> <p>Examples of <b>developed</b> ideas: The map shows that there is a north—south divide in terms of the urban population density. Most regions have low population densities but the south, has higher population densities (million plus). The north of Ghana has savanna grassland / low rainfall; it is difficult to grow crops here. The south has a coastline where you will find the city of Accra, which is good for trade. The climate is wetter so it’s easier to grow crops.</p> <p>Example of <b>simple</b> ideas: More people live in the south as it has rain and heat to grow food for people that live there. There is some water too from the lake. This helps people there live.</p>

Question		Answer	Mark	Guidance
3	(a)	<p>Decreasing supply of freshwater (✓) is used for irrigation. (DEV)</p> <p>Prolonged lack of rainfall / drought (✓) prevents the growth of crops or damages them. (DEV)</p> <p>Desertification (✓) reduces fertility of land and the amount available for farming decreases. (DEV)</p> <p>Diseases such as swine flu (✓) threaten livestock numbers and human health. (DEV)</p>	2	<p>1 x 1 (✓) for any valid physical factor.</p> <p>1 x 1 (DEV) for development of the point.</p> <p>Any one of the following physical factors could be included:</p> <ul style="list-style-type: none"> <li>• Water availability</li> <li>• Climate / climate change</li> <li>• Soil fertility / desertification</li> <li>• Diseases affecting livestock / crops</li> </ul>
3	(b)	<p>Food insecurity will gradually continue to improve. (✓)</p> <p>Advancements in farming / food production. (✓)</p> <p>Food insecurity will gradually continue to decrease. (✓)</p> <p>Distribution of food supplies become more even through trade (✓).</p> <p>Food insecurity will worsen. (✓) Climate change leads to lack of water available for crop growth. (✓)</p> <p>Food insecurity will worsen. (✓) The intensification of farming impacts soil fertility. (✓)</p>	2	<p>1 x 1 (✓) stating a prediction.</p> <p>1 x 1 (✓) Reason given.</p> <p>Either perspective can be taken e.g., food insecurity will improve or worsen.</p>
3	(c)	<p>Increased volume of food produced results in fewer hungry people. (✓)</p> <p>Affordable equipment means farmers can produce more food. (✓)</p> <p>Natural fertiliser improves the quality of the food produced. (✓)</p> <p>Farmers produce higher quality crops which are packaged and sold. (✓)</p>	3	3 x 1 (✓) valid descriptions of improved food security.

Question		Answer	Mark	Guidance
		Regular access to markets, generates income that is reinvested. (✓)		
3	(d)*	<p><b>Is physical geography the cause of food insecurity in Ghana?</b></p> <p><b>Level 4 (7-9 marks)</b> An answer at this level demonstrates a <b>comprehensive</b> understanding of the concept of food security (AO2) and a <b>comprehensive</b> evaluation of the information provided to show whether physical geography is the cause of food insecurity in Ghana (AO3) to make a <b>thorough</b> judgement as to the extent the physical geography causes food insecurity (AO3).</p> <p>This will be shown by including <b>well-developed</b> ideas about the concept of food security <b>and</b> an evaluation of the information as to the extent the physical geography of Ghana is the causes of food insecurity.</p> <p>There are clear and explicit attempts to make appropriate synoptic links between content from different parts of the course of study.</p> <p><i>There is a <b>well-developed</b> line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> <p><b>Level 3 (5-6 marks)</b> An answer at this level demonstrates a <b>thorough</b> understanding of the concept of food security (AO2) and a <b>thorough</b> evaluation of the information provided to show whether physical geography is the cause of food insecurity in Ghana (AO3) to make a <b>reasonable</b></p>	9	<p><b>Indicative Content</b> Candidates need to make the link between the physical geography (climate, ecosystems, landscape, relief) and the pattern of food security for Level 3 answers.</p> <p>Candidates should show a good awareness of the concept of food security and what this means in the context of Ghana.</p> <p>Candidates should acknowledge that there is a range of different levels of food security.</p> <p>Candidates could link food security to climate, with the north of the country having less rainfall and higher temperatures than the south.</p> <p>Candidates could link food security with the ecosystems, with rainforests being more productive than grasslands.</p> <p>Candidates could link food security with the landscape, with the Atlantic Ocean in the south and Lake Volta in the east.</p> <p>Candidates may reference other factors linked to food security, including human geography factors such as investment programmes, aid, transport links, mechanisation.</p> <p>Examples of <b>well-developed</b> ideas: In Ghana levels of food security vary. Food insecurity for people in the northwest of the country is 34% higher</p>

Question	Answer	Mark	Guidance
	<p>judgement as to the extent the physical geography causes food insecurity (AO3).</p> <p>This will be shown by including <b>well-developed</b> ideas about <b>either</b> the concept of food security <b>or</b> an evaluation of the information to judge whether the physical geography of Ghana causes its pattern of food insecurity.</p> <p>There are clear attempts to make synoptic links between content from different parts of the course of study, but these are not always appropriate.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</i></p> <p><b>Level 2 (3-4 marks)</b> An answer at this level demonstrates a <b>reasonable</b> understanding of the concept of food security (AO2) and a <b>reasonable</b> evaluation to show whether physical geography is the cause of food insecurity in Ghana (AO3) to make a <b>basic</b> judgement as to the extent the physical geography of Ghana causes its pattern of food insecurity (AO3).</p> <p>This will be shown by including <b>developed</b> ideas about <b>either</b> the concept of food security <b>or</b> an evaluation of the information to judge whether the physical geography of Ghana causes its pattern of food insecurity.</p> <p>There are limited attempts to make synoptic links between content from different parts of the course of study.</p>		<p>than for people in the south, who are 1% food insecure. This pattern could be due to the warm and wetter weather in the south, near Accra, which will allow communities to farm crops and raise cattle. Food security exists when all people, always, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.</p> <p>Examples of <b>developed</b> ideas: Food security in Ghana varies. The northwest of the country has the lowest food security with 35% of the population being food insecure. This can be compared with the southwest which has the least food insecure people. This could be to do with the fact that people in the south have better weather for growing crops.</p> <p>Examples of <b>simple</b> ideas: There is some food security in Ghana. This can be seen by looking at the map, where areas in the south show high food security. It is wetter in Accra in the south as well.</p>


Question	Answer	Mark	Guidance
	<p><i>The information has some relevance and is presented with limited structure. The information is supported by limited evidence.</i></p> <p><b>Level 1 (1-2 marks)</b>            An answer at this level demonstrates a <b>basic</b> understanding of the concept of food security (AO2) and <b>basic</b> evaluation of the information provided or judgement as to the extent the physical geography of Ghana causes its pattern of food insecurity (AO3).</p> <p>This will be shown by including <b>simple</b> ideas about <b>either</b> the concept of food security <b>or</b> an evaluation as to the extent the physical geography of Ghana causes its pattern of food insecurity.</p> <p>There are no synoptic links between content from different parts of the course of study.</p> <p><i>The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.</i></p> <p><b>0 marks</b>            No response or no response worthy of credit.</p>		

Question		Answer	Mark	Guidance
4	(a)	$117.21 - 77.08 (\checkmark) = 40.13 (\checkmark)$	2	<p>1 x 1 (<math>\checkmark</math>) for correct calculation. 1 x 1 (<math>\checkmark</math>) for correct answer.</p> <p>If the correct calculation is shown but the answer is incorrect, award 1 mark. (<math>\checkmark</math>)</p> <p>If the correct answer is shown but no calculation has been made, award 2 marks.</p> <p>If only the answer is stated, award 2 marks.</p>
4	(b)	<p>Housing quality. (<math>\checkmark</math>) Lack of access to housing / affordable homes can cause people to build their own homes. (DEV)</p> <p>Traffic congestion. (<math>\checkmark</math>) Due to the volume of cars and lack of alternative transport. (DEV)</p> <p>Higher levels of air pollution. (<math>\checkmark</math>) Traffic congestion, industry, and lack of government controls. (DEV)</p> <p>Access to electricity. (<math>\checkmark</math>) Varying levels of infrastructure development affect when and where electricity is available (DEV).</p>	4	<p>2 x 1 (<math>\checkmark</math>) for stating any valid challenge affecting life in the city. 2 x 1 (DEV) explanation of the challenge.</p> <p>Challenges could include any <b>two</b> of:</p> <ul style="list-style-type: none"> <li>• Inequalities</li> <li>• Housing availability</li> <li>• Transport provision</li> <li>• Access to services and infrastructure</li> <li>• Access to employment.</li> </ul>

Question		Answer	Mark	Guidance
5*		<p><b>1. Ghana's development is uneven.</b></p> <p><b>2. One initiative / development strategy to support future development.</b></p> <p><b>Level 4 (7-9marks)</b> An answer at this level demonstrates a <b>comprehensive</b> evaluation of the information to show why Ghana's development is not evenly spread (AO3). A <b>comprehensive</b> understanding of a development strategy (AO2) and a <b>thorough</b> judgement as to whether the initiative / development strategy can support the future development of the country (AO3).</p> <p>This will be shown by including <b>well-developed</b> ideas about the spread of Ghana's development <b>and</b> one initiative / development strategy would support future development.</p> <p>There are clear and explicit attempts to make appropriate synoptic links between content from different parts of the course of study.</p> <p><i>There is a <b>well-developed</b> line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</i></p> <p><b>Level 3 (5–6 marks)</b> An answer at this level demonstrates a <b>thorough</b> evaluation of the information to show why Ghana's development is not evenly spread (AO3). A <b>thorough</b> understanding of a development strategy (AO2) and a <b>reasonable</b> judgement as to whether the initiative / development strategy can support the future development of the country (AO3).</p>	9	<p><b>Indicative Content</b> Using the resources, candidates could potentially include the following ideas.</p> <ul style="list-style-type: none"> <li>• The south has a cooler and wetter climate.</li> <li>• The capital city Accra is in the south – so will act as an economic hub.</li> <li>• Land use change in Accra has seen the size of the built-up area increase significantly.</li> <li>• Proximity to Lake Volta in the east, central and southern areas – this provides a source of food, water supply and possibility of energy supplies.</li> <li>• Fishing industry, from either Lake Volta or the coast.</li> <li>• Farming practices in the centre and south where there is sufficient warmth and rain.</li> <li>• Largest settlements in the centre and south, more developed infrastructure.</li> <li>• Transport and communication likely to be better due to location of cities in the south.</li> <li>• Trade along the coastal area e.g. Accra &amp; Tema.</li> <li>• Relief is lower and flatter in the coastal areas.</li> </ul> <p><b>BUT</b></p> <ul style="list-style-type: none"> <li>• Development is unevenly spread, particularly with poverty levels, infrastructure, education, and healthcare.</li> <li>• Northern Ghana has lower rainfall and hot conditions, more difficult to grow crops. Lower population densities supported.</li> </ul> <p>Initiatives / development strategies candidates could include:</p> <ul style="list-style-type: none"> <li>• Investment in farming industry to generate further international trade.</li> </ul>



Question	Answer	Mark	Guidance
	<p>This will be shown by including <b>well-developed</b> ideas about either the spread of Ghana's development <b>or</b> one initiative / development strategy which would support future development.</p> <p>There are clear attempts to make synoptic links between content from different parts of the course of study, but these are not always appropriate.</p> <p><i>There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</i></p> <p><b>Level 2 (3–4 marks)</b> An answer at this level demonstrates a <b>reasonable</b> evaluation of the information to show why Ghana's development is not evenly spread (AO3). A <b>reasonable</b> understanding of a development strategy (AO2) and a <b>basic</b> judgement as to whether the initiative / development strategy can support the future development of the country (AO3).</p> <p>This will be shown by including <b>developed</b> ideas about either the spread of Ghana's development <b>or</b> one initiative / development strategy which would support future development.</p> <p>There are limited attempts to make synoptic links between content from different parts of the course of study.</p> <p><i>The information has some relevance and is presented with limited structure. The information is supported by limited evidence.</i></p>		<ul style="list-style-type: none"> <li>• Infrastructure projects such a hydroelectric power (Lake Volta) and / or solar power for more remote areas in the north.</li> <li>• Incentives for transnational companies to locate in Ghana, providing employment opportunities.</li> <li>• Investment in education and training to support economic growth with changing industries.</li> </ul> <p>Examples of <b>well-developed</b> ideas: The south of Ghana is more developed due to the geography of the country. It is more low lying, giving rise to a more suitable climate. This makes growing conditions more favourable for crops. The coastline enables the export of crops and therefore trade to increase prosperity of the capital Accra. The south and central areas have access to Lake Volta, providing water and food supplies. The northern and central areas are savannah, with a drier climate. Therefore, it is more challenging to grow crops beyond a subsistence level. Some crops are traded in local markets. To support Ghana's future development, investment in key areas such as infrastructure and industry would enable the economy to grow. Energy supplies for growing industries would be important: Lake Volta could provide hydroelectric power and for more remote northern areas the development of solar power. Ghana will need a skilled workforce for the infrastructure projects and industrial development, therefore, ensuring that all children have access to education and adult training could support with this.</p> <p>Examples of <b>developed</b> ideas: The south of Ghana is more developed as it has a more suitable climate. It is easier to grow crops. The coast</p>

Question		Answer	Mark	Guidance
		<p><b>Level 1 (1–2 marks)</b> An answer at this level demonstrates a <b>basic or no</b> evaluation of the information to show why Ghana's development is not evenly spread (AO3). A <b>basic or no</b> understanding of a development strategy (AO2) and a <b>basic or no</b> judgement as to whether the initiative / development strategy can support the future development of the country (AO3).</p> <p>This will be shown by including <b>simple</b> ideas about either the spread of Ghana's development <b>or</b> one initiative / development strategy which would support future development.</p> <p>There are no synoptic links between content from different parts of the course of study.</p> <p><i>The information is basic and communicated in an unstructured way. The information supported by limited evidence and the relationship to the evidence may not be clear.</i></p> <p><b>0 marks</b> No response or no response worthy of credit.</p>		<p>means that trade in and out of Ghana can happen, crops could be sold to provide money for the country. Lake Volta, providing water and food supplies. Some areas of Ghana are hotter grasslands and so it's difficult to grow crops.</p> <p>To support Ghana's future development, they could develop new industry or farming as this would improve trade. To help with this people will need a good level of education and training so the government needs to invest in this.</p> <p>Examples of <b>simple</b> ideas: Lots of people in Ghana are farmers. If the farmers live in the south, they have better land and more rain. They are also near to cities where they can sell more. Ghana needs better transport so they can move things around the country and help people to get more jobs building the roads.</p>
		 Spelling, punctuation and grammar and the use of specialist terminology (SPaG) are assessed using the separate marking grid in Appendix 1.	3	

**Appendix 1****Spelling, punctuation and grammar and the use of specialist terminology (SPaG) assessment grid**

<b><i>High performance 3 marks</i></b>
<ul style="list-style-type: none"> <li>• Learners spell and punctuate with consistent accuracy</li> <li>• Learners use rules of grammar with effective control of meaning overall</li> <li>• Learners use a wide range of specialist terms as appropriate</li> </ul>
<b><i>Intermediate performance 2 marks</i></b>
<ul style="list-style-type: none"> <li>• Learners spell and punctuate with considerable accuracy</li> <li>• Learners use rules of grammar with general control of meaning overall</li> <li>• Learners use a good range of specialist terms as appropriate</li> </ul>
<b><i>Threshold performance 1 mark</i></b>
<ul style="list-style-type: none"> <li>• Learners spell and punctuate with reasonable accuracy</li> <li>• Learners use rules of grammar with some control of meaning and any errors do not significantly hinder overall</li> <li>• Learners use a limited range of specialist terms as appropriate</li> </ul>
<b><i>0 marks</i></b>
<ul style="list-style-type: none"> <li>• The learner writes nothing</li> <li>• The learner's response does not relate to the question</li> <li>• The learner's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning</li> </ul>

### Awarding Spelling, Punctuation and Grammar and the use of specialist terminology to scripts with a scribe cover sheet

- a. If a script has a **scribe cover sheet** it is vital to check which boxes are ticked and award as per the instructions and grid below:
- Assess the work for SPaG in accordance with the normal marking criteria. The initial assessment must be made as if the candidate had not used a scribe and was eligible for all the SPaG marks.
  - Check the cover sheet to see what has been dictated and therefore what proportion of marks is available to the candidate.
  - Convert the SPaG mark to reflect the correct proportion using the conversion table given below.

SPaG mark awarded	Mark if candidate eligible for one third (e.g. grammar only)	Mark if candidate eligible for two thirds (e.g. grammar and punctuation only)
0	0	0
1	0	1
2	1	1
3	1	2

### Word processed scripts

- If a script has a **word processor cover sheet** attached to it, the candidate **can** still access SPaG marks unless the cover sheet states that the checking functionality is enabled, in which case no SPaG marks are available.
- If you have any queries please contact the OCR Special Requirements Team at [srteam@ocr.org.uk](mailto:srteam@ocr.org.uk)

### Other

If the script has a **transcript, Oral Language Modifier, Sign Language Interpreter** or a **Practical Assistant cover sheet**, award SPaG as normal.