



GCE MARKING SCHEME

**GEOGRAPHY
AS/Advanced**

SUMMER 2013

INTRODUCTION

The marking schemes which follow were those used by WJEC for the Summer 2013 examination in GCE GEOGRAPHY. They were finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conferences were held shortly after the papers were taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conferences was to ensure that the marking schemes were interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conferences, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about these marking schemes.

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Assessment Objectives Grid for Geography - G1

	Knowledge and Understanding	Application	Skills	Total	Key Question
Question 1					
(a)	0	2	3	5	1.5
(b)	8	2		10	1.3
(c)	7	3		10	1.4
	15	7	3	25	
Question 2					
(a)	0	2	3	5	2.5
(b)	8	2		10	2.2
(c)	7	3		10	2.6
	15	7	3	25	
Question 3					
(a)	1	1	5	7	2.2
(b)	2	1	5	8	
(c)	3	2	5	10	
	6	4	15	25	
	36	18	21		
	(48%)	(24%)	(28%)		

Using the mark bands

The aim is to find the descriptor that conveys most accurately the level attained by the candidate, using the best-fit model. A best-fit approach means that marks should be awarded for a response that most fairly matches different aspects of the descriptor.

GCE GEOGRAPHY G1

CHANGING PHYSICAL ENVIRONMENTS

Q.1 (a) Use Figure 1 to describe global variations in green energy investment. [5]

Answers may refer to the size of the investments in green energy and/or the growth rate in green energy investment 2004-2008. The resource shows that Europe has the largest investment whilst Africa has the smallest. The fastest growing investment is in South America (1 mark) whilst the lowest rate of growth is in Africa (1 mark). Accept comparatives of different areas e.g. Europe and Asia/Oceania are growing at approximately the same rate; North America has a larger investment than South America. The greatest amount of energy investments is in Europe (1 mark) with US\$ 50 billion (1 mark). Allow 1 mark for a **comparative** comment with an extra mark for use of data from the resource.

(b) Explain two environmental causes of climate change. [10]

Responses may consider a variety of processes/causes that are linked with climate change.

Volcanic activity may be addressed with candidates commenting on the production of volcanic gases and particulate matter. This can be linked with the trapping of heat or the reflection of heat and thus an increase/decrease in temperatures. This approach can fulfil two natural processes (reflection and absorption).

Changes in the temperatures of oceans may be cited as the cause of short-term climate change. The periodic changes in the temperature of the Pacific may be linked to variations in pressure conditions, which lead to the El Nino/La Nina effect.

Descriptions of climate change can be given credit.

Variations on global orbits may also be used to explain climate change at a variety of scales. Candidates may refer to periodic changes in the distance from the Sun or changes in the angle of the axis. These can then be linked with variations in the amount of energy received by the earth and consequent changes in climate.

Sunspot activity is a valid approach. Some candidates may explore the feedback mechanisms related to albedo/gulf stream/methane. Accept and credit those elements that are physical.

The question is looking for an understanding of process, ability to link process to climate change and use of exemplar materials. Where candidates have examined the human-induced causes of changes in atmospheric pollution give credit for the environmental processes that are linked to change, for example deforestation, industrial development, population growth.

Level 3 8-10 marks	Detailed and developed knowledge of processes that lead to climate change. Developed and linked understanding of link between process and climate change. Good development of examples.
Level 2 4-7 marks	Some knowledge of processes that lead to climate change. Some understanding of link between process and climate change. Lacks balance between processes. Examples are evident and enhance the explanation.
Level 1 0-3marks	Basic knowledge of processes that lead to climate change. Basic understanding of link between process and climate change. Little use of examples.

(c) Outline the possible effects of rising sea levels on people. [10]

The question enables a wide range of approaches in both content and areal extent. Some candidates may take an approach that has a focus on a single aspect such as economy, society or demography. Others may address the question by giving a composite view. There may be a number of answers that approach the question from a case study viewpoint. An examination of the economic impacts may look at the impact on agricultural production, tourism, transport, costs of protection, insurance and rebuilding and repair after damage caused by storms. Social impacts can be loss of homeland and culture, political unrest generated by protests and conflicting interest groups, health issues caused by contamination of groundwater and refugees and changing life styles.

Demographically, rising sea levels will change population distributions, lead to a large number of refugees, and may give an increase in casualties from events such as flooding. Candidates may examine strategies that have been put in place as a result of sea level change. There may be other valid content which should be given credit. An alternative approach may take a region or small area and give a combination of the above impacts. The most obvious examples that could be used are Bangladesh, tundra regions, Pacific islands and coastal UK.

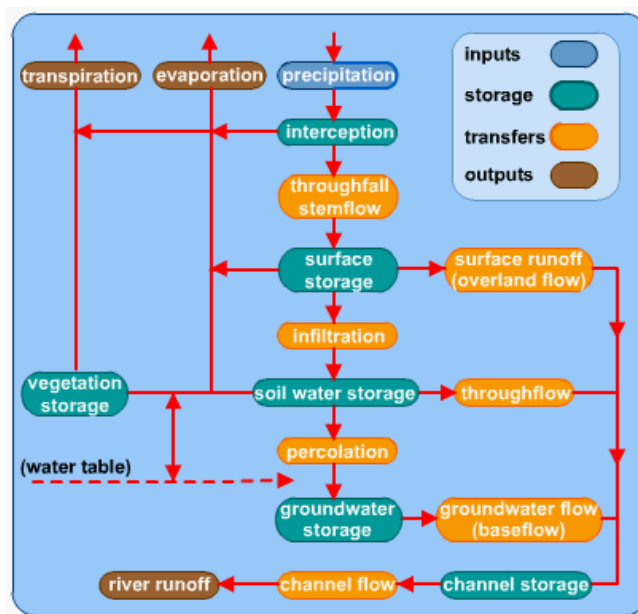
Level 3 8-10 marks	Good description and detailed understanding of process and integrated link to effects of rising sea levels. Good examples.
Level 2 4-7 marks	Description and understanding of effects of rising sea levels has some depth. Examples are evident.
Level 1 0-3 marks	Basic knowledge and understanding of effects of rising sea levels. Little use of examples.

Q.2 (a) Use Figure 2 to describe the effects of flooding in Thailand on Japanese companies. [5]

There are a number of effects that can be seen on the resource. There has been a suspension in production in Japanese firms and this has happened in Thailand, Japan and the USA. Firms are considering the movement of production from the affected area to other parts of Thailand or other countries and large numbers of Japanese firms are being impacted. Some answers may refer to the breakdown of transport. Allow one mark for a valid comment with a further mark for evidence from the resource. Allow one mark for linkage of elements of the resource that refer to effects e.g. digital camera production has been suspended due to submergence of factory (up to 5 marks). Accept logical, immediate effects from the information in the resource e.g. production suspended/damaged factories leads to unemployment. Award a maximum of 3 marks for straightforward list of material e.g. printer factory is submerged.

(b) Outline how the drainage basin operates as a system. [10]

Answers should display knowledge of the structure of a system and recognise that there are inputs, throughputs and outputs. This can be done formally or deduced from the answer. Many answers will examine the idea of stores and flows and display an understanding of the passage of water through the drainage basin. Answers that take this approach should put the response into a systems context to gain access to Level 3. Accept fully annotated diagrams for full marks. Some candidates may approach the question by looking at variables within the system that affect its operation e.g. geology, slope, vegetation, which is also valid for Level 3.



Level 3 8-10 marks	Outlines operation in detail. Detailed understanding of process and linkage.
Level 2 4-7 marks	Some outline of operation. Some understanding of process and linkage.
Level 1 0-3 marks	Basic outline of operation.

(c) Suggest why perceptions of *either* flood hazards or tectonic hazards may vary between different groups of people. [10]

Answers should show an understanding that different groups can see hazards from separate perspectives. Many answers will take a positive and negative viewpoint showing an appreciation that whilst hazards are destructive for some groups they may present opportunities to others. So volcanic activity can be destructive but it also presents tourism opportunities. Floods can kill but they also bring valuable alluvium. Other answers may take different groups and see negativity through the eyes of different people – earthquakes at a personal level may bring trauma through loss of relatives whilst at a community level there may be issues with loss of housing. Some answers may look at the challenges that are brought about by the hazards – there may be the challenge at an international scale of feeding and housing victims and at a national scale of rebuilding.

It is important that candidates recognise the groups that are involved and any answer that is general should not access Level 3. Groups can be recognised in a variety of ways and need not be named specifically – so a group could be simply the local residents, farmers or aid workers.

The command word is ‘suggest why’ and so answers should focus on more than just description for Level 3. Some rationalisation of the perception of the group is needed. Inevitably there will be some element of description and this should be given credit where appropriate.

Many answers will focus on particular events or locations but be willing to fully credit comment that may illustrate points from different examples.

Where a candidate does both hazards mark both and select the best.

Level 3 8-10 marks	Description and explanation in detail. Developed understanding of the different perception of identified groups. Good use of an example(s).
Level 2 4-7 marks	There may be an imbalance between description and explanation. Some understanding of the different perception of identified groups. Example(s) enhances the explanation.
Level 1 0-3 marks	Description and explanation is basic. Little use of an example(s).

Q.3 (a) Use *Figure 3* to describe how volcanic activity varies. [7]

Candidates may refer to a number of variables that describe the nature of volcanic activity. There may be comment on the amount of material ejected using the volume scale. Some candidates may refer to the height of the plume whilst others may comment on the frequency of the eruption. Other valid comments may refer to the numbers of eruptions in the last 10,000 years.

An alternative approach may describe the characteristics of volcanic activity via the scale of eruption.

Level 3 6-7 marks	Shows clear and detailed identification and description of variables. Good use of data.
Level 2 3-5 marks	Shows some ability to identify and describe variables. Uses some information table in form of data.
Level 1 0-2marks	Basic ability to identify and describe variables.

(b) Outline *two ways* of presenting information from *Figure 3*. (8)

The question asks for an outline which can take the form of a description of the method of presentation. There are a variety of possible methods that could be selected. Candidates may choose to organise their answers to examine the columns on the table.

- Proportional symbols could be used to show the amount of material ejected or the height of the plume. Bar graphs could illustrate the occurrence or amount. Line graphs could be used to show occurrence. Some candidates may comment on the difficulty of producing a scale for the y axis.
- Others may organise their answers to show differences in the levels of VEI to encompass all measures of eruption. These answers may refer to pictograms or proportional symbols.
- Some answers may refer to the mapping of examples as an alternative approach.

Be prepared to award full marks for a response that answers through well-annotated diagrams.

Level 3 6-8 marks	Good knowledge of two presentation techniques. Developed ability to apply knowledge of presentation technique to information shown in the table.
Level 2 3-5 marks	Some knowledge of two presentation techniques or good knowledge of one presentation technique. Some ability to apply knowledge of presentation technique to information shown in the table.
Level 1 0-2 marks	Basic knowledge of one or two presentation techniques.

- (c) **Discuss the methods used to collect data in an investigation into a changing physical environment that you have completed.**

You should state clearly the question that you have investigated [10]

The content of the answer will vary greatly as individual centres will engage in a wide variety of investigations. However, the content should have a link to the substance of the specification. Answers should show knowledge of the methods used to collect data. There will be a wide variety of description of the methods used depending on the investigation chosen so a flexible approach will be required in this section. The focus is on the mechanics of data collection (questionnaire, collection of discharge data, land use mapping, etc) but also credit a sampling method. If the answer is only sampling without data collection it is limited to Level 2.

The discussion element of the question can take a variety of formats. Some candidates will give depth to their descriptions of methods and this is sufficient to reach the top of Level 3. Other candidates may take this as an opportunity to comment on the validity of the outcomes of their study or suggest ways to further the investigation.

Level 3 8-10 marks	Good description of methods. Good discussion.
Level 2 4-7 marks	Some description of methods. Some discussion.
Level 1 0-3marks	Limited description of methods.

Assessment Objectives Grid for Geography - G2

	Knowledge and Understanding	Application	Skills	Total	Key Question
Question 1					
(a)		2	3	5	1.6
(b)	8	2		10	1.6
(c)	7	3		10	1.2/3
	15	7	3	25	
Question 2					
(a)		2	3	5	2.1/5/6
(b)	8	2		10	2.6
(c)	7	3		10	2.3
	15	7	3	25	
Question 3					
(a)			7	7	
(b)	4	4		8	
(c)	2		8	10	
	6	4	15	25	
	36	18	21		
	(48%)	(24%)	(28%)		

Using the mark bands

The aim is to find the descriptor that conveys most accurately the level attained by the candidate, using the best-fit model. A best-fit approach means that marks should be awarded for a response that most fairly matches different aspects of the descriptor.

GCE GEOGRAPHY G2
CHANGING HUMAN ENVIRONMENTS

Q.1 (a) Use *Figure 1* to describe changes in the percentage of population aged 65 years or more. [5]

Several approaches may be credited:

- A year by year approach quantifying **the changes** in the same year in different regions.
- A regional approach quantifying **changes** over time between regions.
- Using the world as a control and describing how different regions compare/vary with the world situation.
N.B. Figures are percentages not total numbers.

Award one mark for a **change** and one mark for an illustrative confirmation of that change up to 4 marks, with a further mark for a recognition of an overall impression of change and/or a world view. For example a simple statement of “Africa is 3,3,6” is a lift worth one mark whereas “risen by 3” is exemplification, worth 2 marks.

(b) Outline policies to tackle the demographic challenge of ageing societies. [10]

Answers may include some or all of the following policies:

- Pro-natalist. There are not enough vigorous, innovative and willing young workers to pay taxes to look after the old, so the economy will stagnate. The government, therefore, provides incentives to encourage births (e.g. extending maternity and paternity leave, maternity grants, child allowance, family tax credit, child trust fund).
- Encourage immigration.
- Increase economic productivity as the “working population” goes into decline.
- Raise the retirement age.
- Increase taxes to pay for pensions and health care of the old.
- Provide less generous pensions.

Level 3: 8-10 marks	Developed knowledge and detailed understanding which outlines policies to tackle the demographic challenge of ageing societies. Good development of example(s) of where policies have been introduced.
Level 2: 4-7 marks	Some knowledge and understanding which outline policies to tackle the demographic challenge of ageing societies. Example(s) of where policies have been introduced are evident and enhance the explanation.
Level 1: 0-3 marks	Basic knowledge and understanding of policies to tackle the demographic challenge of ageing societies. Limited detail. No use of example(s) of where policies have been introduced.

(c) Explain why populations change over time. [10]

Change in population may include size, age, gender, ethnicity. Answers may take a variety of approaches.

- A review of the changes in birth rates and death rates in an area through time.
- Essentially describing the stages in the **demographic transition**.
- One **case study** may be chosen with description and explanation of the demographic history and development, including migration, of that country or region.
- A more **generalised** and broad review of the demographic transition with the addition of migration and a selection of relevant data from several countries/regions.
- Focusing entirely on **migration** as the main factor in demographic change.
- Concentrating on population changes which are entirely **ethnic/social**.

All approaches have their merits.

The demographic transition approach

Although no country today is in Stage 1, some remote regions are, and all regions at one time were, at the first stage of population development. It is, therefore appropriate to state the demographic characteristics at the very beginning of population development and then to consider in Stage 2 the changes from this base point.

<p>Stage 1: of the demographic transition is characterised by high birth and death rates. So population numbers fluctuate in the short term, but with no long term increase or decrease.</p> <p>Reasons for high birth rates (which also apply in stage 2):</p> <ul style="list-style-type: none">• Lack of health care so high infant mortality, so dying babies need to be replaced.• Children act as an insurance against illness and old age of the parents.• Children can work and add to the family income.• Lack of family planning advice and guidance.• Lack of contraceptive aids.• Religious objection to contraceptive use.• Cultural/ religious traditions encourage large families. <p>Reasons for high death rates:</p> <ul style="list-style-type: none">• Poor medical resources, hence high infant mortality and disease.• Lack of environmental control may lead to famine.• War could break out over scarce resources /territorial disputes.	<p>Stage 2: population begins to increase.</p> <ul style="list-style-type: none">• Births continue at a high level as in stage 1 for cultural, social and religious reasons.• Death rates begin to fall due to health care improvements such as vaccinations. and social policy reforms such as on sewerage systems.
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<p>Stage 3: population continues to increase very quickly.</p> <p>Death rate continues to fall, now joined by a falling birth rate due to:</p> <ul style="list-style-type: none"> • Better health care. • Better pensions. • Use of contraception. • Falling infant mortality. • Good education on birth control. • Women having careers. • Later age of marriage. • More materialistic society. • Economic uncertainty (especially Eastern Europe). 	<p>Stage 4: population growth slows.</p> <p>Birth and death rates are still falling and birth rate comes close to death rate.</p>
<p>Stage 5: population begins to decline.</p> <p>Birth rate steadies or falls slightly whilst death rate increases due to:</p> <p>Lifecycle</p> <ul style="list-style-type: none"> • Medical technology can keep more people alive into their 70s, 80s and 90s so the number of older people increases, but then all these old people die together in their 70s, 80s and 90s. With so many old people dying, this leads to a relatively high death rate for a country. <p>Lifestyle</p> <ul style="list-style-type: none"> • Obesity caused by ill-advised diet choice and lack of exercise (heart attacks). • Sedentary occupations, lack of exercise (heart attacks). • Personal abuse: drugs, alcohol, smoking (cancer). • Unprotected sex (STDs, AIDS). • Suicides. • Murders. • Industrial accidents and road deaths. <p>World War II.</p> <ul style="list-style-type: none"> • The baby-boomers of the late 1940s to early 1950s are within the pensioner bulge predicted. 	
<p>Migration is relevant to the demographic transition only in how changes in the total numbers of people by migration influence the numbers being born or dying. A good example of this is the UK in recent years.</p> <p>Some candidates may illustrate their account with a diagram of the demographic transition and/or population pyramids. Credit these if accurate and relevant.</p>	

The migration approach

The types of migration are varied:

Voluntary

- Retirement to a more pleasant climate (UK to southern Spain).
- To find employment (North Wales to Liverpool).
- To avoid taxation (UK to Monaco).

Forced

- Refugees and asylum seekers: reasons include famine/war (Afghanistan, Ethiopia and Sudan).
- Environmental (Soufriere Hills volcano, Montserrat).
- Slum clearance in UK inner cities.

Migrations can be permanent (UK to Australia) or temporary (second homes).

Migrations can be internal (from the NE USA to the “Sunshine” southern states) or external (Eastern Europeans to Western Europe).

Demographic impacts of migration

- Total numbers of people which may either increase or decrease which may lead to over or under population.
- Birth and death rate variation due to age selective migration.
- The gender ratio: where a migration is dominated by either male (construction workers from India to Dubai) or females (Philippine females out migrating to MEDCs).
- Age: such as retirement migration.
- Ethnic/social/cultural changes.

Those candidates who do not link their explanation with changing population characteristics should be limited to Level 2. Credit relevant diagrams.

Level 3: 8-10 marks	Developed knowledge and detailed understanding explaining why populations change over time. Good development of example(s).
Level 2: 4-7 marks	Some knowledge and understanding explaining why populations change over time. Example(s) are evident.
Level 1: 0-3 marks	Basic knowledge and understanding of why populations change over time. Little use of example(s).

Q.2 (a) Use *Figure 2* to describe changes within the settlement hierarchy in Scotland. [5]

Overall the flow diagram demonstrates counter urbanisation to the rural-urban fringe, with depopulation of remote rural settlements.

- Urban Areas had a net loss of 972 people in 2001. This loss represented 3267 people leaving urban areas to accessible rural ones, but receiving some replacement population from settlements further down the hierarchy; 460 from accessible small towns, 657 people from remote small towns and approximately double that number, 1178, from remote rural areas.
- Accessible small towns had a net loss of 330 people, this represented only a third of the losses of urban areas to which they lost 460 people, but they gained a total of 177 combined from remote small towns and remote rural.
- Accessible rural have seen the greatest change in the hierarchy by gaining a massive 3317 people, nearly all, 3267, from urban areas.
- Remote small towns changed their net population the least gaining only 197 people mainly due to a large influx (798) from remote rural.
- Remote rural was the biggest loser, not receiving any people and losing a total of 2212 people distributed between every other settlement category in the hierarchy.

Award one mark for a change and one mark for an illustrative confirmation of that change, with a further mark for a recognition of an overall impression of change within the hierarchy. For example a simple statement of lift e.g. '-972,' is one mark whereas a statement with 'settlement with an increase of +3317' is one mark with extra information from the resource being a further mark. Award a maximum of 3 marks for straight lift of figures.

(b) Outline how the social profile of rural settlements is changing. [10]

Social profile could include age, gender, employment, wealth, ethnicity, family status, language, occupancy pattern, social values, deprivation. Although the question asks for **how** the social profile is changing, elements of **why** will inevitably also appear. Award candidates who focus on how the social profile changes and who may use reasons for the change to support the answer.

One or both of the following approaches is acceptable; case study and place detail will enhance the answer and are likely in answers accessing Level 2 and above.

Rural-urban fringe and rural settlements

Counter urbanisation has led to urban people coming to live in ‘suburbanised’ villages to change completely the social make-up from one based on the family-run primary industry to a dormitory community with different attitudes and values. This often leads to conflicts about future village development.

Extreme rural settlements

Abandonment by locals is often occurring as they sell up at inflated prices to second homers; this also leads to the younger locals leaving as house prices become unaffordable. The traditional rural services close down as the community is now mainly occupied only at weekends and in the summer by a different set of usually more wealthy and professional urban folk with a different set of social values from the indigenous community. This abandonment is often exacerbated by the lack of economic opportunities and the lack of social, leisure and recreation facilities for the younger element. This deprivation will impact on the social well-being of the local community. Language issues may arise in certain parts of the UK.

Level 3: 8-10 marks	Developed knowledge and detailed understanding describing how the social profile of rural settlements is changing. Good development of example(s).
Level 2: 4-7 marks	Some knowledge and understanding describing how the social profile of rural settlements is changing. Example(s) are evident and enhance the explanation.
Level 1: 0-3 marks	Basic knowledge and understanding of how the social profile of rural settlements is changing. Little use of example(s).

(c) Evaluate the success of an urban regeneration scheme. [10]

Answers can include: redevelopment, renovation, gentrification, regeneration, renewal.

An urban regeneration scheme can be seen as any scheme within an urban area which changes the existing land use in a way that reinvigorates the use of that land. Schemes may be in any part of the built up area: CBD, inner city, inner suburb, outer suburb. Do not accept 'new build' on 'greenfield' sites.

"Success" could be the personal opinion of the candidate or differing views and attitudes of interested parties such as the original local residents, the local council, an environmental group, pensioners, the government. Success may be perceived to be entirely positive or negative or a mixture, but the changes are unlikely to be welcomed by all interested parties.

Schemes which are planned or in the process of being completed cannot be judged on their success so cannot achieve a Level 3 mark. Rural schemes are limited to Level 1.

Level 3: 8-10 marks	Developed knowledge and detailed understanding of the success of an urban regeneration scheme. Well balanced between descriptive information of a case study and reasons for success with a good range of views. Broad and balanced evaluation which may include both positive and negative aspects of policies of established schemes. Good development of example(s).
Level 2: 4-7 marks	Some knowledge and understanding of the success of an urban regeneration scheme. Expansive description dominates. Evaluation may be fragile or be implicit. Example(s) are evident.
Level 1: 0-3 marks	Basic knowledge and understanding of the success of an urban regeneration scheme. Basic description, not evaluation. Little use of example(s).

Q.3 (a) Use *Figure 3* to describe the pattern of multiple deprivation in the City of Leicester. [7]

A purely descriptive answer is required and can achieve full marks. The size, shape and location of areas in various conditions of deprivation are expected using the key, scale and orientation provided. Some element of explanation may also be present, but treat this as background material and/or elaborative comment. Do not award excessive credit for explanatory comment.

Suggested comments:

General patterns might include statements such as radial, annular/concentric, elements of dispersion or nucleation.

The most deprived areas

- The inner city to the northeast and east of the city centre, extending south to north approximately 3 kilometres.
- The remaining areas are concentrated in the middle and outer suburbs to the west, north and south.
- A large area extends to 3 km in length along the western city boundary.

Not quite the most deprived

- These areas occupy much of the inner city, especially to the east, the very southern tip and are more prevalent in the western middle and outer suburbs.
- These areas occupy a large expanse of city boundary in seven separate locations dispersed around the city's edge.

The least deprived areas

- Two small areas are in the western middle suburbs, about 4 kilometres from the city centre, each being no more than approximately 1 square kilometre.
- The remaining five areas are all on the edge of the built up area and vary considerably in size.
- The largest areas are those in the north and south south-east approximately 7 to 10 square kilometres. Smaller areas are on the city's edge in the southwest with two on the eastern edge.

Not quite the least deprived areas

- These areas represent perhaps the largest coverage within the city and dominate much of the eastern middle and outer suburbs.

Level 3: 6-7 marks	Developed description of the pattern of multiple deprivation using a good variety of key/scale/orientation information.
Level 2: 3-5 marks	Some description of the pattern of multiple deprivation using some key/scale/orientation information.
Level 1: 0-2 marks	Basic description of the pattern of multiple deprivation with very limited use of key/scale/orientation.

- (b) **Outline the advantages and limitations of the mapping technique used in Figure 3.** [8]

Choropleth mapping

The areas mapped may be naturally occurring, as with land cover types, or may be arbitrarily defined by people as in the case of census enumeration districts. Choropleth maps can be used for both qualitative and quantitative data. In mapping quantitative data, the data are usually classified into categories. The main purpose of choropleth mapping is to discover and present spatial patterns. Conveying the actual data values is seen as a secondary purpose, as this can best be done with a table.

Advantages:

- Spatial patterns can be quickly visualised to give a good impression of change over space and variations in spatial distribution which is commonly at the heart of geographical analysis.
- Coloured maps can be very visually appealing and add interest to any analysis of spatial distribution.
- Anomalies can easily be identified.
- Can be easily completed by hand or by computer.
- In the case of some sensitive data such as victims of crime, choropleths can hide specific locations so avoid breaching data protection.

Limitations:

- It gives a false impression of abrupt change at the boundaries.
- Variations within each area are hidden, particularly if a wide data range is used.
- Reading exact data figures from the map is not possible.
- When areas are of vastly different sizes, too much influence is given for the data in the larger areas.
- Colours and/or shading used must degrade clearly from high visibility and attention attraction through to a pale non-descript shading in order for an accurate visual impression of the data to be gained. Maps which have a more haphazard shading regime, or too many categories of colour are likely to mislead and/or confuse.
- Choropleth maps are limited in the type of data they can display and cannot successfully show discrete data such as variation in football for example.

Candidates may refer to their own experience of relevant choropleth mapping and/or other examples of choropleths they have studied.

Candidates evaluating Figure 3 **only**, may reach lower Level 3. Those that solely focus on characteristics, such as key, north arrow, scale, source, border, title are self-limiting to Level 1.

Level 3: 7-8 marks	A detailed and developed outline of the advantages and limitations of the mapping technique.
Level 2: 4-6 marks	A competent outline of the advantages and limitations of the mapping technique.
Level 1: 0-3 marks	A basic outline the advantages and limitations of the mapping technique.

- (c) **Describe and explain how you planned your investigation into a changing human environment.** [10]

You should state clearly the question that you have investigated.

Marking will depend on the quality of response and must be adjusted to suit individual studies presented.

Two approaches can be credited.

1. Planning the initial stage of the investigation

Page 16 of the specification states what is expected. There is also the WJEC document entitled “*Enquiry approach which can be applied to G1, G2 and G3b*” available on the WJEC website. The advice that this document gives on the initial planning stage is given below.

- Develop your own knowledge of the topic by consulting geographical literature or searching the internet.
- Decide on an issue to be investigated and develop your knowledge of the places being studied.
- Decide on the location for the investigation and develop your knowledge of the place(s) being studied.
- Visit your chosen location for a pilot survey.
- Undertake a risk assessment.
- Obtain any equipment (if required) checking availability and how to operate it.
- Prepare recording sheets/design questionnaire surveys.
- Decide on sampling strategies.
- Check weather conditions if relevant.
- Decide on day, date and time of survey.
- Arrange appointments if your investigation involves interviews/visits.

A research investigation would not require the elements involved in primary fieldwork collection, but a variety of pre-planning ideas would be expected. These would include discussion of the initial aim, hypothesis and objectives and a variety of specific secondary data resources would have to be thought through before commencement of the study.

2. Planning the route to enquiry with five suggested stages

1. Planning
2. Data collection
3. Data refinement and display (presentation)
4. Description, analysis and interpretation
5. Conclusion and evaluation

This approach is broader than the initial planning stage, but it is acceptable to include the other 4 stages in the route to enquiry when contemplating the finished enquiry report. Such an answer would put less emphasis on stage 1 but would gain credit for incorporating the idea of overall planning to encompass the whole process of the enquiry from first thoughts to the finished written and produced report.

Credit highly any valuable, positive and geographically appropriate comments within the context of a valid geographical enquiry.

Credit with caution simplistic, self-evident, generalised and vague comments.

Generic answers without reference to a practical study or a research enquiry cannot achieve Level 3.

Level 3: 8-10 marks	Developed knowledge and detailed and developed understanding of the investigation planning process. Good development using the context of the investigation.
Level 2: 4-7 marks	Some knowledge and developed understanding of the investigation planning process. Some development using the context of the investigation.
Level 1: 0-3 marks	Basic knowledge and understanding of the investigation planning process. Little or no use of planning and/or the investigation.

Assessment Objectives Grid for Geography - G3

Question	AO1 Knowledge & Understanding	AO2 Application	AO3 Skills	Total
G3 A Themes 1-3	13 (extend geographical ideas, concepts & processes)	7 (evaluations & connections between aspects of Geography)	5 (reach conclusions & communicate findings)	25
G3 A Themes 4-6	13 (extend geographical ideas, concepts & processes)	7 (evaluations & connections between aspects of Geography)	5 (reach conclusions & communicate findings)	25
G3B (a) (b)	3 6 (geographical concepts)	3 3 (apply understanding and evaluation of techniques)	4 6 (use a range of skills & techniques)	10 15
	35 46%	20 27%	20 27%	75 (100%)

Command Words WJEC A2 Geography

Account	Give reasons for.
Assess	This is an evaluative question - weigh up the importance of the subject. This means that there are a number of possible explanations/outcomes. You need to give the main ones and then say which you tend to favour.
Classify	Divide into groups or categories.
Discuss	Usually you are expected to build up an argument about an issue and to present <u>more than one side</u> of the evidence with supporting examples. This creates a written debate identifying both positive and negative points and then you must reach a conclusion from the debate. You should both describe and explain. Try to create a balanced answer and summarise your view at the end.
Evaluate	<p>Evaluate requires an overall statement of the overall quality or value of the feature/issues being considered. You need to <u>state a viewpoint</u>, after consideration of the evidence. In both cases your own judgement/opinion is wanted. Although an opinion cannot be marked incorrect, credit is given for the justification of the position you've taken up. It is usually best not to adopt an extreme viewpoint; a balanced answer is best.</p> <p>With assess and evaluate, particularly in G4, there are many occasions where there are two sides to an argument and evidence should be put forward for both sides, or that certain strategies or actions may have beneficial outcomes but also costs attached to them.</p> <p>Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument.</p>
To what extent	Give possible explanations for and against and justify which you tend to favour.
How far do you agree	
Examine	Investigate in detail, offering evidence for or against a point of view or judgement.

G3A

SECTION A: CONTEMPORARY THEMES IN GEOGRAPHY

Summary Descriptor	Marks out of 25	Criteria
Very good Level 5	21 - 25	<ul style="list-style-type: none"> • A response that demonstrates a high order of conceptual understanding and an appreciation of the holistic nature of geography within the context of the question. • Critical analysis, synthesis and assessment of the connections between the different elements of the subject. • Wide-ranging, thorough and accurate knowledge. • Detailed and possibly original exemplification. • Well-directed and well-annotated sketch maps/diagrams. • A well-structured, coherent and logical response. • Complex ideas expressed clearly with few, if any, errors in grammar, punctuation and spelling.
Good Level 4	16 - 20	<ul style="list-style-type: none"> • A confident grasp of relevant concepts and principles. • Sound analysis, synthesis and assessment of some of the connections between the different elements of the subject. • Good factual knowledge and understanding. • Appropriate exemplification. • Appropriate, basically accurate annotated sketch maps/diagrams. • The response is clear, coherent and appropriately structured. • The quality of English is consistently sound. <p><u>At the lower end</u></p> <ul style="list-style-type: none"> • Arguments may not be fully developed. • Some lack of balance. • Minor flaws in logical ordering or linguistic expression. • Diagrams not well-integrated.
Average Level 3	11 - 15	<ul style="list-style-type: none"> • A reasonable grasp of relevant concepts and principles. • Arguments are partial with points limited in range, depth and development with only limited linkage. • A secure, straightforward base of knowledge and understanding. • Examples are superficial and may be variable. • Limited use of basic diagrams. • There may be some loss in coherence. • Language is correct but simplistic. <p><u>At the lower end</u></p> <ul style="list-style-type: none"> • An unfocused or potentially relevant response. • Weaknesses in structure and expression.
Marginal Level 2	6 - 10	<ul style="list-style-type: none"> • Some grasp of concepts and principles is evident, but there may be inaccuracies and misconceptions. • Arguments are weakly presented and most points are generalised or of partial relevance to the question with little or no linkage. • Some knowledge and understanding, but it is limited in scope. • There is limited use of examples. • Sketch maps/diagrams contain inaccuracies. • The response lacks fluency. • Expression may be poor and there are basic errors in the spelling of geographical terms. <p><u>At the lower end</u></p> <ul style="list-style-type: none"> • Understanding of the question is weak.
Weak Level 1	1 - 5	<ul style="list-style-type: none"> • There is minimal understanding of subject material. • Organisation of material is poor and although occasional relevant points are made much is irrelevant. • The response demonstrates poor knowledge and understanding and contains errors. • Little use of examples or if evident they are irrelevant to the question. • The response may be incomplete or difficult to follow. • The answer is poorly written and contains basic errors in the spelling of geographical terms.

GCE GEOGRAPHY G3A
CONTEMPORARY THEMES IN GEOGRAPHY
SECTION A

Theme 1 Extreme Environments

Q.1 Assess the threats to the desert environment posed by human activity. (1.2) [25]

Guidance

Candidates:

- i. should show knowledge and understanding of how human activity causes pressures on/threats to the desert environment;
- ii. should show the ability to assess the threats posed by human activity; better candidates will be able to assess the threats throughout, whereas the average candidate may only assess the threats in passing or perhaps briefly in their conclusion.

Candidates may examine the threats posed by population growth, agriculture, tourism and mineral exploitation. They may refer to the negative impacts on a variety of elements of the desert environment. Expect reference to be made to the fragile and special qualities of the desert environment(s) with explanation and illustration of this fragility. Comment could be made on population growth in regions such as the Sahel, the role of agriculture in desertification at a continental scale, the pollution of soils and ecosystems by mineral exploitation such as that in Australia or the damage caused by off-roading in Dubai. Do not expect all these for full marks. The assessment could come in the form of comparisons between different types of human activity or take the form of an assessment of costs compared to benefits, but be prepared to credit those candidates who see a spatial difference in impacts or inter-relationships between threats. In order to reach the **very good band (Level 5)**, in addition to sound factual content of the threats posed by human activity in the desert environment, there needs to be an assessment of these. Expect examples to be well integrated in the answer. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Q.2 Examine the characteristics of the tundra environment that make it extreme.
(1.4) [25]

Guidance

Candidates:

- i. should show knowledge of the main climatic, biotic and soil characteristics of the arctic and/or alpine tundra environment, but not necessarily all aspects of both;
- ii. should show an understanding of how the characteristics interact to give an extreme environment;
- iii. should show the ability to examine the characteristics; better candidates will provide a more detailed examination.

Candidates should examine the climatically stressed arctic and/or alpine tundra environment with short and cool growing seasons. Latitudinal tundra occurs in the Arctic and to a much lesser extent in the Antarctic, where the environments are characterised by cool, short growing seasons. Altitudinal tundra occurs under a similar climatic regime. After temperature, the second most important environmental factor affecting most tundra communities is moisture. However, there are important environmental differences between these two tundras, with the alpine type being subject to much larger variations of daily temperature during the growing season, as well as more intense inputs of solar radiation during the day. In contrast, arctic tundra can experience continuous exposure to the sun's rays, with 24-hour days for an extended period during the growing season. The interrelationships may be discussed in terms of the need for special adaptations required by biota to overcome climatic and soil constraints. Where only the tundra climate is mentioned, the answer is unbalanced and unlikely to reach beyond the **average (Level 3)** category: **good (Level 4)** responses should be characterised by reference to characteristics other than climate and demonstrate good knowledge and understanding. The range of climatic, biotic and soil characteristics need to be discussed in a detailed and balanced way and the contribution of climate to the concept of extreme also needs to be examined for candidates to reach the **very good (Level 5)** category. Expect examples to be well integrated in the answer.

Theme 2 Landforms and their Management

Glacial Environments

Q.3 Examine the processes responsible for the production of *one or more* glacial landforms. (1.2 & 1.3) [25]

Guidance

Candidates:

- i. should show a knowledge and understanding of the processes operating in the glacial environment;
- ii. should show an understanding of the link between processes and the development of glacial landforms;
- iii. should show the ability to examine the processes discussed; better candidates should provide a more detailed examination.

Candidates could examine the production of macro, meso and micro-scale landforms that are the result of predominantly glacial processes. Candidates could examine the production of landforms that are the result of predominantly glacial depositional processes (lodgement till, drumlins, erratics, moraines) or landforms that may be the result of fluvioglacial deposition (eskers, kames, kame terraces, outwash plains) or landforms that may be the result of predominantly glacial erosional processes (cirques, arêtes, pyramidal peaks, glacial troughs, crag-and-tail, roches moutonnées). The central feature of this question is the link between the processes of weathering, erosion, transport and deposition and landform development, as the specification gives emphasis to these processes in Key questions 1.2 and 1.3. The command word 'examine' would imply not only the need to identify the processes, but also to look at their role in landform development in some detail. In order to reach the **very good (Level 5)** band, in addition to sound factual content of processes and associated landforms there needs to be an examination of these. Expect examples to be well integrated in the answer. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding. Answers should deal with one or more landforms.

Q.4 Explain why glacial environments are important.

(1.5) [25]

Guidance

Candidates:

- i. should explain the importance of glacial environments because of the impact of glacial processes and landforms on human activity and/or because of the impact of human activity on glacial processes/landforms and/or because of the opportunities and limitations for human activity presented by a shift of the permafrost limit; better candidates should provide a more detailed explanation.

Candidates should explain the importance of glacial environments and may do so from a variety of perspectives. They are important because glacial processes impact on human activity because of the incidence of avalanches, rock falls and other forms of mass movement such as landslides and glacial outburst floods. They are also important because glacial landforms (in areas that are currently experiencing glaciation and in formerly glaciated areas) provide opportunities and present constraints for human activity in terms of tourism, water supplies and energy, agriculture, mining and quarrying, settlement and corridors for transport. In addition glacial environments are important because of the impacts of human activities on glacial environments that need to be managed including leisure activities — winter-sports activities, including associated infrastructure such as buildings, ski lifts and road access; logging activities leading to the removal of vegetation cover, which accelerates weathering and mass movement processes; damming of glacial lakes for use as reservoirs for hydro-electric power schemes; pollution and permafrost degradation through settlement and heat and waste disposal; anthropogenic climate change, leading to the net ablation of glaciers worldwide. Glacial environments are also important because of the opportunities for human activity presented by the shift of the permafrost limit including settlement and the development of mining and oil extraction industries and shipping across the Arctic Ocean. Limitations for human activity include damage to structures caused by freeze–thaw in the active layer and ground subsidence. Do not expect all these to be covered as candidates can achieve full marks by focusing on one aspect only. To reach the **very good (Level 5)** category of assessment, expect candidates to provide a detailed explanation. Expect examples to be well integrated in the answer. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Coastal Environments

Q.5 Examine the processes responsible for the production of *one or more* coastal landforms. (1.2 & 1.3) [25]

Guidance

Candidates:

- i. should show a knowledge and understanding of the processes operating in the selected environment;
- ii. should show an understanding of the link between processes and landform development;
- iii. should show the ability to examine the processes discussed; better candidates may provide a more detailed examination.

Candidates could examine the production of macro, meso and micro-scale landforms that are the result of predominantly coastal processes. Candidates could examine the production of landforms that are the result of predominantly coastal depositional processes (spits, tombolos, barrier beaches, bay-head beaches, offshore bars, cusped forelands) or landforms that may be the result of coastal erosional processes (cliffs, wave-cut platforms, caves, arches, stacks, stumps). The central feature of this question is the link between the processes of weathering, erosion, transport and deposition and landform development, as the specification gives emphasis to these processes in Key questions 1.2 and 1.3. The command word 'examine' would imply not only the need to identify the processes, but also to look at their role in landform development in some detail. Better candidates may make reference to the role of sea level change and/or geology (Key question 1.4). In order to reach the **very good (Level 5)** band, in addition to sound factual content of processes and associated landforms there needs to be some examination of these. Expect examples to be well integrated in the answer. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding. Answers should deal with one or more landforms.

Q.6 Explain why coastal environments need to be managed.

(1.5) [25]

Guidance

Candidates:

- i. should explain the need for management because of the impact of coastal processes and landforms on human activity and/or of the impact of human activities on coastal environments; better candidates should provide a more detailed explanation.

Candidates may refer to intensive and extensive building and infrastructure close to a coastal edge where coastal erosion is rapid, removal of coastal deposits through activities such as dredging, inappropriate leisure activities such as dune trampling and cliff scaling that adversely affect coastal processes or damage coastal forms. Strategies to manage these impacts will depend on the environment chosen, but may be expected to include protective measures such as prevention of access, control of occupation and character of land use through planning controls and/or education to modify human activity. If the focus is on coastal processes, candidates may make initial reference to cliff erosion or deposition in estuaries and deltas. Their discussion of the need for management should be centred mainly on reducing the detrimental effects of landforms or coastal processes on human activity. To reach the **very good (Level 5)** category of assessment, expect candidates to provide a detailed explanation. Expect examples to be well integrated in the answer. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Theme 3 Climatic Hazards

Q.7 Describe seasonal variations of climate and explain why they occur. (1.2) [25]

Candidates:

- i. should show knowledge and understanding of seasonal climatic changes: better candidates may offer some supporting statistics or qualified descriptive statements in relation to temperature and precipitation changes;
- ii. should show knowledge and understanding of the factors influencing these changes: better candidates will mention a wider range of factors.

Candidates may refer to one climatic type from either a tropical or temperate region. For the tropical region seasonal changes are far more marked in savanna and monsoon climates and for the temperate region seasonal changes are more pronounced for the continental interior and east coast margin, but most candidates will probably take the British western margin type.

Reference should be made to temperature, precipitation, winds and pressure level changes. It would be pleasing to see some candidates offering some supporting statistics in relation to temperature and precipitation changes, but if not, candidates should use qualified descriptive statements.

For the tropical region the most important factor is the effect of the apparent seasonal migration of the overhead sun and the associated migration of the ITCZ and movement of pressure and wind belts. Other significant factors include the effects of land and sea distribution, ocean currents and orographic influences vis-à-vis prevailing winds.

For the temperate region, the movement of global pressure and wind belts should be included as an important factor. In addition, the movement of the jet stream further south in winter and the relative seasonal significance of the various air masses should be referred to as important influences.

Whether the tropical or temperate region is taken, annotated diagrams are likely to form an important component and good credit should be given to well-annotated and well-integrated diagrams that clearly illustrate the factors being discussed.

Where only one factor is mentioned, the answer is unbalanced and unlikely to reach beyond the **average category (Level 3)**. A range of factors need to be addressed in a good and balanced way for candidates to reach the **good (Level 4)** category and for **very good (Level 5)** responses, a detailed description and thorough explanation are both needed. Credit any reference to **periodic** variations in climate.

Q.8 Discuss the inter-relationships between human activity and climate. (1.5) [25]

Guidance

Candidates:

- i. should show a knowledge and understanding of the effects of low-pressure climatic hazards on human activity and/or the effects of high-pressure climatic hazards on human activity and/or the impacts of human activity on climate in the short and/or long term;
- ii. should show the ability to discuss the statement; better candidates should provide a more detailed discussion.

When discussing the inter-relationships between human activity and climate, candidates may refer to the effects of climatic hazards associated with low-pressure systems and/or high-pressure systems on human activity and/or ways in which human activity can impact on climate. When discussing the effects of climatic hazards associated with low-pressure expect candidates to refer to their impacts in either a temperate or tropical region. There may be reference to demographic effects at both time scales such as deaths and long-term migration. Economic effects may analyse losses in the short term such as cessation of production and costs of damage in the long term, such as the effects on economic activity and infrastructure. Social effects may include observations on health, homelessness and bereavement. There may also be consideration of the effects on the physical environment such as landslides, deforestation and salinisation.

When discussing the effects of climatic hazards associated with high-pressure systems expect candidates to refer to their impacts in either a temperate or tropical region. The hazards associated with high pressure systems in tropical regions include drought, a falling water table, loss of vegetation, wild fires, soil erosion and desertification. The hazards associated with high pressure systems in temperate regions in summer are drought, falling water tables and the loss of vegetation and winter hazards may include frost and fog, with air pollution intensifying the fog conditions. The effects on human activity are demographic, economic and social and can be categorised as both direct and indirect. In tropical regions there may be reference to demographic effects at both time scales such as deaths and long-term migration. Economic effects may analyse losses in the short term such as reduced crop and livestock production, unemployment and increased food prices and costs in the long term, such as reduced tax revenues. Social effects may include observations on health (malnutrition, water rationing, increased fire hazards) and bereavement. There may also be consideration of the effects on the physical environment such as salinisation that impact human activity. In temperate regions there may be reference to economic effects such as reduced crop and livestock production, the consequences for farmers and businesses, increased food prices, unemployment and reduced tax revenues during summer droughts and the effect on shipping and other forms of transportation of winter fog and frost. Social effects may include observations on health (water rationing and atmospheric pollution in summer and difficult driving conditions in winter) and disruption to schools.

Candidates may also refer to ways in which human activity affects climate through changes in vegetation, the burning of fossil fuels and deforestation and as the result of particulate pollution (increasing precipitation and resulting in global dimming) and strategies such as cloud seeding.

The discussion may take a number of different approaches depending on the focus of the response. In order to reach the **very good (Level 5)** band, in addition to sound factual content of the inter-relationships between human activity and climate, there needs to be a discussion of these. Expect examples to be well integrated in the answer. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Theme 4 Development

Q.9 Assess different indicators used to measure development. (1.2) [25]

Guidance

Candidates:

- i. should show a knowledge and understanding of different indicators used to measure development;
- ii. should show the ability to assess the indicators; better candidates should provide a more detailed assessment.

Students should have little difficulty in identifying the range of indicators used to measure development. It is expected that candidate will make reference to simple and composite quantitative measures and recent progress made towards the use of qualitative measures that go beyond covering material conditions towards a consideration of aspects such as freedom, security, the plight of indigenous groups and sustainability.

An assessment of these indicators may include the partial picture each one gives of world development patterns, the reliability of the statistics used and how comprehensive the measures are in identifying the level of development at a country level. Other points that may enter into the assessment include the fact that measures quoted on a national scale hide serious regional inequalities as well as variations in material well-being across society, the difficulty of quantifying some measures, the dated nature of some statistics and the non availability of accurate statistics for some countries. To reach **very good (Level 5)** band a well-balanced answer with an assessment is needed. Expect examples to be well integrated in the answer. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Q.10 Discuss the effectiveness of attempts to reduce the development gap. (1.6) [25]

Guidance:

Candidates:

- i. should show knowledge and understanding of some of the attempts/strategies implemented to close the development gap;
- ii. should show the ability to discuss the relative merits of the different attempts/strategies; better candidates should discuss these throughout, whereas the average candidate may only discuss these in passing or perhaps in their conclusion.

The content of the answers will depend upon the attempts/strategies selected. Candidates may discuss the role of aid, free and fairer trade, FDI and initiatives for debt reduction. A distinction may be made between 'top-down' and 'bottom-up' strategies.

A discussion of the attempts/strategies used to close the development gap may consider the economic, social and environmental progress in poorer countries. Candidates may also demonstrate knowledge of the range of indicators that can be used to measure changes associated with the improvements in economic activity and the narrowing of the development gap. Indicators covered will be mainly economic, but may include social, environmental and demographic measures of change.

Answers must discuss the degree of success of the attempts/strategies employed in order to achieve a **very good (Level 5)** category of response. The discussion may make reference to both the positive and negative effects on development (inequality, corruption and environmental deterioration) of the initiatives discussed. Expect the discussion to be supported by appropriate exemplification. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Theme 5 Globalisation

Q.11 Examine the factors responsible for economic globalisation. (1.2) [25]

Guidance

Candidates:

- i. should show knowledge and understanding of the main factors responsible for the globalisation of the world economy;
- ii. should show the ability to examine the factors; better candidates should provide a more detailed examination.

The factors responsible include financial factors (the emergence and investment policies of transnationals), computer technologies, transport and communication technologies, the role of the WTO and trade blocs. Financial factors contribute, such as foreign direct investment (FDI), where a company has at least a 10% interest in the investment in a receiving country. This investment has been made in order to lock into cheaper production costs (labour, raw materials), and cheaper operating and environmental costs. Another reason for investment overseas is that companies involved have sought to circumvent import restrictions such as quotas and tariffs on their goods. One reason why Nissan, a Japanese company, established a factory in Sunderland was to supply the European market with vehicles and thus avoid the payment of import duties into the EU. Several LEDCs have encouraged investment as a way of developing their economies. Computer technologies, such as broadband, the World-Wide Web, videoconferencing and email have speeded up the flow of information and communications. This has enabled business deals to be completed more efficiently and far more quickly. The reduction in the price and increase in the speed of transport technology have meant that goods and people can travel further, more cheaply and faster than at any time in history, and with ever-improving comfort and/or convenience. This has reduced the friction of distance and enables companies to locate more economically and take their product to the world market using extremely cheap and efficient transport modes. The tourism industry in particular has benefited from these factors. The WTO has been working towards promoting free trade between nations and reducing anti-competitive tariffs and quotas that restrict the integration and the flow of goods and services between countries. Trade blocs, e.g. the European Union, wield a lot of global power in trading matters. The very existence of trading blocs is a factor that is symptomatic of the process of globalisation. The role of national governments in encouraging economic globalisation may also be recognised.

Expect **very good (Level 5)** answers to show clear understanding of the processes involved and to contain specific illustrative detail and examples. An examination may look at the relative worth of each factor or recognise that these factors operate in an inter-related way. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Q.12 Assess the costs and benefits of the global shift.

(1.4 & 1.5) [25]

Guidance

Candidates:

- i. should show knowledge and understanding of the advantages and disadvantages of the global shift for TNCs, LEDCS and MEDCs; better candidates will show a more detailed knowledge and understanding;
- ii. should show the ability to assess the costs of the global shift compared to the benefits; better candidates should assess these throughout, whereas the average candidate may only assess these in passing or perhaps in their conclusion.

The global shift brings huge benefits for LEDCs/NICs in terms of job creation, higher salaries, greater disposable incomes and a reduction in gender discrimination. However there are also disadvantages including westernisation and loss of cultural identity, unsocial hours and increasing social divisions. The impact of the global shift for MEDCs is simply more profitable returns for the companies which participate in these activities thus they can maintain employment in the quaternary jobs in the home country and in the manufacturing/service jobs in the production countries. These advantages must be set against significant job losses in MEDCs, particularly jobs in vulnerable deindustrialised areas. Credit any relevant costs and benefits for either/ or both people(s) and place(s).

The assessment should be of costs compared to benefits, but be prepared to credit those candidates who see a spatial difference in impacts. In order to reach the **very good (Level 5)** band, in addition to sound factual content of the costs and benefits associated with the global shift, there needs to be an assessment of these. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Theme 6 Emerging Asia

CHINA

Q.13 'Rural communities in China are not sustainable.' Discuss. (1.3) [25]

Guidance

Candidates:

- i. should show knowledge and understanding of some of the economic and social challenges associated with rural communities in China;
- ii. should show the ability to discuss the sustainability of rural communities; better candidates will provide a more detailed discussion.

Candidates should discuss economic challenges associated with China's rural communities including the changes in the organisation of agriculture (the responsibility system) and rural economic activities to improve food security and rural industrialisation through the expansion of town and village enterprises (TVEs). In many rural communities the focus on economic growth is putting pressure on the environment. Deforestation, air and water pollution and the conversion of land from agricultural to industrial use are gradually putting food production in jeopardy. Increased pressure on the remaining farmland increases the risk of soil degradation. Villages and small towns have to increase their own incomes, mainly through small industries, if they are to contribute to health and education services. If these services decline, outmigration will increase and communities will have even greater difficulty in developing businesses and maintaining basic services. There is a significant divide between rural and urban populations, reinforced during the Mao years by the hukou system. Progress and development in urban areas was not matched in rural areas. Consequently, many rural areas are extremely backward, traditional, have very poor services and amenities, and essentially are a world apart from the modern regional and provincial cities. Rural education and health facilities are poor, particularly for an aspiring superpower like China. Villagers often lack any form of social safety-net such as pensions or health insurance. To reach the **very good (Level 5)** category of assessment, candidates need to discuss the statement with specific comment regarding sustainability. Expect examples to be well integrated into the answer. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Q.14 Examine the effects of globalisation on China.

(1.5) [25]

Guidance

Candidates:

- i. should show knowledge and understanding of the positive effects of globalisation on China;
- ii. should show knowledge and understanding of the negative effects of globalisation on China;
- iii. should show the ability to examine the effects of globalisation on China; better candidates should provide a more detailed examination.

The liberalisation of trade since the 1980s has led global TNCs to expand aggressively in search of new emerging markets. By encouraging foreign firms into China, competition has raised levels of efficiency and forced large SOEs either to modernise or to close down. Joint ventures (JVs) have been vitally important for China, with firms such as Procter & Gamble, Caterpillar and United Technologies being particularly successful. Key features of JVs have been the requirement for technology transfer and an insistence that subcontracted work is given to selected domestic firms. This ensures that China acquires 'know-how' which can then be transferred to domestic firms. China's export 'basket' consists of labour-intensive export products such as toys, clothes and assembled electronics, as well as more sophisticated products that are more typical of a country with a much higher GDP per capita. The JVs, located in clusters in SEZs, provide a critical source of technology and technology transfer and they dominate exports. China's membership of the WTO since 2001 continues to be a driving force in the opening up of China to both imports and exports. This will have wide-ranging impacts on economic and political systems in China, particularly on the ways in which business is conducted. Globalisation and the associated economic miracle have reduced poverty levels. The total number of rural poor living under \$1 per day has fallen from around 250 million in 1978 to 30 million in 2006.

There are also disadvantages associated with globalisation including westernisation and loss of cultural identity, unsocial hours and increasing social and spatial divisions. Despite the advantages associated with globalisation, there is little trickle-down to rural areas leading to huge inequalities between coastal urban wealth and interior rural poverty. China's Gini coefficient of inequality rose from 0.31(1980) to 0.43 (2010) as inequality has grown. To reach the **very good (Level 5)** category of assessment, candidates need to examine the effects. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

INDIA

Q.15 'The major challenge facing rural communities in India is hunger.' Discuss. (1.3) [25]

Guidance

Candidates:

- i. should show knowledge and understanding of some of the economic and social challenges associated with rural communities in India;
- ii. should show the ability to discuss whether hunger is the major challenge facing rural communities; better candidates will provide a more detailed discussion.

Candidates should discuss conditions in rural communities in terms of poverty, service provision, education levels, the caste system, food production and hunger and population growth. Most rural Indians have lower educational levels, higher mortality and fertility, greater poverty, and access to fewer services and amenities than urban dwellers. Most Indians live their whole lives in a relatively limited geographical area. Some rural areas in the states of Bihar, Jharkhand, Uttar Pradesh and Orissa are officially destitute.

Economic challenges associated with India's rural communities include the challenges of food production and land reform and problems of infrastructure and service provision. Social challenges include population growth, hunger and malnutrition and migration. India's growing population increases the challenge of food security. There is growing demand for fertile farmland to be used by multinational companies to grow industrial and food crops for export. New industries also demand land in order to expand. Both of these developments also use up water resources and increase pollution of soil and water.

Poor farmers are often forced onto more marginal land that, without expensive fertilisers and pesticides, produces lower yields. Those farmers who do try new technologies are at risk of debt if crops should fail. With more people to feed and less quality land available, the poor face an increased risk of hunger.

There are many welfare concerns, such as the need to provide minimal social and income security for agricultural workers. Education is a challenge in many rural areas, particularly the education of girls, and dropout rates are high and attendance is poor. Poorer agricultural households show the worst attendance levels, especially in migration and harvest seasons.

A key question for India is how to provide sufficient food for an expanding population while at the same time encouraging agricultural and industrial development. Individual states have very different attitudes to this problem. The discussion may take the form of an assessment of the problem of hunger as compared with the other challenges faced by rural communities; some may discuss the inter-related nature of these challenges. A combination of both approaches is also valid. To reach the **very good (Level 5)** category of assessment, candidates need to discuss the statement in some detail. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Q.16. Examine the effects of globalisation on India.

(1.5) [25]

Guidance

Candidates:

- i. should show knowledge and understanding of the positive effects of globalisation on India;
- ii. should show knowledge and understanding of the negative effects of globalisation on India;
- iii. should show the ability to examine the effects of globalisation on India; better candidates should provide a more detailed examination.

A major economic crisis in 1991 forced the governing Congress Party to borrow money from the International Monetary Fund. This triggered a major change in the economy, allowing direct foreign investments into the country, which opened India up to economic globalisation. Since 1991, the economy has undergone a major transformation. The high levels of protectionism have been replaced by growth in exports. India is building economic and political ties around the world. It has considerable influence over world trade as a founder signatory of the General Agreement on Tariffs and Trade (GATT), the forerunner of the WTO. India leads the developing nations in global trade negotiations and is trying to encourage a more liberal global trade regime, especially in terms of services. India is one of the top ten exporters of services in the world and is famed for its specialist trade in IT services. The direction of trade is also changing, away from Russia and Eastern Europe towards the USA, EU and East Asia. India's major trading partners are the USA and China, but it is also developing trade links with African countries. Some industries, such as defence and aerospace, remain under state control, but many manufacturing sectors, including vehicle, consumer electronics and white-goods manufacturing, are now open to foreign direct investment. Indian companies may set up joint ventures or become wholly-owned subsidiaries of foreign firms. Beneficial effects of globalisation on India include foreign investments into pharmaceutical, petroleum and manufacturing industries, which have provided a significant boost to the Indian economy along with new employment opportunities, and have contributed to the reduction in levels of unemployment and poverty. Foreign companies bring advanced technology, helping to make Indian industry more technologically advanced: as a result India has seen an increase in international trade with a growth in exports, rising incomes, and infrastructure improvements.

However, globalisation has also had some negative effects, such as increased competition in the Indian market between foreign and domestic companies. Other negative effects are growing consumer preferences for buying foreign goods, and a reduction in labour requirements due to the introduction of advanced technologies that require less labour — especially in heavy manufacturing. Globalisation has led to widening social and regional disparities. India's economic development, particularly since 1991, has increased inequality between castes and between states. Although India has developed in terms of rapid industrialisation, consumerism and materialism, in many cases this 'progress' has not affected everyone. In fact, many people are worse off than in 1991 — especially the *Adivasi* (the scheduled tribes and castes and indigenous communities), the landless peasants, and marginalised farmers. The real challenge for India is how to enable the benefits of economic growth to trickle down to the very poor. If India continues to grow at 8% per year, average rates of poverty will fall to single figures within 20 years. This would be a significant achievement but would still mask many underlying economic inequalities across the nation. To reach the **very good (Level 5)** category of assessment, candidates need to examine the effects. **Average (Level 3)** responses will be characterised by secure, but generalised, content, whilst **good (Level 4)** responses should contain good factual knowledge and understanding.

Assessment Objectives Grid for Geography - G3

Question	AO1 Knowledge & Understanding	AO2 Application	AO3 Skills	Total
G3 A	13 (extend geographical ideas, concepts & processes)	7 (evaluations & connections between aspects of Geography)	5 (reach conclusions & communicate findings)	25
G3 A	13 (extend geographical ideas, concepts & processes)	7 (evaluations & connections between aspects of Geography)	5 (reach conclusions & communicate findings)	25
G3B (a) (b)	3 6 (geographical concepts)	3 3 (apply understanding and evaluation of techniques)	4 6 (use a range of skills & techniques)	25
	35 46%	20 27%	20 27%	75 (100%)

Generic Mark Scheme for G3B

G3B contains 10 two-part questions marked out of 10 marks (Part a) and 15 marks (Part b).

Part (a) is marked in three levels.

Level	Description of quality	Marks Range	Characteristics of level (It is not necessary to meet all of the characteristics to be placed in a level)
3	Very good Good	8-10	Very good knowledge and understanding used critically which is applied to aspect(s) of research enquiry examined. The work is obviously based on research and uses it to provide good supporting evidence. A clear, coherent mini-essay that is grammatically correct. May include well-annotated maps and/or diagrams to support answer. Allow full marks for thorough description.
2	Average	4-7	Good knowledge and understanding with some critical appreciation of the aspect(s) of research enquiry examined. A clear structured mini-essay that uses good quality of written communication but argues points soundly rather than strongly. Appropriate diagrams and/or maps not always fully labelled.
1	Basic	1-3	Some limited knowledge and understanding of aspect(s) of research enquiry examined but some points may be partial and lack exemplar support from research. "All I know" rather than an answer to the question. Language is variable; lacking paragraphs and may have weak grammar and syntax.

Part (b) is marked in four levels.

Level	Description of quality	Marks Range	Characteristics of level (It is not necessary to meet all of the characteristics to be placed in a level)
4	Excellent Very Good	13-15	Very good knowledge of the topic studied and a critical awareness of the route to enquiry and findings as applied to the topic in question. Provides very good support from own research. Written in a sound coherent essay style which is grammatically correct with a sequence of ideas that enable the question to be answered fully. Concludes in relation to the question. May include well-annotated maps and/or diagrams to support answer.
3	Good	9-12	Good knowledge of the topic with some gaps. Understanding of the route to enquiry and findings is present with some critical awareness, but this may be sound rather than strong. A clearly structured essay that uses good quality of written communication. Appropriate diagrams and/or maps not always fully labelled.
2	Average Marginal	5-8	Knowledge and understanding present but some points may be partial and lack exemplar support from research theme studied or may only be of potential relevance to the research topic. Language is straightforward and will possibly lack paragraphing. Perhaps going off on a tangent with an "all I know" answer.
1	Basic	1-4	Some knowledge and understanding but with gaps and misconceptions that indicate an inability to understand the question. Evidence that the research was superficial. Only limited support from research. Language is variable and slips occur.

GCE GEOGRAPHY G3B

SECTION B: RESEARCH

CONTEMPORARY THEMES AND RESEARCH IN GEOGRAPHY

- (a) **Describe and justify methods that could be used to acquire information to investigate (context).** [10]

There is no requirement to draw parallels with their own study, but this should be credited if it helps to develop the answer. Methods of acquiring information should be appropriate to the topic area under investigation. Candidates should demonstrate their knowledge of methods of information collection and how they could be used. Any suitable and appropriate methods (i.e. to the topic) should be credited. These could be appropriate to both primary and secondary data collection.

From WJEC list of command words: **Describe:** Identify distinctive features and give descriptive, factual detail. **Justify:** Explain why your choice is better than the possible options.

Some comment on the justification of the methods described will be relevant, including reference to the rigour associated with the method selected. Examples described might include for example, GIS, digital data capture, questionnaires, surveys (EIA, EQA, Bi-Polar), transects, cross-sections, web-based technology, data recorders, sampling methods and methods of data recording. Credit any diagrammatic representation of methods used.

Accept any reasonable and appropriate method. There should be some comment on the justification of methods discussed.

Level 3 (8–10 marks)	Good description of appropriate methods, relevant to the topic area. Good justification. Answers can access this level without reference to their own study, although if mentioned it should be given credit.
Level 2 (4–7 marks)	Either: some description of appropriate methods, relevant to the topic area. Some justification. Or: unbalanced – detailed description or detailed justification.
Level 1 (1–3 marks)	Basic description of the methods. There may just be a list of the methods and there is unlikely to be much, if any, justification.

- (b) **Outline the findings of your personal research into (context), and explain how far they confirm or question your original expectations.** [15]
You should state clearly the title of your research enquiry.

From the WJEC list of command words: **Outline:** Give a brief summary of the brief characteristics. **Explain:** Give reasons or causes. Show an understanding of how or why something has occurred.

The content will depend on the investigation undertaken, but in their answers candidates should give a summary of their findings (using evidence) and explain how these have aided their understanding of their investigation. Expect some use of supporting evidence to access higher levels.

Mention should be made of how the findings may confirm or question their investigation and may have influenced their understanding. Better candidates will probably recognise the links to theory and make some comment on how their work could have been improved. Allow wider understanding of expectations, e.g. specific location and the way research was conducted.

<p>Level 4 (13–15 marks)</p>	<p>Detailed outline of the findings of their investigation, with good evidence/support.</p> <p>Reasoned argument(s) about the extent to which these help with their understanding of their original expectations.</p>
<p>Level 3 (9–12 marks)</p>	<p>Either: good outline of the findings of their investigation, with some evidence/support.</p> <p>Some argument(s) about the extent to which these help with their understanding of their original expectations.</p> <p>Or: unbalanced – either detailed outline of findings or reasoned arguments about the extent to which these help with their understanding of their original expectations.</p>
<p>Level 2 (5–8 marks)</p>	<p>Either: some findings of their investigation, with some evidence/support.</p> <p>Basic argument about the extent to which these help with their understanding of their original expectations.</p> <p>Or: unbalanced – either good outline of findings or some arguments about the extent to which these help with their understanding of their original expectations.</p> <p>Answers with no reference to the context could access this level.</p>
<p>Level 1 (1–4 marks)</p>	<p>Basic findings and/or arguments in relation to the topic.</p>

Assessment Objectives Grid for Geography - G4

Question	AO1 Knowledge & Understanding	AO2 Application	AO3 Skills	Total
1	4 (concepts of place, space and diversity)	3 (interpreting & unfamiliar context)	3 (analyse and synthesise geographical information)	10
2	3 (select human processes underpinning concepts, examples)	4 (application in unfamiliar contexts)	3 (carry out research and use of methods)	10
3	3 (people- environment interactions)	3 (analysis and unfamiliar contexts)	4 (research and communication)	10
4	7 (extend geographical ideas, concepts and processes)	11 (consider new ideas and developments, evaluation)	7 (synthesise information, reach conclusions, and communicate findings)	25
5	7 (extend geographical ideas, concepts and processes)	11 (evaluation of viewpoints, extend geographical ideas, concepts and processes)	7 (reach conclusions and communicate findings)	25
Total	24 (30%)	32 (40%)	24 (30%)	80 (100%)

GENERIC MARK SCHEME

These descriptors give an outline of the qualities expected of answers at each level. These descriptors are written into the mark scheme for the examination, and may be modified beyond these descriptors to accommodate the demands of individual questions. Mark the answers according to these level descriptors and when determining the mark and taking everything into account allocate it on the principle of 'best fit'. The mark awarded should be the one that most fairly reflects the achievement against the level descriptor. It is not necessary for every single aspect of a level descriptor to be met for the mark awarded.

10 mark questions

Explanation of some kind is the most likely demand of these questions. For other kinds of command, comparable qualities to those given for explanation can be expected.

<p>Level 3 (8 - 10 marks)</p>	<p>Answers at this level have a good explanation. Explanations may be brief or quite long; their distinguishing quality is that they are clear. Answers need not be fully comprehensive but should be extensive enough to cover most aspects that can be reasonably expected for the question posed. Points of explanation should have some supporting evidence, either from resources provided or from knowledge gained from the candidate's own studies. If the question has more than one aspect, then each of these will all be addressed soundly.</p>
<p>Level 2 (4 - 7 marks)</p>	<p>Answers in Level 2 will either (i) contain a small amount of clear explanation but several points that might reasonably be expected will be missing, or (ii) be answers that are more comprehensive but the explanation is not really clear, or (iii) be clear on several points but support for the explanations will be missing or be too generalised, 'as in the Amazon'. If the question has more than one aspect, one may be dealt with adequately, but others may be underdeveloped, leading to an unbalanced answer.</p>
<p>Level 1 (1 - 3 marks)</p>	<p>In answers at this level there will only be the beginnings of an answer to the question, and will have major weaknesses. Explanations will be unclear or may be missing altogether. Correct information that could be relevant may be stated, but it will be left to the reader to put two and two together. Answers that deal with more than one point will be over simple on all of them. Any support that is given will be very general 'e.g. Africa'. If a question has more than one aspect, only one may be addressed and others ignored. Answers may be incorrect or faulty in some other way.</p>

25 mark questions

These questions will have a strong evaluative element. Some form of debate needs to be engaged in to reach the two top levels. Some questions may have a command for description or explanation in the early part of the wording. If only those early parts are attempted, answers can gain a maximum mark of the top of Level 3.

Level 5 (22 - 25 marks)	A range of evidence supporting more than one possible conclusion will be clearly stated. There will be a good attempt to weigh up the evidence. This may be by showing that one piece of evidence carries more weight than others, or that there are far more points in favour of one point of view than for any others. These questions will often have a 'how far' or 'to what extent' element, and evidence given will be used deal with such aspects. The structure of the answer will be evaluative throughout. Conceptual understanding and specific knowledge will both be very good. Answers will be well ordered and logical, with clear expression in the chosen language.
Level 4 (17 - 21 marks)	A reasonable amount of evidence on both sides of the debate will be presented here. There will be some attempt to weigh up the evidence in order to show that it points more one way than the other, or to try and assess 'how far'. These will either be limited or confined to just one or two sentences, or unbalanced, being too sweeping for one side over others. All other aspects of the answer expected up to Level 3 will be present. Conceptual understanding or specific knowledge may be good, but not equally strong on both. Answers will have only minor flaws in logical ordering or linguistic expression.
Level 3 (10 - 16 marks)	These answers will have a good explanation. There will be some attempt to show that there are arguments on both sides of the case, but these will be few, scattered and in most instances, not supported by any evidence. There may be some evidence of conceptual understanding, and/or the odd piece of specific knowledge. Structure and expression may have flaws.
Level 2 (5 - 9 marks)	Answers at this level will be mainly simple description or basic explanation, with evidence of some of the comparable qualities expected at Level 2 for the 10 mark questions. Any attempt to deal with the evaluative components will be brief, and either be very simple, confined only to one side or have very little support. There will be weaknesses of structure and expression.
Level 1 (1 - 4 marks)	Some relevant knowledge may be stated, but few points will have any element of explanation. Any evaluation will be a simple statement of a point of view without any valid supporting evidence. The structure may be muddled and expression weak or unclear. Planning notes or fragments can be given a mark in this range.

Geography - G4

If a candidate answers in a way that is not anticipated by the mark scheme, but has an acceptable answer to the question set, please use the generic mark scheme on pages 3 and 4 to determine an appropriate mark. If in any doubt, please consult your team leader.

For all questions, the following qualifying words are available:

Accomplished
Competent
Intermediate (+/-)
Basic
Beginnings

These can be elaborated further as:

Accomplished

A clear answer, covering almost all aspects of the question, with relatively minor, if any, faults.

Competent

An answer addressing many aspects of the question, but with some clear shortcomings.

Intermediate

An answer to the question, but mainly simple with at least one (lower-) or more (upper+) points of better quality.

Basic

An answer, but all very simple or superficial or brief or only very partial in coverage of what could be expected.

Beginnings

Not really an answer to the question, but may contain occasional relevant material.

Further annotations required about elements specific to each question are noted in the indicative content that follows.

SECTION A

Q.1 For one or more countries, outline variations in patterns of food consumption. [10]

Annotations for this question

- Food consumption knowledge
- Outline of variations in patterns
- Support from one or more countries

Variations may be over time or over space. Vietnam, from the Resource Folder, is most likely to be used. *Figures 7 and 8* have specifics on the changing patterns of food consumption. *Figure 3* has information on indicators of food consumption for other countries. If this topic has been studied for one or more other countries, accept as examples. Points likely to be raised are the adoption of a 'western' diet as it can be perceived as achieving a certain status. There is likely to be material on increasing affluence allowing diets that contain a greater range of nutrients, particularly proteins. Shifts from subsistence agricultural are also likely to bring changes in food consumption. Affluence may well lead to a greater consumption of what might be regarded as luxury foods in the society/societies concerned. There are likely to be points about diets generally being healthier, but also accept points related to less healthy aspects of 'western' diets where adopted. As 'outline' is the command word, clear but not extensive reasoning can be expected at Level 3. Also, to reach Level 3 there should be plenty of well-located specific support.

Level 3 (8-10 marks)	The changing patterns of food consumption are identified and expressed in some detail. Outlines are extensive with clear reasoned descriptions even if expressed concisely. Support given throughout most of the answer.
Level 2 (4-7 marks)	Changing patterns of food consumption are identified but may be lacking some detail. Outlines may be sound, but either have gaps in the reasoned descriptions or are incomplete. Some support will be provided in some places.
Level 1 (1-3 marks)	The changing patterns of food consumption may be unclear or partial. Some parts of an outline may be present but be far from complete with much that could be expected missing. Support may be missing, general or limited to just one valid point.

Q.2 Explain why there are increasing demands for energy in *one or more* countries. [10]

Annotations for this question

- Energy demands knowledge
- Explanation of increase
- Support from one or more countries

Information from Vietnam is likely, but there is information in the folder that addresses a wider world. Figure 20 identifies a number of new demands. Many candidates will identify economic growth in Vietnam as the country becomes more industrialised from *Figures 1, 3, 4 and 5*. This is anticipated to be the most common route. Information from *Figures 10, 11, 12 and 17* is also likely to support answers. Some candidates may have studied materials not mentioned in the resource folder so be prepared to credit the original material if it is relevant to the answer. The command is ‘explain’, so expect good details and clarity for a coherent account. Support may be linked to place, but equally good support may come from reference to companies or types of technological development. Support should be detailed whatever its type.

<p>Level 3 (8-10 marks)</p>	<p>Two or more ways in which demands for energy are increasing are clearly identified. The explanation will make clear the cause of increasing demand with reasonable detail. Sound support will be offered at any point throughout the answer.</p>
<p>Level 2 (4-7 marks)</p>	<p>Answers at this level will either only deal with one cause of increase with any clarity, or deal with a greater range without any being clear. There may be gaps left in the explanation. Some support will be present in some places in the answer.</p>
<p>Level 1 (1-3 marks)</p>	<p>Some increasing demands may be identified but it will largely left to the reader to work out how they operate. Support will either be missing, very brief or generalised.</p>

Q.3 Outline physical challenges to food production in *one or more* countries or regions [10]

Annotations for this question

- Food production methods
- Outline of physical challenges
- Support from one or more countries or regions

Figure 16 gives some very specific information for Vietnam. *Figure 12* also has specifics. Other possible support is scattered throughout the resource folder. More than one physical challenge should be expected. As this is an important point in the specification, some candidates may wish to use material they have studied in class. The link to food production should be very clear. The command is ‘outline’ so even at Level 3 accounts may not be fully detailed but should be quite clear.

<p>Level 3 (8-10 marks)</p>	<p>Two or more challenges to food production should be clearly identified. Answers should be full enough to outline exactly how production is challenged. Sound support should be given throughout most of the answer.</p>
<p>Level 2 (4-7 marks)</p>	<p>Description of how either just one way in which there is a challenge to food production is given clearly, or more than one way is identified but none are made very clear. Some support will be given in some places in the answer.</p>
<p>Level 1 (1-3 marks)</p>	<p>One or more descriptions may be given but the reader is largely left to work out the ‘how’ any support given will either be general or limited to just one point.</p>

**Q.4 'In order to meet growing demands for energy, land use must switch from food crops to energy crops'.
How far do you agree with this statement? [25]**

Annotations for this question

- Demands for energy knowledge
- Food crop and energy crop debate
- Understanding of the debate
- Evaluation of 'how far'
- Support and evidence

Figure 17 addresses this dilemma directly but full answers need to draw much more widely to be full. *Figure 19* and *20* help to put the debate into a world-wide context. Almost all of the figures have information that can be used as support to particular lines of argument in an answer to this question. The command of 'how far do you agree' requires assessment skills. Good candidates can be expected to present some evidence in agreement, some questioning the statement and a summary weighing up the evidence presented.

<p>Level 5 (22-25 marks)</p>	<p>Answers at this level will provide points both supporting the statement and questioning it throughout. Although answers should show such a balanced approach, support pointing more one way than the other is quite acceptable. Extensive evidence will be provided in support. The answer will be well structured and logical, and expressed in clear language.</p>
<p>Level 4 (17-21 marks)</p>	<p>A good answer but with either imbalance between the evaluation of food and energy crops, or some lack of depth if both are considered equally, or limited consideration of support for and against the statement. Some good evidence will be given. A well-ordered answer with good expression.</p>
<p>Level 3 (10-16 marks)</p>	<p>A sound answer, but with either strong imbalance, or lack of depth on most points considered. Evaluation will be limited towards the top of the range and may be missing at the lower end. A little evidence will be given. Minor flaws in organisation and expression are likely.</p>
<p>Level 2 (5-9 marks)</p>	<p>Some valid points raised but limited and shallow. Evaluation will be missing, or if attempted, understanding will be very weak and simplistic. Evidence will be poorly linked to the answer. Frequent problems with structure and expression will be present.</p>
<p>Level 1 (1-4 marks)</p>	<p>Isolated points that could be relevant to the answer are made, but are largely up to the reader to work out. The words 'how far' may be included but little understanding of the idea is shown or no evidence is given. The whole answer will be poorly organised, with poor expression.</p>

SECTION B

Q.5 Describe ways in which the quality of the environment causes concerns in cities. To what extent can sustainable solutions be found to meet these concerns? **[25]**

Annotations for this question

- Quality of the environment in cities knowledge
- Cause(s) for concern
- Solutions
- Evaluation of extent of sustainability
- Evidence and support

There is likely to be very little in the resource folder to help with this question, but if any candidate does use such material, there is no penalty at all. To reach Level 4 and 5 candidates do need to consider ideas of sustainability of solutions to clear causes of concern about the quality of the environment in cities. There also needs to be some good assessment of 'to what extent'.

Level 5 (22-25 marks)	Answers at this level will make fully clear how two or more ways in which the environment will be cause for concern in cities. 'To what extent' will be considered throughout, and in view of specific reference in the question, different degrees of sustainability for solutions are identified. Extensive evidence will be provided in support. The answer will be well structured and logical, and expressed in clear language.
Level 4 (17-21 marks)	A good answer with more than one cause for concern. There will be either over-reliance on just one of the causes for concern, or some lack of depth if more than one is considered, or limited consideration of extent. It can be expected that there will be some valid points on sustainability of solutions are made. Some good evidence will be given. A well-ordered answer with good expression.
Level 3 (10-16 marks)	A sound answer, but with either strong imbalance, of causes, or lack of depth on most points considered. Some solutions may be considered. Consideration of extent will be limited (top of the range) or missing or mishandled (lower end of range). A little evidence will be given. Minor flaws in organisation and expression are likely.
Level 2 (5-9 marks)	Some valid points raised but limited and shallow. Extent may be mentioned but understanding of it is weak, simplistic or misunderstood. Evidence will be poorly linked to the answer. Frequent problems with structure and expression will be present.
Level 1 (1-4 marks)	Isolated points that could be relevant to the answer are made, but are largely up to the reader to work out. The word 'extent' may be included but no understanding of it is shown poor or no evidence is given. The whole answer will be poorly organised and with poor expression.



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