

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS Pre-U Certificate

### MARK SCHEME for the May/June 2010 question paper

### for the guidance of teachers

### 9768 GEOGRAPHY

9768/01

Paper 1 (Geographical Issues), maximum raw mark 105

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

• CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the May/June 2010 question papers for most IGCSE, Pre-U, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



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#### Guidance notes for marking 9768/01

In marking questions in Sections A and B of this paper, the indicative content and levels descriptors on the following pages should be used throughout. In marking questions in Section C, which are worth 25 marks and based upon extended writing, the **Generic Mark Scheme** (GMS), used for assessing all pieces of extended writing bearing 25 marks in the Cambridge Pre-U Geography, should be used in conjunction with the **Indicative content** for each question.

Whilst the GMS captures the essential generic qualities of responses in 5 mark bands, the Indicative content is what it says: some indication of the probable content in responses, or possible approaches, to the questions and titles set. Candidates may develop their own approaches to questions. Examiners should not expect to find all the Indicative content in any one response, such as to achieve a Level 5 award. The same mark may be awarded to different pieces of extended writing for different reasons.

CIE expects Examiners to use their geographical judgement and professional experience, combined with guidance given by Senior Examiners at the Standardisation Meeting and during the standardisation process, in assessing responses appropriately.

#### Use of the Generic Mark Scheme

The Generic Mark Scheme is used together with the indicative content for each essay question.

Responses may be placed in any level without fulfilling all the descriptors for that mark band, for example where the essay does not lend itself to the use of sketch maps and diagrams. Responses may exhibit characteristics of more than one Level and so examiners use the principle of best fit in determining response quality. The grid below gives an indication of the relative weightings of the Assessment Objectives at each Level.

Level	Marks	AO1 Knowledge and Understanding	AO2 Skills	AO3 Analysis and Evaluation
5	22–25	15	3	7
4	18–21	14	2	5
3	14–17	12	2	3
2	10–13	10	1	2
1	0–9	8	0	1
Total		15	3	7

Guidance on how to use the above table relating Assessment Objectives to marks, when awarding credit to essays is given in boxed text at the bottom of page 3.

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#### The Generic Mark Scheme (GMS)

Examiners are encouraged to copy this page (or the same page in the Specimen Papers) and to keep it in front of them at all times when marking.

Level	Marks	Assessment criteria
5	22–25	<ul> <li>Wide-ranging, detailed and accurate knowledge and clear, high order understanding of the subject content</li> <li>Relevant, detailed and accurate exemplification used effectively</li> <li>Logical and clear organisation; good English expression; full and accurate use of geographical terminology</li> <li>Well annotated and executed sketch maps/diagrams integrated fully with the text</li> <li>Fully focused on the specific demands of the question</li> <li>Systematic analysis and a critical approach to evaluation; appropriate application of concepts and theories</li> <li>Conclusion shows high level insight and is logical and well founded on evidence and argument</li> </ul>
4	18–21	<ul> <li>Good knowledge and depth of understanding of the subject content</li> <li>Appropriate and well developed exemplification</li> <li>Logical organisation; sound English expression; appropriate use of geographical terminology</li> <li>Clearly annotated sketch maps/diagrams well integrated with the text</li> <li>Well focused on the demands of the question</li> <li>Elements of systematic analysis and ability to evaluate; generally appropriate application of concepts and theories</li> <li>Conclusion is sound and based on evidence and argument</li> </ul>
3	14–17	<ul> <li>Sound knowledge and understanding of the subject content lacking depth in some areas</li> <li>Appropriate but partial exemplification, may not be integrated with the text</li> <li>Generally clear communication but lacking some organisation; English expression and use of geographical terminology are mostly accurate</li> <li>Sketch maps/diagrams generally used effectively and appropriately</li> <li>Specific demands of the question mostly met</li> <li>Some ability to analyse and evaluate; limited application of concepts and theories</li> <li>Conclusion is limited and has some links to the rest of the response</li> </ul>
2	10–13	<ul> <li>Some knowledge and understanding of the subject content lacking depth and detail</li> <li>Exemplification used may be limited or not fully appropriate</li> <li>Limited organisation; English expression is basic with some accurate use of geographical terminology</li> <li>Sketch maps/diagrams may have inaccuracies and limited relevance</li> <li>Question is addressed broadly or partially</li> <li>Analysis, evaluation and application of concepts and theories are limited and may be superficial</li> <li>Conclusion is basic and may not be linked to the rest of the response</li> </ul>
1	0–9	<ul> <li>A little knowledge and understanding of the subject content; response may also contain unconnected material</li> <li>Exemplification, if used, is simple and poorly related to the text or may not be relevant</li> <li>Lack of clarity and organisation; English expression is simple with inaccuracies; geographical terminology, if used, is basic or not understood</li> <li>Sketch maps/diagrams are limited or poorly executed and may lack relevance</li> <li>Question is understood weakly and may be addressed slightly</li> <li>Superficial statements replace analysis and evaluation; application may be minimal or absent</li> <li>Conclusion may be absent or simply asserted</li> </ul>

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#### How to annotate essays and show marks awarded

#### Ticks

Examiners are asked to tick <u>at point of credit</u> and not in a large or loose manner such that it is hard to ascertain what has been credited. Please avoid simply ticking at the end of paragraphs to indicate you have read them. All pages and sketch maps/diagrams, if used, should, however, bear some sign that they have received your attention, such as the simple annotation 'Seen'.

#### Other annotation

Examiners may find a number of symbols and annotations useful. The most commonly used are given here.

	Indicating
?	an uncertain or doubtful point or an unconvincing argument
۸	omission
**	major omission
cf	compare with
IR or NR	often accompanied by wavy down ruling in the margin, irrelevance
(text)	identification of text for associated marginal comment
e.g.	example

#### Comments

Comments on responses are useful both in forming an initial assessment of quality and for any Senior Examiner who reviews the marking at a later stage. Comments will usually reflect the descriptors in the GMS and/or the Indicative content, but other comments may be helpful, such as when an essay is clearly unfinished.

Positive comments may be made, but derogatory remarks must be avoided.

#### Showing marks awarded at the end of a response

In awarding a mark to an essay, please indicate the level, quote one or more phrases from the GMS to support the award made and show the mark, out of 25, ringed. The marks derived from each AO, in whole marks (no half marks) should be given, totalling to the total mark awarded, for example:

	L4 Good K and depth of U, diagrams accurate and well-integrated, sound conc. based on evidence and argument.					
AO1	13	AO2	2	AO3	4	<u>19</u> 25

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#### Section A

#### Candidates should answer *two* questions from this section.

#### Tectonic Hazards

1 Fig. 1 shows the distribution of earthquakes by depth of focus on the west coast of South America.

#### (a) What is meant by the term *focus* of an earthquake?

The exact place/location (1 mark) where slippage occurs (1 mark) or from which energy is released (1 mark), from where the earthquake originates. 1 mark for concept that it occurs below the surface/within the crust.

[2]

### (b) To what extent is there a clear pattern to the spatial distribution of the depth of earthquake foci shown in Fig. 1? [4]

Candidates might identify the increase in depth of foci from west to east, or from the west coast inland; that shallow depth earthquakes are generally on or just off the coast; the string of shallow depth earthquakes heading away/west from coast in the south; exceptions. 1 mark per valid descriptive point, with 1 mark reserved for some evaluative statement, related to the clarity of the pattern.

#### (c) Explain why earthquake foci occur at different depths shown in Fig. 1. [5]

#### Indicative content:

Explanations for shallow focus earthquakes could examine:

- (i) earthquakes at the destructive boundary along the S. American coast; explanations discuss the build-up of stress as two plates meet near the surface, leading to the release of pressure as the plates slip past.
- (ii) those at the constructive boundary stretching west from the southern part of the coast; explanations discuss plates moving apart near the surface, with earthquakes generated either from harmonic tremors from volcanic activity, slippage along transform faults or vertical slippage associated with rift valley formation.
- (iii) the role of subduction and the angle of the benioff zone, as one plate is dragged beneath the other setting up stresses at lower depths, through the break-up of the subducting plate or the frictional build-up of pressure as the subducting plate descends into the aesthenosphere/upper mantle.

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#### Candidates show:

**L3:** accurate and detailed understanding of the reasons for both shallow and deep focus earthquakes. Explanations related to the angle of the subducrtion zone show clear explicit links with depth of foci.

**L2: either:** accurate understanding of the reasons for both shallow and deep focus earthquakes, but lacking detail in explanation.

or: an understanding of variable depths across a subduction zone.

or: accurate and detailed understanding of either shallow or deep focus earthquakes.

L1: understanding of either shallow or deep focus earthquakes, but lacking detail in explanation.

#### (d) How far is it possible for governments to reduce the death toll from tectonic hazards?[9]

#### Indicative content:

Knowledge of different ways by which the risk of deaths can be reduced, which might include prediction and evacuation (e.g. Tangshan, Montserrat), monitoring and precautionary measures, such as building and land use controls, emergency drills and preparation, availability of relief and disaster management. Understanding of how these methods reduce the death toll, such as removal from areas at risk, reducing the risk of secondary hazards (disease, starvation). Evaluation of the effectiveness of the methods in reducing the death toll. Evaluation may give alternative viewpoints for different types of area (e.g. level of economic development, population density), or may contrast earthquakes and volcanoes, or may discuss the profile of events.

#### Candidates show:

**L3:** convincing knowledge of a range of ways in which the death toll from earthquakes can be reduced, supported by reference to specific examples; evaluation of the effectiveness of different approaches to reducing the death toll, supported by evidence; an understanding that in some circumstances, the measures in place may not be successful.

**L2:** knowledge of a range of ways in which the death toll from earthquakes can be reduced, supported by some reference to examples; evaluation is assertive, rather than supported by any evidence, and exemplification is present, but lacks detail.

**L1:** knowledge of a limited range of ways in which the death toll from earthquakes can be reduced, lacking supporting examples; evaluation is likely to be absent or simply take the form of assertion, with no supporting evidence.

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#### Hazardous Weather

- 2 Fig. 2 shows the spatial distribution of tornadoes in the USA.
  - (a) Describe the main atmospheric features of a tornado.

[2]

Features such as: extremely high winds, small-scale vortex or equivalent, specific wind speeds quoted, fast-moving over relatively short distance, intense low pressure. 1 mark per correct point.

## (b) 'Tornado activity in the USA is greatest in inland areas.' To what extent does the information in Fig. 2 support this statement. [4]

Credit should be given for basic descriptions, which might identify the concentration of high incidence in the central states of the USA. Credit should be given for supporting evidence, such as naming specific states and/or the predominance of high incidence in the east, compared to the west. It would be equally valid to identify areas where tornado incidence is rare. 1 mark reserved for an evaluative/summative statement in response to the statement in the question. Use of specific figures required for full marks.

# (c) Fig. 3 shows the average annual number of tornadoes and the average annual number of deaths from tornadoes in the USA by decade from 1950 to 2005. Describe the changes shown and suggest why they occurred.

#### Indicative content:

Descriptions should identify the general increase in the annual number of tornadoes and the decrease in the number of deaths. Explanations for the increased number of tornadoes annually might include improved technology so that more are recorded or global warming as a possible cause. Explanations for the decreased number of deaths annually might be expected to refer to improved monitoring and warnings, better preparation on the part of individuals and better quality building.

#### Candidates show:

**L3:** accurate interpretation of the changes over time shown in Fig. 3, including reference to both aspects shown; valid explanations for the changes over time in both numbers of tornadoes and number of deaths is provided.

**L2: either:** accurate interpretation of the changes shown in Fig. 3, including reference to both aspects shown; a valid explanation for only one of the changes over time in both numbers of tornadoes or number of deaths is provided.

**or:** accurate interpretation of the changes over time shown in Fig. 3, with reference to only one aspect shown; more than one valid explanation for the identified change over time is provided.

**L1:** accurate interpretation of the changes shown in Fig. 3, lacking any valid explanation for the changes over time identified.

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### (d) With reference to examples, discuss the extent to which the impact of hazardous weather events is related to the level of economic development of the area affected. [9]

#### Indicative content:

Knowledge of different ways by which the level of economic development can affect the impact of hazardous weather, which might include the resources to monitor and predict hazardous weather events, the resources to provide effective emergency response and relief, the quality and availability of infrastructure as a result of economic development. Answers can refer to any examples of hazardous weather events. Understanding of how such aspects of the level of economic development help to affect the impact of hazardous weather events. Evaluation of the importance of the level economic development in affecting the impact of hazardous weather events, which might recognise that other factors can also be important, such as the severity and scale of the hazard, accessibility/remoteness.

#### Candidates show:

**L3:** convincing knowledge of how the level of economic development can affect the impact of hazardous weather events, supported by reference to specific examples; evaluation of the significance of the level of economic development, supported by evidence; an understanding that in some circumstances, other factors may be significant.

**L2:** knowledge of how the level of economic development can affect the impact of hazardous weather events, supported by some reference to examples; evaluation is assertive, rather than supported by any evidence, and exemplification is present, but lacks detail.

**L1:** knowledge of how the level of economic development can affect the impact of hazardous weather events, lacking supporting examples; evaluation is likely to be absent or simply take the form of assertion, with no supporting evidence.

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#### Hydrological Hazards

- 3 Fig. 4 shows river regimes for the Murray-Darling river basin in SE Australia for recent years compared to the long-term average.
  - (a) What is meant by the term *river regime*?

[2]

The average variations in river flow/discharge (1 mark) during the year (1 mark).

### (b) Using Fig. 4, examine the extent to which total monthly flow of the Murray-Darling river between 2006 and 2008 differs from the long-term average. [4]

Candidates might describe the generally lower flows in 2006/07 and 2007/08 (1 mark), with supporting evidence in the form of figures (1 mark), and the marked seasonal contrast between June-November, and January-May (1 mark), supported by evidence in the form of figures. 1 mark reserved for a comment that involves an assessment of the extent of the differences. Use of specific figures required for full marks.

(c) Table 1 shows average monthly rainfall and the mean temperature variation from the average between 1995 and 2007 for the Murray-Darling river basin.

Suggest reasons for the occurrence of severe water shortages in the basin between 2003 and 2007. [5]

#### Indicative content:

Reference to Table 1 might observe the generally higher temperatures in the period 2003–2007, and rainfall figures that are generally a little lower than average in the same period. Reasons related to these observations might relate to the lower rainfall inputs and, more significantly, the higher outputs from evapo-transpiration resulting from higher temperatures. Some credit could be given for other possible reasons, such as increased human usage (e.g. increased irrigation for farming, increased urban demand).

#### Candidates show:

**L3:** clear and accurate reference to Table 1 is used to provide detailed and valid reasons for severe water shortages; reasons based upon the significance of the higher temperatures is necessary for this level.

**L2:** clear and accurate reference to Table 1 is used to provide valid reasons for severe water shortages; reasons omit reference to the significance of temperatures, but may include valid reasons not based upon Table 1.

L1: either: clear and accurate reference to Table 1, lacking any attempt to use the information to provide valid reasons for severe water shortages.

or: valid reasons for severe water shortages are given, but without reference to Table 1.

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### (d) With reference to examples, assess the economic and social consequences of severe water shortages. [9]

#### Indicative content:

Knowledge of both economic and social consequences should be apparent. Economic consequences might include the impact on agricultural production, the need and cost of importing water, the impact on industrial production, the economic cost to government authorities. Social consequences might include disease, the social impact on farming communities, the rationing of drinking water. Answers can refer to examples at any scale, although local and national ones are likely to be most effective. Understanding of the ways in which severe water shortages lead to the consequences identified, such as through reduced crop yields, the need for governments to provide economic support for affected businesses and individuals, the need to use contaminated water for drinking purposes; and that some consequences have both economic and social elements. Evaluation includes assessment of these consequences, which could be in terms of severity, how long they last, effects on different groups and might be comparative in nature.

#### Candidates show:

**L3:** convincing knowledge of a range of economic and social consequences of severe water shortages, supported by reference to specific examples; an understanding of exactly how severe water shortages cause the consequences identified; evaluation of the extent of such consequences on individuals, businesses and governments supported by evidence.

**L2:** knowledge of a range of economic and social consequences of severe water shortages, supported by reference to specific examples; some understanding of how severe water shortages cause the consequences identified, but the links established may lack clarity; evaluation of the extent of such consequences on individuals, businesses and governments is largely assertive, with little supporting evidence.

L1: knowledge of some economic and social consequences of severe water shortages, lacking reference to specific examples; understanding of how severe water shortages cause the consequences identified is limited or absent; evaluation is likely to be absent or simply take the form of assertion, with no supporting evidence.

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#### Section B

Candidates should answer *two* questions from this section.

The Geography of Crime

4 Fig. 5 shows the location of crimes and the home location of convicted criminals in the borough of Southwark, London, UK, between October 2006 and March 2007 as reported in the local newspaper. Fig. 6 shows the main land use features of the borough of Southwark.

#### (a) What is meant by the term *crime*?

[2]

An act/deed/action (1 mark) that is against the law (1 mark).

## (b) To what extent is there a relationship between the location of reported crimes and the home location of convicted criminals shown in Fig. 5. [4]

Candidates might identify areas where crimes are committed either by ward name (e.g. Peckham) or by the use of direction (e.g. towards the NW corner of the borough), and areas where offenders live (e.g. Grange, E. Walworth). Pure descriptions of these features separately can gain 2 marks. 2 marks reserved for evaluating the link, which might be achieved by identifying areas where there are clusters of both crimes and offenders home locations (e.g. Peckham, Camberwell Green) and areas where the two elements do not coincide (e.g. SE corner of E. Walworth, towards the NW corner of the borough). 1 mark reserved for an evaluative/summative statement in response to the statement in the question. Use of specific figures required for full marks.

# (c) Using Figs 5 and 6, suggest reasons for the location pattern of reported crimes in Southwark. [5]

#### Indicative content:

Reference to Fig. 6 might observe the coincidence of crime locations and some of the main shopping centres or some of the LA housing areas or proximity to major roads. It would also be valid for reference to be made to the instances where crime location and home location of offender coincide. Reasons related to these observations might consider the high density of population in shopping centres, providing an increased opportunity for crime; the environment of some LA housing areas providing vulnerable areas for crime (underground car parks, poorly lit areas); proximity to major roads providing easier getaway for criminals. Some credit could be given for other possible reasons, such as poverty, boredom.

#### Candidates show:

**L3:** clear and accurate reference to Fig. 6 is used to provide detailed and valid reasons for the location pattern of reported crimes, shown in Fig. 5.

**L2:** clear and accurate reference to Fig. 6 is used to provide valid reasons for the location pattern of reported crimes, shown in Fig. 5.

**L1: either:** clear and accurate reference to Fig. 6, lacking any attempt to use the information to provide valid reasons for the location pattern of reported crimes, shown in Fig. 5. **or:** valid reasons for the location pattern of reported crimes are given, but without reference to Fig. 6.

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### (d) Outline some of the initiatives that can be used to reduce crime rates in urban areas and assess their effectiveness. [9]

#### Indicative content:

Knowledge of a range of initiatives used to reduce crime rates in urban areas, which might include increased policing (such as more officers, stop and search), target hardening approaches (such as gated housing complexes, improved house security systems), improved monitoring of vulnerable areas (such as CCTV, neighbourhood watch or equivalent community initiatives), education and public awareness (such as factual TV crime programmes, advertising programmes). Understanding of the ways in which such methods can reduce urban crime rates, through increased detection and conviction and reduced vulnerability. Evaluation includes assessment of the effectiveness of the methods identified through reference to evidence from specific examples. Such evaluation might be specific to particular methods or might take a wider urban view by quoting figures on overall crime rates for specific urban areas.

#### Candidates show:

**L3:** convincing knowledge of a range of methods used to reduce crime rates in urban areas, supported by reference to examples; a clear understanding of how these methods reduce urban crime rates; evaluation of the effectiveness of the methods identified, supported by evidence.

**L2:** knowledge of a range of methods used to reduce crime rates in urban areas, supported by some reference to examples; some understanding of how these methods reduce urban crime rates but the links established may lack clarity; evaluation of the effectiveness of the methods identified is largely assertive, with little supporting evidence.

L1: knowledge of some methods used to reduce crime rates in urban areas, lacking reference to examples; understanding of how these methods reduce urban crime rates is limited or absent; evaluation is likely to be absent or simply take the form of assertion, with no supporting evidence.

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#### Health and Disease

#### 5 (a) What is meant by the term *life expectancy*?

The number of years/age (1 mark) someone is expected to live from birth (1 mark)

### (b) Fig. 7 shows mortality rates for the population aged under 75 from the main degenerative diseases in Scotland, 1995–2006.

## To what extent has the incidence of degenerative diseases shown on Fig. 7 decreased over time? [4]

[2]

Candidates might identify the decline of all three main diseases, CHD, cancer and stroke, but the more fluctuating nature of "other". Credit should be given for the use of figures in support of the trends identified. 1 mark reserved for a comparative statement, such as the greater decline of CHD, compared to cancer and stroke, or the observation that whereas CHD, stroke and cancer all decline, other diseases generally do not. 1 mark reserved for an evaluative/summative statement in response to the statement in the question. Use of specific figures required for full marks.

Focus should be on decrease not just change.

### (c) Fig. 8 shows the mortality rates for coronary heart disease and cancer, 2000–2006 in Scotland as a whole and in the 15% most deprived areas in Scotland

With reference to Fig. 8, describe and explain the impact of deprivation on the incidence of deaths from coronary heart disease and cancer. [5]

#### Indicative content:

Descriptions should identify the consistently higher mortality rates for the most deprived 15% for both cancer and CHD. Explanations might link deprivation to poverty, a poorer diet, limited access to health care, lifestyle, poorer housing and living conditions. Explanations make explicit the link between deprivation and higher mortality rates.

#### Candidates show:

**L3:** accurate description of the higher mortality rates for the most deprived 15%, supported by evidence; valid explanations for these differences are provided, making the link between deprivation and mortality clear.

**L2: either:** accurate description of the higher mortality rates for the most deprived 15%, supported by evidence; some explanation for these differences is provided, but the link between deprivation and mortality is not made clear.

**or:** basic description of the higher mortality rates for the most deprived 15%, lacking supporting evidence; valid explanations for these differences are provided, making the link between deprivation and mortality clear.

**L1:** accurate description of the higher mortality rates for the most deprived 15%, supported by evidence, but lacking any valid explanation.

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### (d) Critically examine government attempts to reduce the incidence of deaths from degenerative diseases. [9]

#### Indicative content:

Knowledge of a range of policies that governments could follow to try to reduce the incidence of deaths, supported by exemplification from a specific country or countries. Such policies might include advertising campaigns to promote healthier diets (e.g. anti-smoking, diet guidelines) and lifestyle (e.g. exercise for life), improved health care (e.g. regular health checks, drug licensing), financial approaches (e.g. taxation). Understanding of how such policies can reduce the incidence of deaths from degenerative diseases. Evaluation includes a clear critical examination of the policies described in terms of their effectiveness. HIV/AIDS only acceptable if focus on approaches aimed at tackling Immune system.

#### Candidates show:

L3: convincing knowledge of a range of government policies to reduce the incidence of deaths from degenerative disease, supported by examples; a clear understanding of how these policies lead to a reduction in deaths; evaluation of the effectiveness of the policies identified, supported by evidence.

**L2:** knowledge of a range of government policies to reduce the incidence of deaths from degenerative disease, with some reference to examples; understanding of how these policies lead to a reduction in deaths may lack clarity; evaluation of the effectiveness of the policies identified is largely assertive, with little supporting evidence.

**L1:** knowledge of some of government policies to reduce the incidence of deaths from degenerative disease, lacking reference to examples; understanding of how these policies lead to a reduction in deaths is limited or absent; evaluation is likely to be absent or simply take the form of assertion, with no supporting evidence. NB. 2/4 for discussions of infectious disease.

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#### Spatial Inequality and Poverty

#### 6 Fig. 9 shows levels of poverty in selected world regions, 1981–2001.

#### (a) What is meant by the term *absolute poverty*?

Some indication of the lack of the needs (1 mark) for subsistence (1 mark). This could be expressed in a variety of ways, such as an income of less than \$1–2 per day.

[2]

## (b) Using Fig. 9, evaluate the extent to which different regions have reduced poverty between 1981 and 2001. [4]

Credit should be given for basic descriptive points, such as the reduction in E. Asia and the Pacific (58% down to 15%), the reduction in S. Asia (51% to 31%), and the general stability of the trends for the other three regions. 1 mark reserved for some evaluative element, which might involve a comparison of different regions. 1 mark reserved for an evaluative/summative statement in response to the statement in the question. Use of specific figures required for full marks.

### (c) Describe the differences in levels of poverty between Sub-Saharan Africa and the Middle East and N. Africa in 2001, as shown in Fig. 9 and suggest why they occurred. [5]

#### Indicative content:

Descriptions should pick out the significantly higher levels of poverty in Sub-Saharan Africa and support this by figures taken from Fig. 9. Explanations might suggest a variety of valid reasons, which could include economic (such as high dependence on primary products, high income oil producers in the Middle East), political (such as political stability/instability, government policy, corruption) and environmental (such as drought and flooding). Explanations make explicit the link between the reasons given and levels of poverty.

#### Candidates show:

**L3:** accurate description of the higher levels of poverty in Sub-Saharan Africa supported by evidence; valid and detailed explanations are provided, making the link between the reasons identified and levels of poverty. Explicit comparison of the two regions.

**L2:** accurate description of the higher levels of poverty in Sub-Saharan Africa supported by evidence; some explanation for these differences is provided, but the link between the reasons identified and levels of poverty is not explained. Two separate descriptions/explanations related to the two regions

**L1:** accurate description of the higher levels of poverty in Sub-Saharan Africa supported by evidence, but lacking any valid explanation.

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#### (d) Fig. 10 shows Rostow's model of economic development (1960).

#### Evaluate the effectiveness of this model as an explanation of economic development. [9]

#### Indicative content:

Fig. 10 should act as a stimulus for demonstrating knowledge of how countries develop economically. Knowledge and understanding are likely to be shown most effectively through an application of the model to particular countries, but may also be shown through examination of alternative models, such as underdevelopment and Marxist approaches. Evaluation should demonstrate some balance, by recognising situations and examples where the model does seem to be effective, but contrasting these to situations and examples where the model is not, or where alternative models are more effective.

#### Candidates show:

L3: convincing knowledge of examples of where the model is and is not effective in explaining economic development, with a clear balance between both sides; understanding of why the chosen examples do and do not fit the model; evaluation of the overall effectiveness of the model in explaining economic development, supported by evidence. Application to examples required for this level.

**L2:** knowledge of examples of where the model is and is not effective in explaining economic development is unbalanced, with a strong or complete emphasis on one side; some understanding of why the chosen examples do and do not fit the model; evaluation of the overall effectiveness of the model in explaining economic development is limited, with little supporting evidence. Basic critiques of Rostow in general terms.

L1: knowledge of where the model is effective in explaining economic development; understanding of why the chosen examples do fit the model lacks detail or is absent; evaluation is likely to be absent or simply take the form of assertion, with no supporting evidence.

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#### Section C

#### Candidates should answer one question from this section.

## 7 With reference to an area you have studied, assess the extent to which the geographical issues it faces are inter-related. [25]

#### Indicative content:

Candidates show knowledge and understanding of a range of geographical issues, which could come from either the geographical hazards section (tectonic, weather, hydrological) or the socioeconomic issues section (crime, health and disease, spatial inequality and poverty) or from both sections. The area chosen can be any suitable scale from urban or rural up to national and regional. Answers are likely to identify cases in which the geographical issues identified are interrelated, and might identify other cases, where more than one issue is apparent, but not necessarily inter-related. Understanding of the links between the different issues is central, as is some assessment and explanation of how they are inter-related. Inter-relationships might be examined in a causal fashion, such as poverty reducing access to health services, increasing the risk of disease and lower health levels, or earthquakes affecting the poor more than the wealthy.

Weaker responses are likely to show some grasp of the issues involved, but to lack an understanding of the complexity of the links between the various geographical issues. Such responses are also likely to lack detailed exemplification. At higher levels, candidates will show an understanding of the complexity of the links between the geographical issues, and recognise the ways in which these inter-relationships operate. Exemplification at this level will be place specific and use the information to support the arguments presented.

### 8 'It is easier to plan for the problems created by geographical hazards than those created by socio-economic issues.' Discuss the validity of this statement. [25]

#### Indicative content:

Candidates show knowledge and understanding of the ways in which a range of problems created by environmental hazards and socio-economic issues can be planned for. Planning for hazards might consider monitoring, prediction, evacuation, emergency procedures, land use controls, building regulations. Planning for socio-economic issues might consider researching patterns and incidence, preventative measures and reactive measures, financial initiatives. Knowledge and understanding is also shown through the use of specific examples to illustrate the points being made. Evaluation should consider the effectiveness of the planning methods described and compare those used for environmental hazards with those for geographical issues.

Weaker responses are likely to show some knowledge and understanding of the planning methods that can be used. Such responses are likely to lack detailed exemplification and may show an imbalance between environmental hazards and geographical issues. Evaluation is likely to be assertive and lack support from evidence. At higher levels, candidates will show a thorough understanding of the planning methods of a range of both environmental hazards and geographical issues, and will evaluate the relative ease of planning on the basis of evidence presented through exemplification.

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#### 9 'The long-term consequences of geographical hazards are more significant than the shortterm impacts.' How far do you agree? [25]

#### Indicative content:

Candidates show knowledge and understanding of both short and long-term consequences, and support this with relevant examples from different geographical hazards. Short-term consequences might focus on injuries, deaths and damage to property and infrastructure as a direct result of the hazard event (e.g. flooding from heavy rain or storm surges, ground-shaking/liquefaction leading to collapsed structures, various volcanic hazards, such as lahars and pyroclastic flows). Long-term consequences might focus on social aspects, such as disease and starvation due to the disruption to infrastructure and difficulty of access for relief, economic aspects, such as loss of agricultural land and damage to industrial production, and political aspects, such as increased instability. Evaluation of the relative significance of the short and long-term consequences is evident and is based firmly on the evidence presented through exemplification.

Weaker responses are likely to show some knowledge and understanding of both short and longterm consequences, but are likely to be stronger on the short-term ones. Such responses are also likely to lack detailed exemplication. At higher levels, candidates will show thorough knowledge and understanding of both short and long-term consequences, supported by detailed and relevant exemplification which will be used to evaluate their relative significance.