

Geography Specification B

Advanced GCE **A2 7833**

Advanced Subsidiary GCE **AS 3833**

Combined Mark Schemes And Report on the Units

January 2006

3833/7833/MS/R/06J

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by Examiners. It does not indicate the details of the discussions which took place at an Examiners' meeting before marking commenced.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

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**Mark Scheme 2687
January 2006**

Notes for Examiners

The following notes, specific to the “Physical Systems and their Management” module (2687) should be read in conjunction with ‘Instructions to Examiners’ provided by OCR. Please follow all the instructions regarding administration and timing carefully.

Your attention is drawn to the opening statement of Module 2687 in the Specification:

This module is designed to build on studies of physical geography already undertaken at GCSE... It requires a deeper understanding of physical processes... their influence on environments and people’s responses to them.

The questions seek to reflect this in their use of resources and the standard of answers expected.

As Centres are encouraged to select their own case studies within the scale and place requirements of the Specification, Examiners should be prepared to accept a wide range of examples appropriate to the question. This point is further emphasised in the rubric, which states that ‘*credit will be given for sketch maps, diagrams, and examples of places that you have studied, provided that they illustrate your answer*’.

When using the Levels mark scheme, a candidate should be awarded full marks for a level where the requirements have been met. The suggestions of possible answers given in the mark scheme are for guidance only and it is not expected that even the best candidates will cover all of the possible points. High quality answers that show good relevant geographical knowledge and understanding should be awarded full marks. This may apply to unforeseen answers. If in doubt do not hesitate to contact your Team Leader.

Where a candidate exceeds a lower level, but does not fulfil the requirements of the next level, an intermediate mark should be awarded. Professional judgement should be used where the answer departs from the expected response but is still valid geographically.

Section A

Answer **two** questions.

Question	Answer	Mark
1	Atmospheric Systems and People	
	<p>The roots of the first sections of this question are the moisture and temperature regimes in different parts of Europe, maritime and continental factors.</p>	
(a)	<p>Study Figs. 1a and 1b.</p> <p>Describe the seasonal distribution of rainfall from Limerick across Europe to Warsaw.</p>	[9]
	<p>Level 3 (8-9 marks) A full description of the winter and summer patterns of rainfall from west to east across Europe referring to figures and recognising the significance of annual totals. Offering other seasonal aspects than quoting the figures e.g. working out spring and autumn contrasts</p>	
	<p>Level 2 (5-7 marks) An answer that deals effectively with either each place in turn or the whole span – quoting some or all the figures..</p>	
	<p>Level 1 (1-4 marks) A basic attempt that describes a simple or single feature such as winter rainfall decreases eastwards.</p>	
(b)	<p>Account for the changes in temperature from Tromso to Naples.</p>	[9]
	<p>Level 3 (8-9 marks) A full account of maritime and continental influences on temperature as well as latitudinal differences including insolation and atmospheric effect.</p>	
	<p>Level 2 (5-7 marks) A partial account that either explains latitude effectively and makes an attempt at continentality or similar other factor.</p>	
	<p>Level 1 (1-4 marks) A simple account of differences in latitude such as ‘Naples is closer to the Equator so is warmer.’</p>	

Question	Answer	Mark
(c)	<p>With reference to examples, explain how rapid changes in temperature can give rise to short term hazards.</p> <p>Snow, fog, frost, local flooding from snow melt could all be used.</p> <p>Level 3 (10-12 marks) A good range of the temperature changes and detailed explanation of how these cause two or more short term hazards. Clear exemplification is expected</p> <p>Level 2 (6-9 marks) A moderate explanation of at least two hazards, or good explanation of how one and brief explanation of how a second results in short term hazards. Some exemplification is expected.</p> <p>Level 1 (1-5 marks) A basic explanation of how two hazards or a reasonable explanation of how one hazard result from rapid change in temperature. Max. L 1 if no example.</p>	[12]

2

Landform Systems and People

The root of this question lies in the first key idea and concept – fluvial processes combine with weathering and slope processes to produce distinctive landforms and mass movement, basal removal etc.

(a)	<p>Study Fig. 2. Draw a sketch of the valley and annotate with the natural features that you can identify.</p> <p>Features include very steep valley sides, interlocking spurs with rough grazing, v-shape, erosion and mass movement, small braided stream (low flow conditions) with gravel bed and some larger sub-rounded stones.</p> <p>Level 3 (8-9 marks) A good sketch at appropriate scale with the main river and slope features labelled.</p> <p>Level 2 (5-7 marks) A fair attempt at a sketch including at least one non-river feature.</p> <p>Level 1 (1-4 marks) A cross section or basic sketch with very basic labels e.g. 'vegetation'.</p> <p>Max if not a sketch.</p>	[9]
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Question	Answer	Mark
(b)	<p>Suggest and explain the natural processes by which this valley may have been formed.</p>	[9]
	<p>The emphasis is on fluvial processes together with the points above. Human or animal activity could be argued for some of the erosion visible.</p>	
	<p>Level 3 (8-9 marks) A full explanation that shows an understanding that a combination of fluvial processes, weathering and mass movement interact to produce valleys. A clear focus on this valley should be offered.</p>	
	<p>Level 2 (5-7 marks) A moderate explanation that shows some development of two points of processes – one river + one other e.g. mass movement, or one developed well and another mentioned.</p>	
	<p>Level 1 (1-4 marks) A simple explanation of one process such as river erosion. Only focuses on river channel rather than valley.</p>	
(c)	<p>For a named British drainage basin that you have studied, explain ways in which it has been modified by human activity.</p>	[12]
	<p>The answer will depend on the example, but points should be recognisably appropriate for the drainage basin chosen.</p>	
	<p>Level 3 (10-12 marks) A detailed and accurate case study with clear focus on drainage basin.</p>	
	<p>Level 2 (6-9 marks) A moderate explanation of one way in depth or two or more ways in less detail, such as flood defences, change in land use, reservoir construction etc. Max if focus is on the channel.</p>	
	<p>Level 1 (1-5 marks) A basic or superficial explanation of one or more modification such as urbanisation. Max L1 if not named or not British</p>	
3	<p>Coastal Systems and People</p>	
(a)	<p>Study Fig. 3. Choose <u>one</u> of the varieties of coastal wetland (A-E). Suggest ways in which the coastal wetland has accumulated in your chosen example.</p>	[9]
	<p>Sediment accumulation in a low energy environment, flocculation, the sequence of mud flats and algae building up through slob and sward zones to high marsh. The sediment is stabilised by plant growth, including <i>Spartina</i>, <i>Salicornia</i>, sea aster, sea purslane and salt marsh grass (<i>Zostera</i>), reeds (<i>Juncus maritima</i>) etc.</p>	

Question	Answer	Mark
	<p>Level 3 (8-9 marks) A clearly expressed explanation of how the wetland forms with knowledge of its continued development – especially the role of vegetation.</p> <p>Level 2 (5-7 marks) A moderate explanation of the process (e.g. consideration of energy loss, flocculation etc) of deposition and an understanding of the significance of the role of vegetation.</p> <p>Level 1 (1-4 marks) A basic explanation with little or no knowledge of the role of vegetation or why the wetland has been deposited. Max if focus is on the formation of the sheltering feature e.g. spit.</p>	
(b)	<p>Outline a management strategy to cope with future sea level change.</p> <p>A single strategy has been required but expect candidates definition of strategy to vary e.g. hard engineering. Do not penalise candidates who look at more than one strategy.</p> <p>Level 3 (8-9 marks) A detailed account of a suitable strategy. Flooding in low lying areas or increased erosion will be the main subjects for protection, but implications for urban areas and farmland could be considered, with the Thames Barrier, sea walls etc and managed retreat all possible solutions.</p> <p>Level 2 (5-7 marks) A moderate description of one or more strategies with some explanation of its/their role.</p> <p>Level 1 (1-4 marks) A basic description of one or more simple strategies with little or no explanation of how it could cope with a sea level change.</p>	[9]
(c)	<p>Use diagrams to help illustrate how waves erode a named cliffed coastline.</p> <p>Level 3 (10-12 marks) Clear diagrams used to show; some of hydraulic action and wave quarrying, pressure release, abrasion, solution illustrated appropriately plus some reference to other factors e.g. structure, wave strength.</p> <p>Level 2 (6-9 marks) A moderate explanation with an attempt at illustration. Clear focus on 'how'. At this level many may describe the evolution of stacks etc. Max if no named cliffed coast.</p> <p>Level 1 (1-5 marks) A basic explanation with no diagrams or where diagrams have little focus on 'how' waves erode.</p>	[12]

Section B

Answer **one** question.

Either

Question	Answer	Mark
4	Discuss whether time is an important factor in the formation of fluvial and coastal landforms that you have studied.	[30]

Fluvial and coastal landforms are the first subjects of the Questions for Investigation. Sub aerial processes, weathering, slope and fluvial processes, coastal configuration, local winds are all mentioned in the syllabus. In studying landforms the element of time cannot be ignored as it is fundamental to Earth processes. Rock type and processes can also be considered, and some will include human interaction although the question relates to fluvial and coastal landforms so human actions should be related to their impact on the formation of such landforms.

Time may refer to length needed for processes to act, seasonal or diurnal differences in processes, how long a surface has been exposed or even the cycle concept with time and its interruptions e.g. uplift = rejuvenation, change in climate etc.

Level 5 (27-30 marks)

A well structured, logical and balanced essay with specific relevant detail and good understanding of the balance between process, structure and time involved. A considered assessment or evaluation is given, of the effect of time and several other factors on coastal and fluvial landscapes. Uses appropriate terminology in almost faultless English to communicate ideas.

Level 4 (21-26 marks)

A good essay with a clearly developed understanding of physical systems and that demonstrates some detailed knowledge and understanding of the importance of time, giving preferably two or more examples of named landform systems. Clear attempt at evaluation.

Level 3 (15-20 marks)

The essay begins to achieve balance in describing physical processes and explaining the importance of time, but there may still be weakness in knowledge of case studies. Conclusions may be limited, although able to recognise more than one other factor, but language is reasonably accurate. Should include any additional consideration of the role of time – other than ‘processes take time’. A comparative assessment of how long individual landforms take to evolve can lift candidates to this level.

Question	Answer	Mark
	<p>Level 2 (9-14 marks) A more developed answer with some understanding of the role of time (processes take time to work) with some examples of landforms, but still a vague assessment of its importance. Still an over-descriptive approach with no clear evaluation or judgement. Some structure, but there are weaknesses in English and the answer may lack a clear focus. Max if only Fluvial or coastal landforms considered.</p> <p>Level 1 (1-8 marks) A basic and simple description of physical processes. Very little understanding of the concept of time involved. Limited knowledge of examples and poorly structured with poor use of language and obtrusive errors.</p>	
5	<p>Illustrate and evaluate the interactions between people and atmospheric systems.</p>	[30]
	<div style="border: 1px solid black; padding: 5px;"> <p>‘Opportunities and constraints for human activities’; ‘people have an impact on weather and climate at a range of scales’ could be the start points for this essay directly from the syllabus, with local micro climates, air quality and global warming being used as examples. Water management and flood protection could also be included.</p> </div>	
	<p>Level 5 (27-30 marks) A well structured, logical and balanced essay with specific relevant detail and good understanding of the interactions involved. A considered evaluation is given of well illustrated examples of interactions between people and atmospheric systems. Uses appropriate terminology in almost faultless English to communicate ideas.</p>	
	<p>Level 4 (21-26 marks) A good essay with a clearly developed understanding of atmospheric systems and that demonstrates some detailed knowledge and understanding of interactions giving preferably two or more examples.</p>	
	<p>Level 3 (15-20 marks) The essay begins to achieve balance in describing atmospheric processes and how people interact with them, but there may still be weakness in knowledge of case studies. Conclusions may be limited, with little evaluation, but language is reasonably accurate.</p>	
	<p>Level 2 (9-14 marks) A more developed answer with some understanding of the interaction between people and atmospheric systems giving one or two weakly developed examples. Still an over-descriptive approach with no clear evaluation. Some structure, but there are weaknesses in English and the answer may lack a clear focus. Max if only one side of interaction examined.</p>	

Question	Answer	Mark
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Level 1 (1-8 marks)

A basic and simple description of an interaction between people and atmospheric systems. Very little understanding of the concepts involved or attempt at evaluation. Cause and effect not well understood. Limited knowledge of examples and poorly structured with poor use of language and obtrusive errors.

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Generic Level Descriptors**Section A, part (a)****Level 3 (8 - 9 marks)**

Description is comprehensive and detailed.

Evidence from the resource is used extensively to support points.

Candidate may further support points from own knowledge.

Level 2 (5 - 7 marks)

A sound description but some important points missed.

Some evidence from the resource is used to support some points.

Own knowledge may be used in support of points instead of resource.

Level 1 (1 - 4 marks)

Focus on one or two descriptive points. Several important points missing.

Very little evidence used in support either from the given resource,

or from own knowledge.

Section A, part (b)**Level 3 (8 - 9 marks)**

Explanation includes a wide range of points and shows very good understanding.

Evidence is used to exemplify points and assist in explanation.

The evidence will be appropriately selected from the resource, or be drawn from the candidate's own knowledge.

Level 2 (5 - 7 marks)

Some sound explanatory points made but there are important gaps in the explanation and a partial understanding shown. Some points will be supported by evidence but some explanatory points will not be exemplified. Limited evidence may be drawn from the resource, or from own knowledge

Level 1 (1 - 4 marks)

One or two explanatory points made, but the overall understanding will be weak.

Most important points may be missed. Little, if any, use of evidence in support of points made, either from the resource or own evidence.

Section A, part (c)**Level 3 (10 - 12 marks)**

Extensive use of case study material used in explanation.

Explanation is comprehensive and shows very good understanding.

Most aspects of the issue are raised and commented on.

Evidence is place specific and is fully appropriate to illustrate points made.

Level 2 (6 - 9 marks)

Some case study material is given to support some important points of explanation.

Explanation shows good understanding of some points but the explanation is incomplete. Some important aspects of the issue are missing. Some evidence may be place specific but some may be rather general. Evidence selected may not always be appropriate to illustrate points made.

Level 1 (1 - 5 marks)

Little case study material is given. Explanation is limited and partial with many major points not dealt with. Evidence is generalised rather than place specific. Evidence given may not be particularly appropriate to support points made.

Section B**Level 5 (27 - 30 marks)**

Shows a sound understanding of the issues related to the topic.
Good use of appropriate place specific material. Will have good detail.
Arguments will be reasoned and be based on examples provided.
Most information is soundly ordered with clear evidence of structure.
There is a sound attempt to summarise or reach a conclusion.
English expression is sound and clear in most places.

Level 4 (21 - 26 marks)

Shows understanding of some issues related to the topic.
Some place specific material used, which may be may be loosely appropriate, but may lack full detail.
Arguments may show some reasoning and may be related to examples.
Overall structure will show some ordering but may have some flaws.
There is some attempt to summarise or reach a conclusion.
English expression may mainly be good but show weakness in places or some lack of clarity.

Level 3 (15 - 20 marks)

Shows some understanding of a few issues related to the topic.
A little place specific material will be given, but detail may be poor.
Arguments will only have a little reasoning and may have only a little support.
Information used shows a little ordering, so the overall structure will have some weakness.
There is only a poor attempt to summarise or reach any conclusion.
English expression is largely unambiguous, but may be poor in places leading to a lack of clarity.

Level 2 (9 - 14 marks)

Answers scoring in this range will show two or more of the following characteristics:-
Shows a little understanding of very few issues related to the topic.
There is some place material, but is general or only loosely related to the topic.
Some reasoning presented but weakly argued.
Information used shows only a little ordering, and overall structure is distinctly weak.
There is some evidence of attempt to summarise or reach any kind of conclusion.
English expression is simple. Clarity may be limited.

Level 1 (1 - 8 marks)

Answers scoring in this range may show one of the following characteristics, or alternatively, may contain other material which may have some slight relevance to the answer:-
Shows a little understanding of very few issues related to the topic.
There is some place material, but is general or only loosely related to the topic.
Some reasoning presented but weakly argued.

Information used shows only a little ordering, and overall structure is distinctly weak.

There is some evidence of attempt to summarise or reach any kind of conclusion.

English expression is simple. Clarity may be limited.

Question	Answer	Mark
1 (a)	<p>Use Fig. 1 to compare the changes in employment structure between Australia (MEDC), Indonesia (NIC) and Ethiopia (LEDC) from 1982 to 2002.</p> <ul style="list-style-type: none"> • Different starting points for each country • Small change Australia, secondary fall, tertiary increase • Indonesia large decrease in primary, tertiary slightly more growth than secondary • Only very minor change from primary to secondary in Ethiopia • Sectors elaborated by reference to, for example, agriculture, manufacturing and services, or named jobs <p>Level 3 (8-9 marks) Accurate description of sectoral changes for each country Clear comparative statements (whilst, but, on the other hand) For 9 marks at least one sector elaborated as indicated in final bullet point</p> <p>Level 2 (5-7 marks) Most of changes in sectors for the three countries described Comparison present, but incomplete, or by separate statements in same order Any clarification of a sector likely to be at top of level</p> <p>Level 1 (1-4 marks) Some changes described but either unclear or with distinct gaps Weak comparison, lacking comparative terms, just reading off without comment If any clarification of a sector, then better end of the level</p>	[9]
1 (b)	<p>Suggest reasons why the changes described in 1(a) have been taking place.</p> <ul style="list-style-type: none"> • Different starting points in development process • Australia already developed, some deindustrialisation and increase in services, rising affluence • Indonesia industrialising rapidly, but strongly growing consumer market stimulating services • Decline of industry in Australia and modest growth in Indonesia due to mechanisation • Global redistribution may be used to link changes between countries • Low base with little development in Ethiopia, subsistence from land still dominant, low affluence with little increase 	[9]

Question	Answer	Mark
1 (c)	<p>Level 3 (8-9 marks) Change (or lack of it) explained with reference to relevant sectors Clear reference to stage of development, and development processes in more than one country Roles of some factors, such as affluence of population, mechanisation or globalisation, included</p> <p>Level 2 (5-7 marks) Some changes explained but with some gaps either by country or sector Some mention of development and stage but not fully sustained Processes such as affluence, mechanisation or globalisation mentioned but not fully developed</p> <p>Level 1 (1-4 marks) One or two changes given some simple explanation, or answer static If development is mentioned, relevance poorly/not explained Little if any reference to processes that underlie change</p> <p>For a country that you have studied, explain how economic change can create both benefits and problems at a variety of scales.</p> <ul style="list-style-type: none"> • May deal with growth, decline, or change of emphasis • Benefits in employment, affluence, increased tax revenue, infrastructure • Problems in unemployment, increased poverty, declining tax revenue, migration • May explain these in terms of vicious/virtuous circle, cumulative causation • Clear range of scales showing linked similarities or differences <p>Level 3 (10-12 marks) Change clear, sound coverage of both benefits and problems A range of scales covered with some substance for at least one Place specific detail is good with clear references to activities/companies and locations</p> <p>Level 2 (6-9 marks) Change identified, coverage of benefits or problems but with imbalance/lack of detail At least one scale covered, with little reference to any others, or all covered but in no depth Some accurate reference to places but limited in extent or detail</p> <p>Level 1 (1-5 marks) Change present with some resulting benefit or problem, but limited Scale not always clear, or very superficial if better defined References very general, 'the North', or largely superficial, 'industry gone'</p>	[12]

Question	Answer	Mark
2 (a)	<p data-bbox="443 219 1203 286">Describe the distribution and size of sites for housing development shown in Fig. 2.</p> <ul data-bbox="443 324 1300 638" style="list-style-type: none"> • Brownfield in a central belt running west to east • None of brownfield on the periphery • Greenfield has two peripheral and one in brownfield belt • More brownfield than greenfield • One greenfield very large, larger than all other sites combined • Two of greenfield sites larger than any of brownfield, two of which are very small • Relationship to transport • Comments on size of area in relation to number of houses <p data-bbox="443 672 715 705">Level 3 (8-9 marks)</p> <p data-bbox="443 707 1326 873">Describes both distribution and size in some detail Both brownfield and greenfield discussed, may be by B1-5 and G1-3 references Some reference to resource in terms such as areal extent, directions, distances, relative positions</p> <p data-bbox="443 907 715 940">Level 2 (5-7 marks)</p> <p data-bbox="443 943 1286 1108">Deals with both distribution and size, but incomplete, or showing imbalance Covers both brownfield and greenfield, but poorly differentiated, unbalanced Reference to the resource but may be indirect</p> <p data-bbox="443 1142 715 1176">Level 1 (1-4 marks)</p> <p data-bbox="443 1178 1294 1310">May be reference to both distribution and size, but poor detail, or one component missing Brief on both types of site or one completely missing Little reference to the resource, any given loose and imprecise</p>	[9]
2 (b)	<p data-bbox="443 1344 1318 1411">Explain why Lowestoft is expected to develop greenfield sites in addition to brownfield sites to meet future housing needs.</p> <ul data-bbox="443 1444 1332 1825" style="list-style-type: none"> • Only 283 brown-field homes, further 870 green-field to complete extra 1 153 homes needed • Brownfield sites may be more expensive to develop, e.g. may need demolition and clearing • Brown-field sites insufficient to meet demands because of lower densities than in past, and; • Smaller family size, more single occupancy, more second homes • Small increase in population, but greater demand for homes • May be preference for peripheral locations to ease commuting/pleasanter environment etc 	[9]

Question	Answer	Mark
2 (c)	<p>Level 3 (8-9 marks) Explains why there is increasing demand for housing for two or more reasons in detail Demonstrates a need for green-field sites in addition to brown-field Supports the explanation with reference to resource and/or own information</p> <p>Level 2 (5-7 marks) One reason for increasing demand for housing clear, and one or more other(s) mentioned Shows need for green-field and brown-field, less clear on 'in addition' Some valid support but not extensive or detailed</p> <p>Level 1 (1-4 marks) One or more reasons attempted but not developed to any degree States rather than explains a need for more land Support, if any, is poor or generalised</p> <p>Explain how recent changes in a named urban area in the UK have had impacts on the surrounding rural settlements.</p> <ul style="list-style-type: none"> • Increase in employment + increase in affluence → increased commuting • Increase in house building, possibly roads, shops and services • Increase in urban/fringe services leading to closure of rural services • Above changes leading to increases in traffic, reduction/increase of public transport • Competition for housing increasing prices beyond reach of low paid rural locals • Increased opportunities for rural young to obtain well paid urban jobs <p>Level 3 (10-12 marks) Urban change clear and linked to two or more rural impacts Explanation is good for two or more impacts Place detail for both named urban and rural areas, e.g. '<i>In Waterbeach north of Cambridge.</i>'</p> <p>Level 2 (6-9 marks) Urban change may be unclear but at least one impact clearly identified, or reverse One aspect is explained, or several given some degree of explanation Accurate places given in support but place detail thin, e.g. '<i>In villages around Cambridge.</i>'</p> <p>Level 1 (1-5 marks) Change may be unclear/missing and impacts poorly described/missing Any explanation is weak or misguided Place detail very thin if given at all. e.g. '<i>This has happened around London.</i>'</p>	[12]

Question	Answer	Mark
3 (a)	<p>Describe the dependency issues that are likely to arise from each of the population pyramids shown in Fig. 3.</p> <ul style="list-style-type: none"> • Mali will have high youth dependency • Sweden will have high old age dependency • Mali around 35% working age to 60% under 20 years • Sweden 54% working and over 20% old aged, but working age group entering old age • Youth dependency large drain on resources for education and health care (immunisation, diet) • Old age dependency large drain on resources for care (medical, sheltered homes) and pensions <p>Level 3 (8-9 marks) Accurate identification of both types of dependency Scale of problem shown by figures or strong relative terms Implications of the dependency described for each</p> <p>Level 2 (5-7 marks) Both dependencies identified although one may be less accurate Some sense of scale for one, or only superficial for both Implications of one kind of dependency sound and other neglected</p> <p>Level 1 (1-4 marks) May only identify one dependency or unclear if both mentioned Little sense of scale either by figures or relative terms No elaboration of the nature of either dependency</p>	[9]
3 (b)	<p>How can population change in a country be linked to a demographic cycle?</p> <ul style="list-style-type: none"> • Likely to be demographic transition model but credit any attempt to deal with a cycle • Stages identified with reference to birth rates, death rates and overall increase • Application of stages to one country is sound • Historical time and relative length of process largely accurate or realistic • Explanatory rather than just descriptive • Country may be named, or be generic application to 'a country' <p>Level 3 (8-9 marks) At least two stages identified from cycle chosen Explanation of processes sound in terms of change Application a country largely accurate or realistic</p> <p>Level 2 (5-7 marks) At least one stage dealt with well, or more covered superficially Some sound explanation but with gaps, or comprehensive coverage in thin detail Some accurate application to a country but either gaps or unrealistic parts</p>	[9]

Question	Answer	Mark
3 (c)	<p>Level 1 (1-4 marks) No stage clear or just a series of labels Explanation of any stage very weak No sound application to any country</p> <p>Explain why internal migration is occurring at a national scale in a named LEDC.</p> <ul style="list-style-type: none"> • Concentration of development and affluence in limited number of urban centres • Rural poverty, and many young chasing very few employment opportunities • Increases in transport in both surfaced roads, railways and provision of vehicles • Increased communication by media of opportunities offered in growth areas • Remittances, return visits by successful migrants, comfortably off retired <p>Level 3 (10-12 marks) Explains both push and pull reasons for migration Identifies some facilitating factor for 12 marks Sound place detail for both source and destination areas</p> <p>Level 2 (6-9 marks) Good explanation of only push/pull reasons, or poor explanation of both A facilitating factor would indicate upper end of level Place detail of source/destination moderate, or poor for both</p> <p>Level 1 (1-5 marks) Push and/or pull reasons very weakly presented No facilitating factors, or very superficial (upper end of level) Little if any place reference</p>	[12]
4	<p>Explain how the globalisation of employment is changing economies of both LEDCs and MEDCs.</p> <ul style="list-style-type: none"> • Industrialisation of many LEDCs, increase in secondary, tertiary, decline in primary • Deindustrialisation of most MEDCs, already low primary, growth of tertiary, decline of secondary • Some LEDCs growing rapidly in tertiary without secondary, especially with tourism • Some services sector jobs moving from MEDCs to LEDCs, especially call centres • May consider mobility of labour and migration and impact on economies • TNCs originally largely in manufacturing, movement of secondary, division of R&D, part production, assembly and marketing • TNCs growing in other sectors, tourism, finance, telecommunications 	[30]

Question	Answer	Mark
	<p>Level 5 (27-30) Shows good understanding of globalisation of employment for more than one sector Good exemplar detail on the overall structure and impact of at least one LEDC and one MEDC Arguments are reasoned, based on evidence and logically ordered There is a very good attempt to summarise or reach a conclusion English expression is sound and clear in most places</p> <p>Level 4 (21-26) Sound understanding of redistribution of employment but not fully comprehensive Sound exemplar material but some gaps on overall structure and impact for either LEDC or MEDC Well argued, but may be lacking in one of reasoning, evidence or logical ordering There is a sound attempt to summarise or reach a conclusion Only minor lapses in English expression</p> <p>Level 3 (15-20) Some understanding of some aspects of shifts of employment, but with distinct gaps Some exemplar material, but only moderate detail or a strong imbalance between LEDCs and MEDCs Sound level of argument but may have weaknesses in reasoning, evidence or logical ordering Some attempt to summarise or reach a conclusion is made English is generally good although there may be some weak sections</p> <p>Level 2 (9-14) At least one aspect of a shift in employment is clear, but very limited beyond that Some exemplification is provided, but nothing developed far Distinct weaknesses in reasoning, evidence or logical ordering Very weak attempt to summarise or reach a conclusion English is often awkward but some sound expression in places</p> <p>Level 1 (1-8) May not have any awareness of shifts in employment, but mentions loosely relevant point(s) Little if any exemplification Weak in reasoning, use of evidence and logical ordering Little or no attempt to summarise or reach a conclusion English very simple with little sound expression</p>	

Question	Answer	Mark
5	<p>To what extent do the causes, scale and nature of urban sprawl differ between LEDCs and MEDCs?</p> <ul style="list-style-type: none"> • Causes largely differ, scale may or may not differ, nature differs • Resulting from affluence/increased mobility in MEDCs, often not arising from population growth • Resulting from poverty and permanent migration in LEDCs, usually related to rapid population growth • Scale differences will vary according to examples chosen • May be similar in nature, growth of industrial areas • Nature may differ, executive homes in MEDCs, informal settlements LEDCs <p>Level 5 (27-30) Shows differences of causes, scale and nature of urban sprawl for LEDCs and MEDCs Good exemplar detail for at least one LEDC city with one MEDC city Arguments are reasoned, based on evidence and logically ordered There is a very good attempt to summarise or reach a conclusion English expression is sound and clear in most places</p> <p>Level 4 (21-26) Makes sound points concerning causes, scale and nature but not fully comprehensive Sound exemplar detail to for LEDC or MEDC cities, but with some gaps Well argued, but may be lacking in one of reasoning, evidence or logical ordering There is a sound attempt to summarise or reach a conclusion Only minor lapses in English expression</p> <p>Level 3 (15-20) Some points for MEDC or LEDC cities, but with distinct gaps Some exemplar material, but little detail, or imbalance between LEDC and MEDC cities, or many gaps causes, scale and nature Sound level of argument but may have weaknesses in reasoning, evidence or logical ordering Some attempt to summarise or reach a conclusion is made English is generally good although there may be some weak sections.</p> <p>Level 2 (9-14) At least one point on causes/scale/nature for LEDC or MEDC Some exemplification is provided, but nothing developed far Distinct weaknesses in reasoning, evidence or logical ordering. Very weak attempt to summarise or reach a conclusion. English is often awkward but some sound expression in places.</p> <p>Level 1 (1-8) May not understand sprawl but mention a loosely relevant point(s) Little if any exemplification Weak in reasoning, use of evidence and logical ordering. Little or no attempt to summarise or reach a conclusion. English very simple with little sound expression.</p>	[30]

**Mark Scheme 2689
January 2006**

Notes for Examiners

[Same as given on Specimen Materials.]

Report of Personal Enquiry and Questions 1 to 3

These parts of the examination are designed to assess the candidate's ability to plan, conduct and evaluate the outcomes of a geographical investigation. The Cover Sheet, which should accompany the report, will include a brief outline from the centre which describes the investigation(s) undertaken at the centre to prepare their candidates. The purpose of the outline is to provide examiners with an accurate and common background to the work undertaken by candidates from any one centre. Care should be taken when marking the answers to questions 1 to 3 not to credit mere repetition of the report.

Given the diversity of investigations that candidates will have undertaken, responses will vary considerably. Examiners should be prepared to award up to full marks for answers which do not follow precisely the pattern suggested by the descriptors, but which nevertheless show similar quality.

[Recommended adjustments to the Cover Sheet:

- 1. Replace "Number of Words" with "Number of Words in the Report" as some Centres wrote in the number of words in the brief summary.*
- 2. Replace "Signature" with "Signature of Teacher" as some candidates sign this section.]*

The Report

Examiners are asked to read carefully the outlines of work undertaken before marking the report. Depending on the activities undertaken, candidates may have had varying opportunities to comment on the different aspects of investigative work. This should be taken into account when marking work from different Centres. The report is designed to assess the candidate's ability to produce a geographical investigation.

The report on the Personal Enquiry will be marked against the following level descriptors.

The report should be read and given an impression grade before marking against the level descriptors.

Assessment Criteria (AC)	Levels marks available for each AC			Overall marks available for each level	
	L1	L2	L3	Level	Marks
Hypothesis, design and presentation	1	2-3	4	1	1-7
Data collection and outcomes	1-4	5-7	8-9	2	8-15
Evaluation and understanding	1-2	3-5	6-7	3	16-20

Hypothesis, Design and Presentation

Level 3 (4 marks)

There is a well-constructed hypothesis which is relevant to the stated aims of the study.

The report is well structured and fluently expressed.

Level 2 (2-3 marks)

The hypothesis is relevant to the stated aims.

The report is presented in a clear and intelligible manner.

Report of excessive length will not enter Level 3.

Level 1 (1 mark)

A hypothesis is stated that has some relevance **or** the aims are identified.

The report displays generally correct spelling, punctuation and grammar.

Data Collection and Outcomes

Level 3 (8-9 marks)

The report shows the following, but may lack detail **or** be slightly unbalanced:

- How decisions were made about the sources of data.
- The appropriateness of the methods and strategies used to fulfil the purpose of the enquiry.
- How these led to the outcomes.

The presentation and analysis of the outcomes are clear and relevant.

Level 2 (5-7 marks)

The report shows the following, but may lack detail **and** be unbalanced:

- How decisions were made about the sources of data.
- The appropriateness of the methods and strategies used to fulfil the purpose of the enquiry.
- How these led to the outcomes.

The presentation and analysis of the outcomes are generally clear and relevant.

Level 1 (1-4 marks)

A descriptive report which summarises the data collection and outcomes, although there may be some lack of coherence between and within the sectors.

Evaluation and Understanding

Level 3 (6-7 marks)

The report shows the following, but may lack detail **or** be slightly unbalanced:

- The evaluation recognises the validity of the outcomes, linking them to the data collected.
- Alternative strategies and sources of data that could have been used are discussed.
- Suggestions of how the study could be modified or extended are included.
- The significance of the results may be related to the particular area of geography.

Level 2 (3-5 marks)

The report shows the following, but may lack detail **and** be unbalanced:

- The evaluation recognises the validity of the outcomes, but they are unlikely to be linked to the data collected.
- Alternative strategies and sources of data that could have been used are discussed.
- Suggestions of how the study could be modified or extended are included.

Level 1 (1-2 marks)

The evaluation is simple and is likely to be in terms of its success in relation to the original topic or question.

Questions 1 to 3

Credit answers that are given in terms that **extend** the Report on the Personal Investigation.

- 1 If you repeated your investigation at the same location next year, identify the factors that need to be considered to ensure a fair comparison with this year's investigation. Why might this be difficult to achieve?**

[20]

Indicative content:

Physical:

- Physical changes by man to the location: canalising rivers, building beaches, woodland planted or cut down.
- Human changes to the location: construction of new roads, buildings and barriers.
- Natural changes: weather affects accessibility to sites.

Human:

- Availability of equipment: same, should better equipment be used but jeopardise comparability.
- Sampling method (e.g. day, time of day, type, justification of location) and sample size: should same be used or improved at expense of comparability.
- Amount of time available.

The following content is applied to each level:

- The discussion relates to the personal enquiry.
- The relevance of the factors – achieving the same results each year is not relevant.
- The difficulty – or ease (since “might” is part of the question) - of achieving comparability in relation to influences on the methodology including some or all of
 - sampling method
 - sample size
 - fieldwork measurement

Level 5 (18-20 marks)

Either Two or more factors are discussed well.

Or More factors are discussed in less depth.

The answer is logically ordered and well presented.

Level 4 (14-17 marks)

Either Two or more factors are discussed quite well.

Or More factors are discussed in less depth.

The answer is generally logically ordered well presented.

Level 3 (9-13 marks)

Either One or more factors are discussed moderately well.

Or More factors are discussed in less depth.

There are lapses in the logic and presentation of the answer.

Level 2 (5-8 marks)

- Either** One or more factors are discussed **adequately**
Or More factors are discussed **in less depth.**

There are noticeable gaps and/or errors in the answer.

Level 1 (1-4 marks)

- Either** One or more factors are discussed **in a basic manner.**
Or Factors are **irrelevant** to the personal enquiry.

There are considerable gaps and/or errors in the answer.

- 2 A geographical investigation may be carried out by an individual or a group of students. Identify the approach that you used and evaluate both its advantages and disadvantages.**

[20]

Indicative content:

Advantages of individual investigations:

- Don't need to rely on other people, e.g. poor measurement techniques, poor data recording.
- Can plan investigation that student most wishes to carry out.
- No need to collect superfluous data for other members of the group.
- No need to duplicate effort, e.g. each group member takes it in turn to take each type of measurement.

Advantages of group investigations:

- Larger dataset can be collected due to time savings – important for climate, river and coastal studies as well as human studies where pedestrians and vehicles are counted.
- Can take a consensus reading, e.g. for environmental impact assessment.
- May have access to substitute data if some is lost or clearly incorrect.
- Additional data collected for other group members can be used if own variables need supporting evidence.
- If one member is ill it has a less serious effect on data collection than with an individual investigation.

The following content is applied to each level:

- The discussion relates to the personal enquiry.
- The identification of the approach used.
- The relevance of the advantages/disadvantages.
- The evaluation of the advantages/disadvantages.
- Reference to individual and group investigations.

Level 5 (18-20 marks)

- Either** Two or more advantages/disadvantages are discussed **well.**
Or More advantages/disadvantages are discussed **in less depth.**

The answer is logically ordered and well presented.

Level 4 (14-17 marks)

- Either** Two or more advantages/disadvantages are discussed **quite well.**
Or More advantages/disadvantages are discussed **in less depth.**

The answer is generally logically ordered well presented.

Level 3 (9-13 marks)

Either Two or more advantages/disadvantages are discussed **moderately well**.
Or More advantages/disadvantages are discussed **in less depth**.

There are lapses in the logic and presentation of the answer.

Level 2 (5-8 marks)

Either One or more advantages/disadvantages are discussed **adequately**.
Or More advantages/disadvantages are discussed **in less depth**.

There are noticeable gaps and/or errors in the answer.

Level 1 (1-4 marks)

Either One or more advantages/disadvantages are discussed **in a basic manner**.
Or Advantages/disadvantages are **irrelevant** to the personal enquiry.

There are considerable gaps and/or errors in the answer, e.g. repetition of information by referring to the same advantages of groups and disadvantages of individuals.

3 Discuss the extent to which you made the most appropriate choice of sampling method and sample size.

[20]

Indicative content:

Sampling method:

- Choice between: random, systematic, stratified random, stratified systematic, opportunistic.
- Choice between: point, line, area/quadrat sampling.
- Location, time of day, time.

Sample size:

- Temporal factors: time available to carry out the data collection.
- Resources available: manpower; equipment.
- Large enough to be able to carry out statistical tests and construct meaningful figures.
- Small enough to be able to manage the data collection, presentation and analysis.

This question does not relate to fieldwork measurement techniques, except when they are referred to in terms of how they affect the appropriateness of the sampling method and/or sample size, e.g. river velocity – use of float or impeller can affect sampling strategy.

Extent of appropriate choice can be interpreted as meaning how the sampling method/size could be improved as it was not the most appropriate.

The following content is applied to each level:

- The discussion relates to the personal enquiry.
- The understanding of what sampling method and sample size are.
- Specific aspects of sampling method and sample size.
- Positive and negative aspects of the chosen sampling method and sample size.

The following content *may be discussed at each level*:

- Reasons for rejecting alternative strategies.
- Reference to the impact of fieldwork measurement techniques, which will be related to the impact on sampling method and sample size.

Level 5 (18-20 marks)

Either Two or more aspects of sampling method **and** sample size are discussed well.

Or More aspects of sampling method **and/or** sample size are discussed in less depth.

The answer is logically ordered and well presented.

Level 4 (14-17 marks)

Either Two or more aspects of sampling method **and** sample size are discussed quite well.

Or More aspects of sampling method **and/or** sample size are discussed in less depth.

The answer is generally logically ordered well presented.

Level 3 (9-13 marks)

Either Two or more aspects of sampling method **and** sample size are discussed moderately well.

Or More aspects of sampling method **and/or** sample size are discussed in less depth.

There are lapses in the logic and presentation of the answer.

Level 2 (5-8 marks)

Either One or more aspects of sampling method **and** sample size are discussed adequately.

Or More aspects of sampling method **and/or** sample size are discussed in less depth.

There are noticeable gaps and/or errors in the answer.

Level 1 (1-4 marks)

Either One or more aspects of sampling method **and** sample size are discussed in a basic manner.

Or Reference to sampling method **and/or** sample size is **irrelevant** to the personal enquiry.

There are considerable gaps and/or errors in the answer, e.g. fieldwork measurement techniques will be referred to in isolation from sampling method and sample size.

- 4 As part of an AS investigation a student collected data from three sites along a transect leading away from a river. Maximum and minimum temperature and relative humidity readings were taken at each site at 10:00 a.m. on four successive days in early summer (see Fig. 1).

The student wanted to present the data so that it displayed how temperature and relative humidity varied in time and space. Unfortunately, the student did not present the data using the most appropriate and effective techniques.

Consider the weaknesses and strengths of the data presentation methods in Figs 2 to 4 and suggest how the data could be presented more effectively using graphs.

[20]

Indicative content:

Figs 2a – 2d: data intended to be presented by day.

Choice of graph

- Figs c and d: 3D bars whereas Figs a and b 2D.
- Bars are appropriate and this group of figures are reasonably consistent, offering some comparability.
- Change over time is clear.
- Change over space can be seen for each variable.
- No exact values.

Presentation

- Fig d: x axis: omitted temp. and RH variables.
- Fig d: used 1,2,3 without explanation.
- Figs b-d: y axis: no reference to variables.
- Figs a-d: y axis: no units – should be different for temperature and RH.
- Figs a-d: y axis: use of one scale meaningless for different variables.
- Figs a-d: y axis: different scales therefore not comparable.
- Figs a-d: arbitrary changes of colour for background on base and behind graphs.
- Figs a-d: arbitrary changes of colour for bars.
- Figs a-d: arbitrary presence / absence of grid lines.
- Fig b: key positioned in different place.
- Fig c: unnecessary and illegible labelling of bars.

Fig. 3: data intended to be presented by max and min temp and relative humidity.

Choice of graph

- The choice of a line graph is inappropriate as there is no causative relationship between the temperature and RH variables.
- Only Site A data are presented, i.e. omitted the dimension of space.
- Can make comparisons between days reasonably well.

Presentation

- y axis: incorrect reference to variable (reference to °C is given incorrectly).
- y axis: no units for RH
- y axis: use of one scale meaningless for different variables.
- Unnecessary and illegible labelling of points.

Fig. 4: data intended to be presented by site.

Choice of graph

- Only data for RH is shown, i.e. no temp.
- Pie chart is inappropriate: it does not show a transect as it is a circular graphical form.
- It does not show data for all 4 days, i.e. omitted the dimension of time.
- Data shown is meaningless.

Presentation

- No units on labels.
- Site C does not need to be labelled on pie chart as there is a key

The improvement can be stated in the following terms:

- How to make corrections to the charts given – as noted above.
- Appropriate suggestions for new graphs, e.g.
 - One chart per day. Bar charts (and/or line graphs) grouped for distance separately, each showing changes of temp and RH at each distance.
 - One chart per site. Bar charts (not line graphs) grouped for temp and RH separately, each showing changes for each day.
 - One chart per site. Bar charts (and/or line graphs) grouped for each day separately each showing changes of temp and RH for each day.
 - One chart per abiotic factor. Bar charts (and/or line graphs) grouped for each day separately, each showing changes over distance.
 - One chart per abiotic factor. Bar charts (and/or line graphs) grouped for distance separately, each showing changes for each day.
 - Triangular graphs.
 - Any of the above (including something based on Fig. 2) located on a very large scale map.
- Inappropriate suggestions for new graphs, e.g.
 - Pie charts.
 - Fig. 3 repeated for each site.
 - Any line graph that makes **false** representations between variables, e.g. as in Fig. 3 temperature and RH cannot be “linked” in this way.
 - The original in Fig. 2 is one chart per day. Bar charts grouped for temp and RH separately, showing changes with distance from the river. This is not suitable as line graphs.
 - Combining data (mean, median) and dispersion graphs.

The following content is applied to each level:

- The discussion in relation to the graphs.
- Recognition and discussion of the different approaches to presentation in Figs 2, 3 and 4.
- The appropriateness of the data presentation methods given, referring to some or all of
 - Conciseness.
 - Completeness of dataset.
 - Technical flaws.
 - Type of data represented.
- The appropriateness of the suggested improved data presentation methods.
- The number of suggested improvements to data presentation.
- The balance between the 2 parts of the response.

Level 5 (18-20 marks)

Either Data presentation and improvements are discussed **well**.

Or **More** aspects of data presentation methods and/or improvements are discussed **in less depth**.

The answer is logically ordered and well presented.

Level 4 (14-17 marks)

Either Data presentation methods and improvements are discussed **quite well**.

Or **More** aspects of data presentation methods and/or improvements are discussed **in less depth**.

The answer is generally logically ordered well presented.

Level 3 (9-13 marks)

Either Data presentation methods and improvements are discussed **moderately well**.

Or **More** aspects of data presentation methods and/or improvements are discussed **in less depth**.

There are lapses in the logic and presentation of the answer.

Level 2 (5-8 marks)

Either Data presentation methods and improvements are discussed **adequately**.

Or **More** aspects of data presentation methods and/or improvements are discussed **in less depth**.

There are noticeable gaps and/or errors in the answer.

Level 1 (1-4 marks)

Either Data presentation methods and improvements are discussed **in a basic manner**.

Or References to data presentation methods **and/or** improvements are **irrelevant**.

There are considerable gaps and/or errors in the answer, e.g. the different approaches to presentation in Figs 2, 3 and 4 are unlikely to be recognised and discussed; it is most likely that individual figures will be discussed in isolation, especially Fig. 2.

**Mark Scheme 2691
January 2006**

Question	Answer	Mark
1 (a)	<p>Study Fig. 1. It shows an area of North Wales, parts of which have been affected by coastal flooding. Using Fig.1, suggest why the area on the map is vulnerable to flooding. What measures might be used to reduce the risk of flooding?</p> <ul style="list-style-type: none"> • Why vulnerable <ul style="list-style-type: none"> • low lying area; broad open coastlines; loss of surface drainage • Human habitation; clear evidence of tourism communication routes • Measures might include; <ul style="list-style-type: none"> • Coastal defence measures • Drainage • Land-use management of building <p>Level 5 (18-20) Uses the resource effectively by identifying key points which are clearly linked to the question. Applies original ideas or examples to illustrate a clear understanding of the question.</p> <p>Level 4 (14-17) Uses the resource appropriately to address the key ideas of the question. Brings in some original ideas or examples to develop an understanding of the question.</p> <p>Level 3 (9-13) Extracts information from the resource and applies it to the question in a general way <u>OR</u> uses own ideas/examples to address the question with only superficial user of the resource.</p> <p>Level 2 (5-8) Considers the question in a simplistic, descriptive way by using a limited number of points from the resource <u>OR</u> very general, vague individual ideas/examples.</p> <p>Level 1 (1-4) Vague ideas which show very limited understanding of the question.</p>	[20]
(b) (i)	<p>Either</p> <p>Describe and explain the distribution of either one type of tectonic <u>OR</u> atmospheric hazard.</p> <ul style="list-style-type: none"> • Either tectonic <u>OR</u> atmospheric. • Attempting both will be self-penalising. • Describe – where – global appreciation with specific examples. • Explain – process involved information. <p>L3 – General description with some explanation which is variable.</p> <p>L4 – Sound description with examples – some clear appreciation of the process</p> <p>L5 – Detailed description and examples – clear understanding of the process</p> <p>Max L3 if only descriptive.</p>	[25]

Question	Answer	Mark
	<p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplifications to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support answer. Generally well organised and logical and clearly presented.</p> <p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p> <p>Level 2 (7-11) Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	
(ii)	Or	
	<p>Examine the view that in LEDCs long term impacts of natural hazards are more significant than short term impacts.</p>	[25]
	<ul style="list-style-type: none"> • Can be any natural hazards • Specific to LEDC's/or relative to MEDC's acceptable (will be self penalising) • Distinction between short/long term impacts • Links to general development in long term/comparative ideas 	
	<p>L3 – Description of events with understanding of short/long term impacts</p>	
	<p>L4 – Uses examples to express the impact of hazards in short/long term. Links to development ideas. Begins debate about the question.</p>	
	<p>L5 – Detailed examples used to express impacts.</p>	
	<p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplifications to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p>	
	<p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support answer. Generally well organised and logical and clearly presented.</p>	

Question	Answer	Mark
	<p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p> <p>Level 2 (7-11) Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	
2 (a)	<p>Climate and Society</p> <p>To what extent does Fig. 2 suggest that LEDCs are more vulnerable to the consequences of global warming?</p> <ul style="list-style-type: none"> • Clear, comparative observations required for Level 5. • Range of general effects; coastal flooding; climate changes linked to agriculture; extreme weather hazards. • Particular links to LEDCs both locationally – tropical disease links, and economically – secondary impacts. • Specific impacts of marginal increases in temperature in LEDCs which might be more acute than MEDCs. <p>Level 5 (18-20) Uses the resource effectively by identifying key points which are clearly linked to the question. Applies original ideas or examples to illustrate a clear understanding of the question.</p> <p>Level 4 (14-17) Uses the resource appropriately to address the key ideas of the question. Brings in some original ideas or examples to develop an understanding of the question.</p> <p>Level 3 (9-13) Extracts information from the resource and applies it to the question in a general way <u>OR</u> uses own ideas/examples to address the question with only superficial use of the resource.</p> <p>Level 2 (5-8) Considers the question in a simplistic, descriptive way by using a limited number of points from the resource <u>OR</u> very general, vague individual ideas/examples.</p> <p>Level 1 (1-4) Vague ideas which show very limited understanding of the question.</p>	[20]

Question	Answer	Mark
(b) (i)	Either	
	Explain how urban areas can modify climate.	[25]
	<ul style="list-style-type: none"> ● Built up areas can be cities or large urban areas. ● A transect may be useful – City – suburbs. ● Modification can consider – temperature/wind direction/strength, sunshine/rainfall etc. ● Modify implies marginal change – urban heat island etc. 	
	<p>L3 – References to a small number of potential modifications. Some reasoning and basic locational references.</p>	
	<p>L4 – Range of modifications with some clear reasons and specific use of examples.</p>	
	<p>L5 – Range of modifications and detailed reasons. Uses examples to express the differences between built up areas and surrounding areas.</p>	
	<p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplifications to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p>	
	<p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support answer. Generally well organised and logical and clearly presented.</p>	
	<p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p>	
	<p>Level 2 (7-11) Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p>	
	<p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	

Question	Answer	Mark
(b) (ii)	<p data-bbox="443 315 1286 383">Or</p> <p data-bbox="443 315 1286 383">Discuss the view that resolving the problem of atmospheric pollution requires global management.</p> <ul data-bbox="443 416 1257 551" style="list-style-type: none"> • Understanding of what constitutes “atmospheric pollution”. • Understanding of what is the “problem”. • Why is it a global issue? • Importance of global management – Kyoto, Rio etc. <p data-bbox="443 584 1286 651">L3 – General understanding of problems and the fact that it is a global issue which requires broad management.</p> <p data-bbox="443 685 1219 786">L4 – Clear reference to development and understanding of international issue. Brings in descriptive account of global management.</p> <p data-bbox="443 819 1286 920">L5 – Detailed understanding of why it is a global issue and why international co-operation is required with examples of environmental conferences etc.</p>	[25]
	<p data-bbox="443 954 655 987">Level 5 (23-25)</p> <p data-bbox="443 987 1294 1088">Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p>	
	<p data-bbox="443 1122 655 1155">Level 4 (18-22)</p> <p data-bbox="443 1155 1302 1256">Shows a good understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p>	
	<p data-bbox="443 1290 655 1323">Level 3 (12-17)</p> <p data-bbox="443 1323 1326 1424">Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation maybe variable.</p>	
	<p data-bbox="443 1458 639 1491">Level 2 (7-11)</p> <p data-bbox="443 1491 1334 1626">Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p>	
	<p data-bbox="443 1659 624 1693">Level 1 (1-6)</p> <p data-bbox="443 1693 1318 1794">Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	

Question	Answer	Mark
3 (a)	Cold Environments and Human Responses	
	To what extent does Fig. 3 illustrate the challenges of sustainable development in cold environments?	[20]
	<ul style="list-style-type: none"> • Understanding of the fragile nature of cold environments. • Challenges can be expressed in terms of development challenges, environmental challenges, cultural conflict challenges. • Environmental challenges might consider flora/fauna (including marine life). • Building challenges, climate, ground conditions, remoteness. • Social conflict, indigenous populations might be significant, especially if seen as part of a natural system. 	
	<p>Level 5 (18-20) Uses the resource effectively by identifying key points which are clearly linked to the question. Applies original ideas or examples to illustrate a clear understanding of the question.</p>	
	<p>Level 4 (14-17) Uses the resource appropriately to address the key ideas of the question. Brings in some original ideas or examples to develop an understanding of the question.</p>	
	<p>Level 3 (9-13) Extracts information from the resource and applies it to the question in a general way <u>OR</u> uses own ideas/examples to address the question with only superficial use of the resources.</p>	
	<p>Level 2 (5-8) Considers the question in a simplistic, descriptive way by using a limited number of points from the resource <u>OR</u> very general, vague individual ideas/examples.</p>	
	<p>Level 1 (1-4) Vague ideas which show very limited understanding of the question.</p>	
(b) (i)	Either	
	Explain the links between climate changes and the extent of glaciated areas.	[25]
	<ul style="list-style-type: none"> • Climate change resulting in glaciation. • Evidence of climate change – inter-glacial periods. • Links to development of the ice-sheets/valley glacier systems. • Change implies growth and ablation. • Could consider long-term change (cycles of change) or seasonal change (advance/retreat). 	

Question	Answer	Mark
	<p>L3 – Establishes a link between development of ice-sheets/valley glaciers and falls in temperature. Some understanding of ice-ages.</p> <p>L4 - Clear links between climatic change and development of ice-sheets/valley glaciers. Uses evidence to support the views – features of glaciation.</p> <p>L5 – Detailed use of examples to express link between climate change and glacial/interglacial. Use of features and consideration of present situation of changing ice-sheets.</p> <p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplifications to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support answer. Generally well organised and logical and clearly presented.</p> <p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p> <p>Level 2 (7-11) Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	
(ii)	<p>Or</p> <p>‘Glaciated landscapes provide the opportunity for a wide range of leisure activities’. Discuss.</p> <ul style="list-style-type: none"> • Description of glaciated landscapes. • Links to leisure activities which can be passive or active, and should be wide ranging. • Areas that have been glaciated (Lake District) and are currently (Alps) are acceptable. <p>L3 – Descriptive appreciation of landscapes associated with glaciation and how these provide opportunities. Largely active opportunities (sports) – supported by examples</p>	[25]

Question	Answer	Mark
	<p>L4 – Clear use of examples to express the scenic features associated with glaciation – range of opportunities expressed including active and passive ideas</p> <p>L5 – Detailed appreciation of how glaciated landscapes, both valley glaciers/ice sheets provide scenic, active and environmental opportunities. Detailed use of examples.</p> <p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p> <p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p> <p>Level 2 (7-11) Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	
4 (a)	<p>Tropical Environments and People</p> <p>Examine the choice expressed in Fig. 4 in relation to the sustainability of tropical rain forests.</p>	[20]
	<p>“Examine” the choice is really a consideration of:</p> <ul style="list-style-type: none"> - Exploitative development/loss of habitat/short term gains/broad social and environmental impacts. - Sustainability which is both social and environmental. Appreciation of idea of “bio-diversity”. • Could bring in an appreciation of different types of development/suitability (deforestation OR ecotourism) 	

Question	Answer	Mark
	<p>Level 5 (18-20) Uses the resource effectively by identifying key points which are clearly linked to the question. Applies original ideas or examples to illustrate a clear understanding of the question.</p> <p>Level 4 (14-17) Uses the resource appropriately to address the key ideas of the question. Brings in some original ideas or examples to develop an understanding of the question.</p> <p>Level 3 (9-13) Extracts information from the resource and applies it to the question in a general way <u>OR</u> uses own ideas/examples to address the question with only superficial use of the resource.</p> <p>Level 2 (5-8) Considers the question in a simplistic, descriptive way by using a limited number of points from the resource <u>OR</u> uses own ideas/examples to address the question with only superficial use of the resource.</p> <p>Level 1 (1-4) Vague ideas which show very limited understanding of the question.</p>	
(b) (i)	<p>Either</p> <p>How do physical processes operate to give tropical ecosystems their distinctive characteristics?</p> <ul style="list-style-type: none"> • Understanding of ecosystem and its constituent parts. • Tropical ecosystem(s). Can be any – one acceptable if detailed. • “Unique” characteristics implies understanding of flora, fauna, soil etc. • Link between climate and flora/fauna often significant. <p>L3 – Describes ecosystem(s) – some understanding of constituent parts and begins to link together</p> <p>L4 – Clear understanding of the link between process and type of ecosystem – especially climate/flora/fauna.</p> <p>L5 – Detailed appreciation of parts of ecosystem and how they operate together to give unique characteristics.</p> <p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p>	[25]

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	<p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p> <p>Level 2 (7-11) Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	
(ii)	<p>Or</p> <p>To what extent is human activity constrained by hazards in tropical environments?</p> <ul style="list-style-type: none"> • “To what extent”, might imply management etc. • Hazards might include cyclones/winds/floods/soil erosion/landslides etc. • Nature of fragile ecosystems and how change can increase vulnerability. <p>L3 – Description of hazards and uses examples to explain why they may make activity more difficult.</p> <p>L4 – Clear examples used to express fragile nature of areas and how human activity can increase vulnerability. Examples of where conditions have constrained human activity. Begins to consider extent.</p> <p>L5 – Uses detailed examples to express vulnerability and why careful management is required. Clear understanding of extent.</p> <p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows a good understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p> <p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague and disjointed. Some evidence of structure, although presentation may be variable.</p>	[25]

Question	Answer	Mark
5 (a)	<p>Level 2 (7-11) Vague understanding of the question with generalisation and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p>Level 1 (1-6) Very little understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p> <p>Food Supply – Management and Change</p> <p>To what extent does Fig. 5 suggest that overnutrition is a global issue?</p> <ul style="list-style-type: none"> • To what “extent” – article is essentially about USA. • Comparative appreciation of MEDC/LEDC differences • Are characteristics of USA increasingly common in other MEDCs? • Links between diet and health in broad terms. • Specific health problems associated with over-eating or incorrect diet. <p>Level 5 (18-20) Uses the resource effectively by identifying key points which are clearly linked to the question. Applies original ideas or examples to illustrate a clear understanding of the question.</p> <p>Level 4 (14-17) Uses the resource appropriately to address the key ideas of the question. Brings in some original ideas or examples to develop an understanding of the question.</p> <p>Level 3 (9-13) Extracts information from the resource and applies it to the question in a general way <u>OR</u> uses own ideas/examples to address the question with only superficial use of the resource.</p> <p>Level 2 (5-8) Considers the question in a simplistic, descriptive way by using a limited number of points from the resource <u>OR</u> very general, vague individual ideas/examples.</p> <p>Level 1 (1-4) Vague ideas which show very limited understanding of the question.</p>	[20]

Question	Answer	Mark
(b) (i)	<p data-bbox="443 248 533 286">Either</p> <p data-bbox="443 309 1235 376">‘Agricultural productivity is influenced only by physical factors’. Discuss.</p> <ul data-bbox="443 398 1254 573" style="list-style-type: none"> • Physical factors (climate/soil/slope etc) can influence agriculture. • Other factors include economic/political/social factors. • Often a combination of factors which are variable. Links to agricultural types/development. <p data-bbox="443 595 1310 663">L3 – Some appreciation of how influential physical factors are and brings in other factors.</p> <p data-bbox="443 685 1334 723">L4 – Begins to consider relative impacts using clear exemplification.</p> <p data-bbox="443 745 1315 813">L5 – Detailed analysis of the range of influences with clear relative judgements using a range of examples.</p> <p data-bbox="443 835 651 873">Level 5 (23-25)</p> <p data-bbox="443 873 1294 969">Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p data-bbox="443 992 651 1030">Level 4 (18-22)</p> <p data-bbox="443 1030 1289 1126">Shows an understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p> <p data-bbox="443 1149 651 1187">Level 3 (12-17)</p> <p data-bbox="443 1187 1334 1283">Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p> <p data-bbox="443 1305 635 1344">Level 2 (7-11)</p> <p data-bbox="443 1344 1334 1485">Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p data-bbox="443 1507 619 1545">Level 1 (1-6)</p> <p data-bbox="443 1545 1315 1637">Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	[25]
(ii)	<p data-bbox="443 1671 483 1709">Or</p> <p data-bbox="443 1731 1278 1798">Examine the ways in which international agencies can help countries that are experiencing food shortages.</p> <ul data-bbox="443 1821 1326 1962" style="list-style-type: none"> • International agencies can be NGO or Government Agencies. • Can be considered in terms of short-term disaster relief. • Can be limited to general development strategies/sustainability. • Food ‘shortage’ can be short term or on-going. 	[25]

Question	Answer	Mark
	<p>L3 – Basic examples of where aid in general has helped with food problems. Good general understanding/lacks detail.</p> <p>L4 – Clear appreciation of the mechanism of aid with some mention of hazard (short-term) relief and longer term strategies.</p> <p>L5 – Detailed understanding of both short/long term strategies and how they are used. Uses examples to express the range of possibilities.</p> <p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p> <p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p> <p>Level 2 (7-11) Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	
6 (a)	<p>Changing Urban Places</p> <p>To what extent do self-help schemes improve the life of the urban poor in LEDCs? Use Fig. 6 to support your answer.</p>	[20]
	<ul style="list-style-type: none"> • Descriptive observations about the Social, Economic and Environmental conditions of the urban poor. • How can improvements be made to living conditions for the urban poor. • What is self-help; how can it improve living conditions. • Why is self-help often more significant than other development methods? • “Extent” – how widespread are self-help schemes globally, examples other than Bombay. 	

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	<p>Level 5 (18-20) Uses the resource effectively by identifying key points which are clearly linked to the question. Applies original ideas or examples to illustrate a clear understanding of the question.</p> <p>Level 4 (14-17) Uses the resource appropriately to address the key ideas of the question. Brings in some original ideas or examples to develop an understanding of the question.</p> <p>Level 3 (9-13) Extracts information from the resource and applies it to the question in a general way <u>OR</u> uses own ideas/examples to address the question with only superficial user of the resource.</p> <p>Level 2 (5-8) Considers the question in a simplistic, descriptive way by using a limited number of points from the resource OR very general, vague individual ideas/examples.</p> <p>Level 1 (1-4) Vague ideas which show very limited understanding of the question.</p>	
(b) (i)	<p>Either</p> <p>Discuss the view that inward investment can play a significant part in the management of urban regeneration in MEDCs.</p> <ul style="list-style-type: none"> • What is regeneration, why is it required? • Holistic approach to development, consideration of improving Social, Economic, Environmental conditions. • What is inward investments? –considered in its broadest sense it might include <ul style="list-style-type: none"> <Government initiatives/Redevelopment <Individual companies • Impact of investment through the multiplies/perception of area. <p>L3 – Clear ideas about regeneration with basic examples used. Range of types limited. Impacts clear although not always fully aware or range (economic/ social/environmental).</p> <p>L4 – Uses examples to examine the holistic impact of regeneration and its impacts. Begins to appreciate multiplier idea and the idea of 'significant part'.</p> <p>L5 – Uses examples to examine the impact of investment and considers it in broad terms. Investment seen as one part, alongside local/national planning etc. Appreciation of the importance of the multiplier and image of an area.</p>	[25]

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	<p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p> <p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p> <p>Level 2 (7-11) Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	
(ii)	<p>Or</p> <p>What factors need to be considered to ensure the sustainability of urban areas?</p> <ul style="list-style-type: none"> • Sustainability is about people and environment. • Key factors might include, transport/services/housing/employment/social space/dealing with waste etc <p>L3 – Understanding of sustainability – uses general examples to bring in a narrow range of points.</p> <p>L4 – Clear appreciation of sustainability – uses detailed examples to identify key ideas – not always complete in range.</p> <p>L5 – Uses examples to show understanding of sustainability and brings in a range of social, economic and environmental factors.</p> <p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p>	[25]

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7 (a)	<p>Leisure and Tourism</p> <p>To what extent is there a conflict between the aims of environmental management and the needs of local communities in areas of tourist development? Use Fig. 7 to support your answer.</p> <ul style="list-style-type: none"> • Range of possible exemplification which could include LEDC/MEDC examples. • Appreciation that tourism areas often contain indigenous people. • Sustainability is not just about the environment – it is also about the people in an area. • Environmental management can often conflict with the needs of local people. • Management that does not consider local people is not always sustainable. • Local people are often useful in managing environments. • Resource shows strong negative influences – how common is this? <p>Level 5 (18-20) Uses the resource effectively by identifying key points which are clearly linked to the question. Applies original ideas or examples to illustrate a clear understanding of the question.</p> <p>Level 4 (14-17) Uses the resource appropriately to address the key ideas of the question. Brings in some original ideas or examples to develop an understanding of the question.</p> <p>Level 3 (9-13) Extracts information from the resource and applies it to the question in a general way <u>OR</u> uses own ideas/examples to address the question with only superficial use of the resource.</p>	[20]

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	<p>Level 2 (5-8) Considers the question in a simplistic, descriptive way by using a limited number of points from the resource <u>QR</u> very general, vague individual ideas/examples.</p> <p>Level 1 (1-4) Vague ideas which show very limited understanding of the question.</p> <p><u>One</u> LEDC – For Level 4 and Level 5 expect details about one place. A range of general LEDC points max Level 3.</p>	
(b)	(i) Either	
	<p>Examine the role of tourism in the economic development of one LEDC.</p>	[25]
	<p>One LEDC – For L4 and L5 expect detail about one place – A range of general LEDC points max L3. Drifting into environmental factors will be self-penalising.</p> <ul style="list-style-type: none"> • “Examine the contribution” can imply negatives (holding back development?) • Economic development implies more than direct jobs, clear reference to multiplier ideas required. • Economic development implies improvements in infrastructure, social conditions etc. 	
	<p>L3 - Uses examples to express links between tourism and jobs/incomes. Idea of a multiplier expressed. General understanding/lacks depth.</p>	
	<p>L4 - Clear examples which express contribution in terms of direct/indirect impacts. Detailed links to jobs, money, infrastructure and sound understanding of multiplier. Some notion of broader ideas – government spending/balance of payments etc.</p>	
	<p>L5 - Uses examples to express detailed understanding of the part played by tourism in the soci-economic and skill base. Also points about increases in spending in areas (social) and national income.</p>	
	<p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p>	
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(ii)	<p>Or</p> <p>‘In order to be successful an ecotourism strategy must be developed with sensitivity to the natural environment’. Discuss.</p> <ul style="list-style-type: none"> • Definition of eco-tourism. • Links between eco-tourism and sustainability. • Examples express appreciation of fragility of environments and how eco-tourism must adjust to environments. <p>Descriptive accounts of eco-tourism, examples with no discussion will be self-penalising.</p> <p>L3 – General understanding of ecotourism and how it might protect environments – ‘close adjustment’ ideas marginal.</p> <p>L4 – Appreciation of vulnerability through use of examples and some understanding of sustainability and ‘close adjustment’. Use of clear examples – usually of specific areas. Some debate about positives/negatives of eco-tourism.</p> <p>L5 – Uses detailed examples of how successful eco-tourism adjusts to environments and makes it sustainable. Comparative observations about how poor eco-tourism does not / is not sustainable.</p> <p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplifications to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support answer. Generally well organised and logical and clearly presented.</p>	[25]

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8 (a)	<p>The Globalisation of Economic Activity</p> <p>To what extent does Fig. 8 illustrate the impacts of the globalisation of manufacturing industry?</p> <ul style="list-style-type: none"> • Focus on manufacturing industry shifts – how common is the pattern expressed? • Reasons are about <ul style="list-style-type: none"> - Globalisation – [Labour costs/ shifting materials - Changing supply chains - Local planning restrictions - Developing markets • Impacts can be positive <ul style="list-style-type: none"> - Shifts to new possibilities - Company growth - Bigger markets • Impacts can be negative <ul style="list-style-type: none"> - Job losses - Negative multiplier effects - General decline. <p>Level 5 (18-20) Uses the resource effectively by identifying key points which are clearly linked to the question. Applies original ideas or examples to illustrate a clear understanding of the question.</p> <p>Level 4 (14-17) Uses the resource appropriately to address the key ideas of the question. Brings in some original ideas or examples to develop an understanding of the question.</p> <p>Level 3 (9-13) Extracts information from the resource and applies it to the question in a general way <u>OR</u> uses own ideas/examples to address the question with only superficial user of the resource.</p> <p>Level 2 (5-8) Considers the question in a simplistic, descriptive way by using a limited number of points from the resource <u>OR</u> very general, vague individual ideas/examples.</p> <p>Level 1 (1-4) Vague ideas which show very limited understanding of the question.</p>	[20]

Question	Answer	Mark
(b) (i)	Either	
	<p>Examine the role of information technology in the globalisation of a service industry that you have studied.</p>	[25]
	<ul style="list-style-type: none"> • A “service industry” could include finance, banking, communications, tourism etc. • “Examine the role” – has IT increased globalisation, range/speed of transactions – idea of “shrinking world”. • Could imply a great impact <u>OR</u> limited impact. • Response will be partially dictated by chosen area. 	
	<p>L3 - Selects service industry and describes how IT might be used and how it has allowed industry to develop.</p>	
	<p>L4 - Selects service industry – gives a broad global overview and explains how IT may have increased globalisation.</p>	
	<p>L5 - Uses detailed example and describes growth and examines the specific ways that IT may have encouraged spatial and financial growth. Clear idea of the “shrinking world” and use of IT in 24 hour/365 day business.</p>	
	<p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p>	
	<p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p>	
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	<p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	

Question	Answer	Mark
(ii)	<p>Or</p> <p>Describe and explain the spatial distribution of one or more transnational corporations that you have studied.</p> <ul style="list-style-type: none"> • Clear understanding of what is meant by TNC. • Distinction between Head Office/Research/Manufacturing. • Global distribution. • Reasons for spread linked to globalisation/market/labour. <p>L3 – General description, little detail about type. Reasons linked to globalisation – tends to focus on MEDC or LEDC with vague locational reference.</p> <p>L4 – Reasonable description with some appreciation of type of organisation, brings in examples. Explanation brings in both MEDC and LEDC context.</p> <p>L5 – Detailed description which brings in organisational structure. Uses examples to consider MEDC and LEDC and brings in a wide range of reasons pertinent to both MEDC and LEDC.</p> <p>Level 5 (23-25) Shows a clear understanding of the question and uses locational exemplification to support a reasoned response. Answer is well structured and logical with effective presentation skills.</p> <p>Level 4 (18-22) Shows an understanding of the question and selects appropriate locational examples to support the answer. Generally well organised and logical and clearly presented.</p> <p>Level 3 (12-17) Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.</p> <p>Level 2 (7-11) Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.</p> <p>Level 1 (1-6) Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.</p>	[25]

Generic Levels**Level 5 (18-20)**

Uses the resource effectively by identifying key points which are clearly linked to the question. Applies original ideas or examples to illustrate a clear understanding of the question.

Level 4 (14-17)

Uses the resource appropriately to address the key ideas of the question. Brings in some original ideas or examples to develop an understanding of the question.

Level 3 (10-13)

Extracts information from the resource and applies it to the question in a general way OR uses own ideas/examples to address the question with only superficial user of the resource.

Level 2 (6-9)

Considers the question in a simplistic, descriptive way by using a limited number of points from the resource OR very general, vague individual ideas/examples.

Level 1 (1-5)

Vague ideas which show very limited understanding of the question.

Level 5 (23-25)

Shows a clear understanding of the question and uses locational exemplifications to support a reasoned response. Answer is well structured and logical with effective presentation skills.

Level 4 (18-22)

Shows an understanding of the question and selects appropriate locational examples to support answer. Generally well organised and logical and clearly presented.

Level 3 (12-17)

Shows an awareness of the question and some locational exemplification, although argument might be vague or disjointed. Some evidence of structure, although presentation may be variable.

Level 2 (7-11)

Vague understanding of the question with generalised and simplistic observations. Locational exemplification limited to general points which lack a clear focus on the question. Some basic structure, although weakness in presentation apparent.

Level 1 (1-6)

Very limited understanding of the question and vague general knowledge used to support ideas. Poorly organised and presented with a lack of structure.

Geography B (7833)

2691 - Issues in the Environment

	Question	A01	A02	A03	A04	Total	
CANDIDATES ATTEMPT ONE QUESTION	1(a)	8	3	3	6	20	
	(b)	13	6	6		25	
	2(a)	8	3	3	6	20	
	(b)	13	6	6		25	
	3(a)	8	3	3	6	20	
	(b)	13	6	6		25	
	4(a)	8	3	3	6	20	
	(b)	13	6	6		25	
	CANDIDATES ATTEMPT ONE QUESTION	5(a)	8	3	3	6	20
		(b)	16	6	3		25
6(a)		8	3	3	6	20	
(b)		16	6	3		25	
7(a)		8	3	3	6	20	
(b)		16	6	3		25	
8(a)		8	3	3	6	20	
(b)		16	6	3		25	
			A01	A02	A03	A04	
			(45)	(18)	(15)	(12)	TOTAL 90
		KNOWLEDGE	UNDERSTANDING	APPLICATION of UNDERSTANDING	SKILLS and TECHNIQUES		

REPORT ON THE UNITS
January 2006

Chief Examiner's Report

The OCR Advanced Subsidiary GCE Geography B specification attempts to provide a coherent course in geography and a solid foundation for further study at A2. The philosophy of the specification is essentially about understanding how physical and human systems operate in order to consider how they might be managed in a sustainable way. As such, the use of contemporary examples is important in considering future geographical challenges.

The January 2006 examinations were sat by a significant number of candidates in all the available units. (unit 2692 is not available in the January session).

There were a significant number of re-sit candidates in some of the units and it was evident that an appreciable proportion of these candidates improved their performance.

Principal Examiners have expressed the view that students were generally well prepared in terms of both subject content and examination technique. Standards appear to be consistent across the units with marginal improvements in some areas and slightly fewer very poor responses.

Very few candidates aggregated their marks in order to claim a final grade in this session.

The following sections give a more detailed breakdown of the individual units.

2687 Physical Systems and Their Management

General Comments

The examination was considered appropriate for AS level candidates and almost a full range of marks was achieved. There was still some imbalance in the choices in Section A with just over half the candidates choosing to answer the question on Atmospheric Systems but three quarters answering the Landform and Coastal Systems questions, the most popular being the latter. Candidates should be encouraged to look at the whole balance of the Specification, including the headings to each module and study section. Care should be taken by A2 candidates who may be re-sitting their AS module that their more recent studies of topics such as Natural Hazards are not used in place of their AS case studies; they are rarely appropriate. Better candidates can demonstrate a synthesis and overview of the physical systems studied. This ability to see the whole picture of any of the physical systems, to understand how the processes interact, and then to appreciate the impact of management upon the system is the quality that characterises the good candidate.

Section A

The format of each question is the same as in previous examinations and as in the complementary Human Systems unit. There is a choice of two from three questions, one on each of the three study units. A resource provides stimulus material and data for parts (a) and (b) to show understanding and skills in different contexts while part (c) requires greater use of knowledge. Parts (a) and (b) have 9 marks each, while part (c) has 12 marks.

Section B

In this longer essay section there is a choice of one from two questions that seek to combine elements of all three physical units, to show the ability to synthesise knowledge and understanding of all aspects of physical geography. There is space in the answer booklet to plan this more demanding task, worth 30 marks, and once again it was evident that the candidates who planned carefully were able to construct a more logical essay that fulfilled the requirements of the question.

There was no evidence of shortage of time, and few rubric errors, although a few candidates failed to complete all sections of some questions. It is advised that the following comments are read in conjunction with the mark scheme.

Comments on Individual Questions

Section A

1 Atmospheric Systems and People

- (a) Describe the seasonal distribution of rainfall from Limerick across Europe to Warsaw. [9]

The focus of this question was purely descriptive using the data given in the table and map. Nearly all candidates attempted to explain why the three centres differed in summer and winter rather than stick to describing how seasonal rainfall changed from the west to east in Europe:

“As there is no direct contact with an ocean current, Berlin and Warsaw receive less rainfall than Limerick.”

This is a point made in the last report – ‘candidates need to be able to

Report on the Units Taken in January 2006

recognise that the questions are carefully worded to ensure only relevant material is included'. In the example above there is no reference to seasonality. More able candidates could make perceptive comments about the other seasons by comparing the summer and winter against the overall totals.

- (b)** Account for the changes in temperature from Tromso to Naples. **[9]**

Reasons or explanation is required but too many candidates wasted space and time describing the changes. Also many ignored Berlin or dismissed it as 'half way between the other two'. Too many answers were descriptive:

"Naples is hotter all year as it is nearer the equator." or "Tromso is colder as it is in the Arctic circle."

This is not explanation. Few seemed able to explain the effect of latitude, although a number of candidates did make effective use of a diagram to illustrate the impact of the earth's curvature on the sun's rays. Most candidates ignored the maritime versus continental effects as in the case of Berlin. All too often explanation was superficial such as:

"Naples gets warm winds from the tropics whilst Tromso gets cold winds from the arctic."

- (c)** With reference to examples, explain how rapid changes in temperature can give rise to short term hazards. **[12]**

The focus was on how rapid temperature changes (rise or fall) could produce short term hazards. Many saw this as the global warming question suggesting a geological timeframe for 'rapid' whilst most found it difficult to link cause with effect – i.e. how rapid change in temperature resulted in a short term hazard such as fog. Some provided some very effective and topical examples e.g. the sudden snowfall on Bodmin Moor around Christmas 2005 whilst others missed the direction to exemplify.

Many candidates saw this question as being linked to the creation of flash floods:

"Following high temperatures there was a thunderstorm that caused the river Lynn to rise and eventually sweep away the village of Lynmouth."

Clearly cause and effect were not well established in this answer. Why did the rapid rise in temperature trigger thunderstorms (if indeed it did) ? The link could have been made if the mechanism was well understood. Indeed it was the detail of why rapid changes in temperature lead to certain hazardous weather phenomena that led to candidates achieving at the top level.

2 Landform Systems and People

- (a)** Study Fig. 2. Draw a sketch of the valley and annotate with the natural features that you can identify. **[9]**

Sketches were usually sound but some candidates did confuse this direction with cross sections and plans. Annotations ranged from the very basic e.g. 'vegetation' to the more complex explanatory e.g. 'mass movement is occurring on the steep sides due to river undercutting'.

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Candidates should go for the main salient features with a modicum of comment. Some missed the restriction to natural features and included the footpath as a feature. More able candidates were distinguished by their use of geographical terminology e.g. 'interlocking spurs' and ability to distinguish features other than channel features. It was disturbing to see how many candidates could identify oxbow lakes in the photograph.

- (b) Suggest and explain the natural processes by which this valley may have been formed. [9]

This was an explanatory question with a focus on the particular valley shown in the photograph – i.e. 'this valley'. Some candidates saw features that did not exist such as ox-bow lakes whilst others gave a generic account of river development from source to mouth. The stress was on valley formation rather than channel development:

"The point bars are created as deposition occurs in the meander bends where the river is slower."

Is not so effective as:

"The valley seems to have steep sides so it probably formed as the river has eroded vertically and weathering has reduced the valley sides."

Many candidates had no idea at all as to how a valley is formed – many thought interlocking spurs forced the river to meander or the valley was the result of glaciation. River processes were not well understood.

- (c) For a named British drainage basin that you have studied, explain ways in which it has been modified by human activity. [12]

It is disconcerting when an answer starts with:

"With reference to the Mississippi"

Or

"A British Drainage basin which I have studied is the River Seven, situated in Scotland."

The focus was on the ways in which human activities have modified drainage basins. It was an explanatory task and so some cause and effect was expected such as:

"The replacement of agricultural areas by cities has caused faster run off over the now impermeable surfaces which in turn makes for very short lag time."

Many candidates ignored the basin aspect and focused on a single event or flood protection scheme via engineered channels. Many were clearly prepared answers to a different question based on flood prevention schemes. Clearly some of this was valid comment but it did miss the thrust of the question. The most effective answers focused on a range of human activities such as settlement, farming and forestry with a clear cause-effect link to the resultant changes in the hydrology of the drainage basin.

3 Coastal Systems and People

- (a) Study Fig. 3. Choose **one** of the varieties of coastal wetland (A-E). Suggest ways in which the coastal wetland has accumulated in your chosen example. [9]

Many candidates found this question confusing and focused on the formation of the coastal landforms, e.g. dune formation in E, rather than the resulting wetlands. The majority selected A – sheltered water behind a spit or E – river and sea meeting in an estuary. Few could explain why the wetlands had started in the first place and only the more able referred to the role of vegetation in furthering the development of the wetland. Cause and effect were rarely fully developed:

“The force of the sea, winds and longshore drift is stronger causing deposition to occur and form a spit, behind which more deposition starts to occur creating a saltmarsh.”

In this example the candidate fails to say why deposition occurs behind the spit. Loss of energy is central to the discussion such that fine debris is deposited in a low energy environment. Candidates should appreciate that the variety of types of wetlands offered in Fig. 3 is based on how the energy loss occurs. Similarly the role of vegetation needed relating to this energy loss context:

“Once the silt deposits are colonised by plants such as marram they increase the friction on the tidal waters so slowing them and increasing deposition.”

Although not very accurate over the type of plants involved their role is nevertheless explained and linked into the growth of salt marshes.

- (b) Outline a management strategy to cope with future sea level change. [9]

The question required a focus on one management strategy but candidates defined strategy in a number of ways including ‘hard engineering strategies’ – this gave them the opportunity to outline more than one approach to defending against a rising sea level. Some took an extreme view and saw the strategy as one of preventing global warming by burning less fossil fuels. Valid though this may be it is not part of Coastal systems.

Most answers were simplistic:

“The town has also invested in gabions and riprap at the ends of the beach or harbour to provide more protection.”

There is little attempt to explain how these cope with a rising sea level. Too much was superficial and poorly focused. This was an opportunity to link the approach to the cause – changing sea level. Instead many saw ‘outline’ as the opportunity to comment on the pros and cons of each approach:

“Seawalls are expensive and eyesores. They cost a lot – thousands per metre and they may have to be continually raised as sea levels rise.”

Some selected ‘managed retreat’ as a management strategy and linked this well to coping with a rising sea level, often drawing on some interesting examples chiefly from the East coast.

- (c) Use diagrams to help illustrate how waves erode a named cliffed coastline. [12]

Candidates were invited to use diagrams to show how waves erode a named coastline that is cliffed. Some candidates tried to put cliffs where there are none such as Skegness whilst others decided to draw a strip cartoon of how old Harry rocks in Dorset evolved. In this case 'how' meant 'in what ways' so answers should have looked at types of erosion, including corraison, attrition, hydraulic and solution, and the exploitation of structural weaknesses such as faults and joints.

Very often candidates lost focus and wasted time and space on irrelevant comments:

"When the cliff breaks away wave cut platforms also form which provide the coastal features with some protection at low tide, yet this platform is also being eroded from many sides."

Full marks could be achieved by a single well annotated diagram but most tried to produce a series of diagrams containing most elements of marine erosion landforms. This was an example of the most effective answers being often the simplest.

Section B

- 4 Discuss whether time is an important factor in the formation of fluvial and coastal landforms that you have studied. [30]

Question 4 was more popular than question 5, but gained a lower average mark. It was particularly evident in this question that candidates were struggling to put 'time' into some kind of context as a causal factor. Most candidates produced a long descriptive list of how a number of coastal and then river features had come about. All too often the role of time was ignored or implied:

"It takes a long time for longshore drift to work to produce a spit."

Others tried to compare and contrast:

"Deposition may take hundreds of years to construct coastal landforms whilst a single storm can cause massive erosion and resulting landforms."

Many of the above type answers managed to get into the middle level responses as there was some acknowledgement that processes varied with time and over time. Some did focus on the time of year and discussed the role of winter storms and summer flash floods. The most effective answers looked at time as only one of a number of factors that controlled the development of coastal and fluvial landforms:

"As well as time the nature of the processes may vary as does the structure of the area. A soft rock area suffering lots of storms is more easily, and thus quickly, eroded into landforms than a sheltered area of hard resistant rocks."

Too many candidates only looked at one of the landform sets, usually coastal. Too many candidates ignored the evaluative aspects of the question resulting in thin and barely relevant conclusions.

5 Illustrate and evaluate the interactions between people and atmospheric systems. [30]

Many candidates seemed to struggle with the notion of 'interaction' so produced unbalanced accounts of how people impacted on the climate – i.e. global warming. Whilst quite effective as works of description of the processes they lacked the evaluation required. Too many were confused:

“Global warming has reduced the ozone layer so there is an increasing incident of skin cancer especially in Australia.”

Many still confuse global warming and the destruction of the ozone layer but at least this candidate did refer to some interaction – some cause and effect. It was the impact on people that was all too often ignored or dismissed as of low importance. For example:

“Global warming has resulted in more extreme weather. With increasing hurricanes, last year had the most on record, people suffer more damage and destruction of property.”

This answer could have been developed to examine more of the impact on people of weather systems. Few candidates looked at systems, beyond 'hurricanes' and most referred to climate as a whole or quite small scale features such as the creation of urban micro-climates.

The instruction to illustrate is clearly poorly understood. Few produced any diagrams and exemplification was thin – either approach would have met the need to 'illustrate'.

Similarly evaluation is not seen as a trigger to weigh up the relative importance of the interaction. This explains why so few candidates produced high quality answers to this question.

Candidates should be given practice in this extended writing, as the longer essay gives the examiner the opportunity to assess the quality of written communication to a greater degree than the shorter answers. Crucial in this is the ability to read the question carefully and respond in a focused way to the key concepts or terms used. Fluent use of geographical terminology, the logical structure of the essay, and the ability to draw together elements from all three of the study units of the Specification fulfil the requirement to synthesise knowledge throughout the AS course, and provide a good foundation for the higher level skills required in the synoptic paper at A2. It also provides confirmation of progression beyond GCSE in both knowledge and understanding of the subject.

Evident in this session was a lack of revision by some candidates as if they were relying on work done some time ago. Those who had revised well and thought carefully about the question wrote answers which were a pleasure to read and reflect the good teaching that is evident in many Centres.

2688/01 Human Systems and their Management

General Comments

The number candidates entered was a good deal larger than for the January 2005 session. There was a very wide range of responses, with a few in the very low range and a considerable number in higher mark ranges.

The range of abilities tested was very similar to that of previous sessions of this examination, ranging from informed description in a geographical context, usually based on resources provided, through explanation based mainly on recalled knowledge, up to high order organisation of material to weigh evidence to support judgements.

It is often noted in reports that relevant sketch maps and diagrams can be well rewarded. There was a small increase in the number of these. A number of candidates used useful diagrams of demographic cycles in answering 3(b). A few sketch maps were used for 3(c) showing countries where internal migration had taken place, but hardly any showed source or destination areas, or had arrows to show major movements. 2(c), where the impact of urban change on surrounding rural areas was the focus, seemed ideal for sketch maps, but virtually none were seen.

The structure of the paper remained the same as in previous sessions. In Section A candidates had to answer two questions from three. There was one question from each of the three sub-sections from the 'Human Systems and their Management' unit. Each Section A question was comparable in format. Section B questions required candidates to draw from more than one of the units. For further detail on this structure, please refer to reports for Winter or Summer 2003.

There were a few rubric errors. These were the usual kind where a candidate answered all three Section A questions. As usual, all were marked, but only the two with the highest scores were credited to the paper total.

In all Section A, parts (a), the command is likely to be describe or compare. Once more a number of candidates put a good deal of explanation in here that could gain no credit and often distracted them from further creditable description. Parts (b) are likely to require some explanation or suggested reasons. Candidates who had already explained in (a), often failed to repeat their explanation, so gained little credit for (b), depressing the overall total.

Some candidates struggled with English expression, to the extent that it was difficult to determine what points were being made. It was limited to only a very few, and in most cases expression was clear, and accomplished in a few cases.

Comments on Individual Questions

- 1 (a)** Use Fig. 1 to compare the changes in employment structure between Australia (MEDC), Indonesia (NIC) and Ethiopia (LEDC) from 1982 to 2002. **[9]**

Most candidates found the question accessible, but a wide range of responses were found here. A few candidates read off the figures for 1982, then 2002 for each country in turn without highlighting change or how it varied from country to country. This gained little credit. The best answers usually took each sector in turn, noting whether each country had experienced a rise or fall, and if countries had experienced the same trend, commented on how similar the percentage change had been. Most answers tended towards the latter type. The high quality was not always maintained throughout answers, with some candidates showing lapses in comparison or glossing over degree of change. There were a few instances of misreading the information; in particular, a number of candidates noted an increase in secondary employment in Australia.

- (b)** Suggest reasons why the changes described in 1(a) have been taking place. **[9]**

There were some very sound answers here. Many candidates recognised that the countries were at very different stages of development and explained the processes that were bringing about change, or resisted change. Other candidates pointed out the stage each country was at, but rather left it to the reader to work out what the implications would be, and did not elaborate their reasons very much. Other candidates who did not score high marks only suggested reasons for one country, or confined their reasoning to changes in just one sector. There were few very poor answers.

- (c)** For a country that you have studied, explain how economic change can create both benefits and problems at a variety of scales. **[12]**

The majority of candidates responded well to the question. Most identified an economic change and went on to outline both benefits from it then turned to problems it had created. Some candidates did not score high credit for a variety of reasons. Some just stated that a particular country had experienced economic change without stating what it was. They often went on to describe benefits (and/or problems), but without an initial cause, it was often difficult to see why they should arise. Other candidates clearly identified a change and resulting benefits (or problems), but did not go on to examine problems (or benefits). The part that many candidates found difficult was identifying scales. There were some excellent answers where candidates showed, for example a switch from secondary to tertiary employment bringing higher GNP/capita at a national level, but problems of unemployment in regions that had relied heavily on manufacturing. Some appreciation of scale tended to distinguish the Level 3 candidate.

- 2 (a)** Describe the distribution and size of sites for housing development shown in Fig. 2. **[9]**

Once again most candidates found it quite easy to start responding in an appropriate way. Some did not elaborate their answers very far, doing little more than reading off figures. Many made size the focus of their answer with little or no comment on distribution. However, the majority dealt with both aspects and differentiated between greenfield and brownfield sites in terms of both size and distribution. Although not necessary for a full answer, many candidates noted the relationship between size and number of houses planned for several of the sites. Candidates who did not score well tended to be drawn into explaining the locations of the sites.

- (b)** Explain why Lowestoft is expected to develop greenfield sites in addition to brownfield sites to meet future housing needs. **[9]**

For candidates who responded well to the 'in addition' component of the question, almost always high marks resulted. A good number of candidates wrote answers that explained why greenfield were preferable to brownfield sites, both to constructors and future residents. Whilst relevant points could be made in this way, many candidates failed to deal with the main demand of the question.

- (c)** Explain how recent changes in a named urban area in the UK have had impacts on the surrounding rural settlements. **[12]**

This question produced a very wide range of responses. There were many excellent answers that outlined for example, the growth of industry and new jobs, attracting more people than could be accommodated. They then went on to explain how new housing had been added to surrounding villages and the impact on shops and schools. With specific names these easily reached Level 3. However some candidates seemed to have little idea of rural settlement. A number of candidates, from a range of centres, looked at urban change in London having caused the redevelopment of the Docklands.

- 3 (a)** Describe the dependency issues that are likely to arise from each of the population pyramids shown in Fig. 3. **[9]**

Only a fairly small number of candidates identified both dependencies, and went on to describe the associated issues. Almost all candidates noted the very large percentage of the population in the 0-19 age group for Mali. Most of these candidates noted that they would be dependent on the 20-39 and 40-59 age groups. Not all these candidates went on to describe the dependency in any detail, or identify any issue, although most did. A small number of candidates who noted the large 0-19 group tried to argue that older age groups were dependent on them, gaining little credit. A much smaller number of candidates noted any dependency issues for Sweden. Of those who did, the most common response was to identify the 40-59 age group as the largest and to note that in future, as they entered the 60+ age group, they would cause issues such as raised taxes for health care and higher retirement ages. Such responses were credited up to full marks. It was surprising that few candidates noted that the large percentage of the population currently over 60 was already raising dependency issues. A small number of candidates described the contrasts in population age distribution between the two countries, but seemed quite unaware of the concept of dependency.

- (b)** How can population change in a country be linked to a demographic cycle? **[9]**

Most candidates who scored soundly selected the Demographic Transition Model, but there was no requirement for this. A few candidates took other approaches; usually the progression population pyramids generally follow, and were able to achieve good marks. Examiners were looking for evidence that different rates of increase (or possibly stability and decrease) could be related to other demographic measures that usually follow comparable trends between countries. A small number of candidates wrote answers that seemed to have little to do with population change or any pattern that could be related to it.

- (c)** Explain why internal migration is occurring at a national scale in a named LEDC. **[12]**

It was rare to see answers that were poorer than the very top of Level 1 here. Almost all candidates selected an appropriate country. Weaker answers usually identified push and pull factors in general terms and got little further than that movement was usually rural to urban. Far more candidates gave firmer detail on push or pull, or had some precision in source or destination areas. Level 3 candidates, and they were not uncommon, were fairly clear on both push and pull factors and were accurate about source and destination regions. There were several centres where candidates had used the Peru article from the Autumn 2005 issue of *Geography* very well and applied it with good effect to this question.

- 4** Explain how the globalisation of employment is changing economies of both LEDCs and MEDCs. **[30]**

This question gave scope for good candidates to apply knowledge from several parts of the Specification. The best answers dealt well with some aspects of globalisation, usually shifts or changes in employment, or growth of MNCs. These answers also went into some detail over how the overall economy was affected by this, particularly in relation to employment sectors and levels of development. Level 5 answers did this equally well for at least one LEDC and one MEDC. Answers that did not reach Level 5 or the upper end of Level 4 tended to focus just on shifts in employment without considering the economy, or dealt only with either LEDCs (usually) or MEDCs, but still had substantial content. Candidates in Levels 2 and 3 could focus reasonably well on only a very narrow part of the answer, for example MNCs being attracted to LEDCs, but with little else; or they had a superficial overall grasp but were unable to support their points by any kind of example. Only a tiny number of candidates were unaware of the concept of globalisation, or alternatively, changing economies.

- 5** To what extent do the causes, scale and nature of urban sprawl differ between LEDCs and MEDCs? **[30]**

There were marginally fewer answers to this question than to question 4. A similar proportion of answers fell into each level as was seen in question 4. The Level 5 answers showed sound understanding of all three aspects of cause, scale and nature of sprawl for both LEDC and MEDC cities. Place knowledge was often good and appropriate. Answers not reaching upper Level 4 or above had distinct gaps, for example in scale, or distinct weakness for either LEDC or MEDC cities. At Levels 2 and 3 there was usually some isolated aspect dealt with soundly but large parts of the question unaddressed. Alternatively, there were answers at these levels that showed a general understanding that lacked any kind of support. There were just one or two candidates who did not seem to understand the concept of sprawl. These were usually attempts to explain why CBDs are different in LEDC and MEDC cities.

2689 Geography AS Level

General Comments

The overall standard of the paper demonstrated considerable improvement upon January 2005 and June 2005. Candidates are generally able to address all the assessment objectives of the Report. Where a choice exists (Questions 1 to 3), most Candidates did not opt for a question that was familiar (Question 3) and on the whole the responses were most encouraging. Indeed, the responses for the familiar Question 3 were noticeably poorer. Question 4 presents the challenge of a varying format and content of question between sessions. Candidates dealt very well this question, although very few had studied climatic data in a transect for their personal report.

The Report

Guidance given to Candidates: As expected for AS Level, nearly all Reports are guided by the Centre or a field centre with group collection of data, to some extent, reflects the expertise of the Centre or field centre. The assessment criteria achieve differentiation by outcome, although there is necessarily commonality in the reports and subsequent marks at each Centre. There was sufficient differentiation between Candidates at most Centres to suggest that an appropriate level of support had been offered to Candidates. Nearly all Centres stated how Candidates had been assisted, usually by selecting the general topic, study location and sampling points. Candidates were responsible for developing the methodology for planning, undertaking data collection and analysing the outcomes.

Length of Report: There was an increase in the number of rubric infringements, concerning the 1,500 word limit. Candidates that substantially exceeded the word limit were penalised under the guidelines given that Reports of excessive length will not enter Level 3.

Supporting figures: A maximum of two pages of relevant figures in support of the text is required. It is pleasing to report that proportionally more centres are noting this recommendation, without any detrimental impact on the mark awarded. Credit is awarded for presenting the most appropriate data in the most appropriate formats that enable like for like variables to be compared readily on the same page. Figures should not be photocopied and reduced in size in order to continue to submit excessive quantities of data. The inclusion of raw data such as field notes and completed questionnaires is not required. However, templates for data collection, e.g. blank questionnaire, are useful.

Content: A maximum of three hypotheses gives the most successful outcomes, as this enables deeper analysis and evaluation than is possible with more than three hypotheses. Data collection and analysis should relate to the aims and hypotheses that the Candidate has proposed at the beginning of the Report. Average and good Candidates now produce little irrelevant material. As in previous years the majority of Reports covered physical topics, typically rivers, coasts or psammomeres. Human geography Reports were mostly based on the CBD or urban environment.

Benefit from experience: If re-sitting, it is a good opportunity for Candidates to improve the Report submitted or even to submit a new one based on a different topic or improved data collection.

Preparing for the Report: A good set of field notes can provide valuable explanations for the outcomes of the data analysis – particularly any anomalies that are present.

The Written Paper

The answer booklet clearly states that material from the Report is to be extended and not repeated in Questions 1/2/3, which is still improving with successive examination sessions, but remains a characteristic of lower ability Candidates. For January 2006 repetition from the Report was only a risk with Question 3 – provided the Candidate had read Questions 1 and 2 properly. However, for Question 1 some candidates thought that it meant that the results had to be the same, rather than considering the sampling factors. For Question 2 some Candidates did not take note of the need to discuss the issues around group and individual data collection – instead they just looked at general problems of carrying out an investigation. The response to Question 1/2/3 was a good discriminator showing those who had clearly understood the programme of work leading to the Report, as opposed to those mechanically following instructions.

In Question 4 examples of poor ways of presenting data were used for the first time as a resource on this paper, to which most Candidates responded well. The objective was for the Candidate to demonstrate their understanding of graphical techniques. The resource itself – climatic data along a transect – was familiar to Candidates in the Physical Geography module. Nearly all Candidates had not prepared Reports based on climatic data – but this was not an impediment to their ability to respond to the question. Differentiation in the answers was achieved through their understanding of the general principles of how to present data effectively and meaningfully, by being able to identify both good and practice. All Candidates referred directly to the data throughout the response. No Candidates completely misunderstood the question.

All Candidates attempted all parts of the paper and followed the rubric. Very few appeared to mismanage the time available. There was an improvement in consistency of quality between questions, particularly for intermediate and high ability Candidates.

Detailed Comments

The Report

Once again, these comments regarding the Report have been made for previous examinations. Many Candidates have the potential to benefit substantially by addressing these issues outlined below, many of which are simple to act upon.

1) Coursework Cover Sheet CCS205

- (a) Cover Sheet CCS205 must be used (it replaced GCW024 in September 2004).
- (b) A Cover Sheet was used by most Centres. It is used to identify the context of the studies, the conduct of group work and special circumstances relating to the conduct of the study.
- (c) Centres should ensure that the following information is provided:
 - The number of words in the Report should be entered and should be given to the nearest 20. Titles and headings are excluded from the word

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count. Text presented as sentences or detailed notes in tables are included in the word count.

- The Reports are signed and dated individually, i.e. not photocopied, by a member of staff at the Centre.

2) Authentication Sheet CCS160

The Authentication Sheet was introduced in November 2003: not all Centres are using it.

3) Overall performance

- (a) The vast majority of Candidates entered Level 2; few Candidates fell in Level 1. Stronger Candidates constructed fluent and well argued Reports that were able to link their outcomes with theory and their expectations when accepting or rejecting hypotheses. Weak Candidates included little analysis and the structure was poor, with weak hypotheses that were ignored in the remainder of the Report.
- (b) Most Reports represented a substantial development from GCSE, showing independent thinking when analysing and evaluating outcomes.

4) Presentation

- (a) The **standard** of presentation in the Reports was generally good and show continued improvement. Good characteristics are:
 - Easy to read text.
 - Use of the third person rather than the first person.
 - The sheets are in the **order** in which they should be read. **Page numbering** is used.
 - Cross-reference** the figures and tables at the appropriate place in the text.
- (b) The use of **excessive text** describing data collection and the evaluation of the method in a tabular format can attract a penalty against entering Level 3 if the word count is not adhered to. However, this technique is highly effective when used carefully.
- (c) The recommendation for two pages of **supporting material** was still not adhered to by many Candidates. These figures should:
 - (i) Provide evidence of the data collected.
 - (ii) Relate to the stated aims and hypotheses of the investigation.
 - (iii) Show an awareness of appropriate methods of representing data, e.g.:
 - One map extract should show the location of the investigation and/or sampling sites.
 - Insert figures/tables at the appropriate place within the text so that it complements rather than detracts from the text.
 - Do not photocopy and reduce the size of figures in order to put in more information in the recommended space: this leads to loss of quality in information.
 - Do not spread graphs over a number of pages, making it difficult to compare like for like variables, e.g. if 10 river cross sections are made, they should be presented on the same page using the same scale.
 - Do not use more than one technique to present the same data.

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- (d) **Word processing skills** continue to improve, but **proof reading** must not be neglected. In a few cases the standard of English was weak.

5) Length

- (a) At a few Centres many Reports exceeded 1,700 words. The word count must be adhered to and an accurate word count is to be stated. Fairness for all Candidates is paramount. Candidate should think carefully about how to use the word resource effectively.
- (b) As noted in 4)(b), the use of tables to describe and evaluate data collection may be used to “save words” – but such tables with continuous text are part of the word count.

6) Format

Most Candidates used a recognisable format based upon the Specification: introduction, aims and/or hypothesis, data collection, analysis, and evaluation. The essay style approach without headings was used by few Candidates – this approach often makes the structure of the Report less methodical and more difficult to understand.

7) Content

- (a) The **subject matter** of Reports was nearly always appropriate. At AS level Candidates have not covered a great variety of topics. Physical studies such as rivers and psammomeres continue to be popular and make topics.
- (b) Many Reports continue to have a weak **introduction**. It should be short and balanced, summarising the context of the study by stating: (i) where the study is based; (ii) something about the study area; and (iii) why it was selected.
- (c) The **aims** were given in nearly all Reports, but in some cases the **hypothesis** is not given or it is not clearly linked to the aims. A simple hypothesis demonstrates an understanding of what is expected to happen, according to theoretical knowledge, e.g. the velocity of a river will increase downstream; larger shopping centres have a greater sphere of influence. Additional justification can be given here. Expectations presented here can be used to explain the results later in the Report. The purpose of the null and alternative hypothesis, when stated, continues to be misunderstood. *The null hypothesis should state that there is not a relationship expected between two variables, whilst the alternative hypothesis should state that a relationship is expected, and preferably indicate the direction/nature of this expected relationship.*

All relationships to be analysed should be stated clearly in this section.

One or two hypotheses are adequate. Highly diverse and/or numerous hypotheses do not lend themselves to an easily managed Report, often leading to lengthy methodology and limited data analysis / evaluation sections.

The hypothesis must precede the methodology, otherwise it is not possible for the reader to know whether appropriate variables are being collected.

- (d) The **method** was usually presented well (as in previous years). Appropriate methods of enquiry were used. The following are good characteristics:
- How the sites/transects for measurement were **selected**.
 - Type of sampling** used (random, systematic, stratified – *Candidates often confuse these definitions*).
 - Sample size** for each sampling site [*frequently omitted*].

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- The data collected is **relevant** to the aims/hypotheses, *otherwise the analysis is not relevant to the aims. When groups collect many variables, individual Candidates should only refer to variable relevant to their chosen hypotheses both in data collection and analysis.*
 - A precise **definition** is given for the variables.
 - Template of **questionnaires** and **survey forms**, e.g. environmental impact.
 - Make **field notes** whilst collecting data, to be referred to in explanations of results.
- (e) **Analysis** continued to be of variable quality. Good characteristics include:
- A clear indication of the hypothesis under discussion.
 - Link the text describing the results of the investigations to graphs, tables or figures.
 - Use theoretical knowledge to explain the outcomes.
 - Look for **anomalies** and try to explain them by referring to **secondary knowledge** and **field notes**. It should be clear which form of explanation is being offered.
 - Link the outcomes from more than one hypothesis/aim – *this is a Level 3 type response.*
 - Refer to **all the data** that had been collected and is relevant to the hypotheses.
 - State when **supplementary data** (i.e. secondary and anecdotal evidence) is used to support the interpretation of data. *This often omitted with coastal management schemes and responses to questionnaires.*
 - Statistical tests:**
 - Numerical evidence to demonstrate that a test has been carried out.
 - The term “significant” is used carefully. The **level of statistical significance** of a relationship (if any) is stated when carrying out a suitable test such as Spearman’s Rank Correlation.
 - Check calculations carefully. *A logic check by the Candidate will quickly reveal unrealistic results, e.g. the direction and strength of an appropriate relationship based upon Spearman’s Rank Correlation should be checked against scatter graphs. Units should be checked, e.g. discharge is often miscalculated.*
 - Use appropriate formulae to calculate results, e.g. the calculation of velocity based on the number of propeller counts or the time taken for a float to travel over a given distance must be converted to metres per second.
 - Make sure *both* variables are ranked from high to low (or low to high) for Spearman’s Rank Correlation.
 - The Conclusion does **not repeat information** verbatim from the analysis.
- (f) Nearly all Candidates **evaluated** the project by considering two main aspects: (i) difficulties in selecting the sample and field data collection, and (ii) possible modifications and extensions to the study. Weaker Candidates continue to state that the study went well and that the outcomes were as predicted. Most studies can be linked to a geographical theory, but this third area of evaluation was usually not mentioned or the theory stated early in the Report was not linked to the outcomes – particularly in the case of land use models.

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- (g) The presentation of **maps** is reasonable, e.g. title, scale and key. Few Candidates used the map to show precise locations of sampling sites on, for example, rivers or sand dunes. However, many did not include any map – yet maps are a fundamental part of Geography.
- (h) **Graphs:** as in previous years Candidates usually selected appropriate ways of presenting data, but most made one or more of the following errors:
- Used more than one technique to present the same data.
 - Poor choice of scale for variables with small variations.
 - Variable scales for the same pairs of variables on different graphs, so that comparisons were difficult and/or misleading.
 - Axes not labelled or inaccurately labelled.
 - Two types of graph used to represent the same variables at two different sites, thereby making comparison difficult.
 - Independent variable placed on y-axis.
 - Poorly ordered graphs make it difficult to compare like with like.
 - Line graphs should not purport to show a link between qualitative descriptors such as types of land use or a set of 10 randomly selected pebbles on a river bed.
 - Do not use titles starting “A graph to show.....” The graph obviously shows something!
 - Graphs and diagrams not relevant to the variables used.

The Written Paper: Comments on Individual Questions

Choice of Question 1 or 2 or 3

Very few Candidates remained in Levels 1 and 2 and a good number entered Levels 4 and 5. Questions 1/2/3 reflect the ability to discern what the question requires of the Candidate. In particular, Candidates should be aware of the need to read the requirements of the question rather than attempt to use an answer that has been rehearsed as part of examination preparation.

Question 1 was the most popular choice, with fewer attempting Question 2 and very few answering Question 3. Nearly all Candidates clearly understood the requirements of the questions. The level of attainment for Questions 1 and 2 was good, with most responses entering Level 3 and a good number entering Levels 4 and 5. The level of attainment was somewhat lower for Question 3.

Acceptable responses were similar to previous examinations, with credit gained either by considering a few issues in detail or by looking at a range of ideas in less depth. These questions consistently differentiate between Candidates that understand how to carry out and analyse AS level research, as opposed to those who have mechanically followed instructions.

The answer booklet clearly states that material from the Report is to be extended and not repeated, which is improving with each examination session. For January 2006 repetition from the Report was a risk Question 3; if Questions 1 and 2 were misinterpreted, repetition also became a risk.

- 1) Many Candidates reached Level 4; a good number entered Level 5; very few stayed in Levels 1 and 2.

Indicative content: physical factors that could be considered when repeating an investigation at the same place include: physical changes by man to the location, e.g. canalising rivers, building beaches, woodland planted or cut down; human changes to the location, e.g. construction of new roads, buildings and barriers; natural changes, e.g. weather affects accessibility to sites. Methodological factors include: availability of equipment, e.g. is it the same, should better equipment be used but jeopardise comparability; sampling method, e.g. day, time of day, type, justification of location, and sample size, e.g. reasons why the same should be used or whether it should be improved at the expense of comparability; amount of time available.

Qualities of A grade Candidates: Either two or more factors that need to be considered – and how difficult this is to achieve – to ensure a fair comparison when an investigation is repeated at the same site are discussed well / quite well; or more factors and difficulties are discussed in less depth. The two parts of the response (factors and difficulties) are well balanced, relevant and relate to the investigation.

The majority of Candidates were able to identify two or more factors to be taken into consideration and usually noted the associated difficulties of carrying it out. Typical responses referred to the timing of the data collection, the impact of the weather, the equipment used, the personnel involved in data collection, how measurements would be made and the sampling scheme. Weaker Candidates lacked detail, particularly with regard to how difficult it would be to achieve a fair comparison. The weakest responses thought that it meant that the results had to be the same, rather than considering issues of comparability; others strayed into discussion of the graphs and analytical techniques that would be used in a repeat study.

- 2) Many Candidates reached Level 4; a good number entered Level 5; very few stayed in Levels 1 and 2.

Indicative content: advantages of individual investigations: don't need to rely on other people, e.g. poor measurement techniques, poor data recording; can plan an investigation that the student most wishes to carry out; no need to collect superfluous data for other members of the group; no need to duplicate effort, e.g. each group member takes it in turn to take each type of measurement. Advantages of group investigations: larger dataset can be collected due to time savings – important for climate, river and coastal studies as well as human studies where pedestrians and vehicles are counted; can take a consensus reading, e.g. for environmental impact assessment; may have access to substitute data if some is lost or clearly incorrect; additional data collected for other group members can be used if own variables need supporting evidence; if one member is ill it has a less serious effect on data collection than with an individual investigation.

Qualities of A grade Candidates: Either the advantages and disadvantages of carrying out a group or individual investigation are discussed well / quite well; or more advantages and disadvantages are discussed in less depth. The two parts of the response are well balanced, relevant and relate to the investigation.

Nearly all Candidates had worked in a group. The majority of Candidates were able to discuss the advantages and disadvantages of their method of working. Typical advantages of group work considered the time saved in data collection, the ability to collect a lot of data and the ability to confer and check work; conversely it was noted that the very diversity of personnel involved was prone to

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human error measurements unless each person was allotted a particular task. The response by moderate Candidates tended to discuss disadvantages rather than advantages. Weaker Candidates failed to remain relevant to the question and wrote about the five stages of completing the coursework. The weakest responses failed to identify whether they had worked in a group or as an individual – instead they looked at the general problems of carrying out an investigation.

- 3) Most Candidates entered Level 3; few entered Level 4; some remained in Levels 1 and 2.

Indicative content: issues regarding the appropriateness of sampling method: choice between: random, systematic, stratified random, stratified systematic, opportunistic; choice between: point, line, area/quadrat sampling; location, time of day, time. Sample size: temporal factors: time available to carry out the data collection; resources available: manpower; equipment; large enough to be able to carry out statistical tests and construct meaningful figures; small enough to be able to manage the data collection, presentation and analysis.

This question does not relate to fieldwork measurement techniques, except when they are referred to in terms of how they affect the appropriateness of the sampling method and/or sample size, e.g. river velocity – use of float or impeller can affect sampling strategy.

Qualities of A grade Candidates: Either two or more aspects of the appropriateness of sampling method and sample size are discussed well / quite well; or more aspects are discussed in less depth. The response relates to the personal enquiry and understands what is meant by sampling method and size. Rejection of alternative strategies is acceptable.

Most Candidates discussed the sampling method used, most of whom understood the difference between stratified and systematic sampling. Issues such as the need to sample pragmatically were highlighted, together with the understanding the sample size is a compromise between what would be ideal and the time/resources available to collect large samples. Otherwise competent Candidates did not gain high marks due to repetition of material from the Report. Weaker Candidates deviated into a description of data measurement techniques which did not affect the sampling strategy.

- 4) Many Candidates reached Level 4; a good number entered Level 5; very few stayed in Levels 1 and 2.

As noted earlier, a range of graphs of varying appropriateness for representing given data was a new type of resource for the Candidates to consider and overall this was done well. An important skill for the Candidate was in giving a balanced response to the three elements of the question: the strengths, weaknesses and suggested improvements. As there were numerous weaknesses in the graphs, it was not necessary to identify everything; however, it was important to have well structured, logical response where points were developed rather than erring towards being a list – particularly with regard to weaknesses. The indicative content in the mark scheme is lengthy, therefore a selection of points are given in this report.

Indicative content:

The 4 bar charts grouped together (Fig. 2): weaknesses: mixed scales, inadequate labelling of scales, mixed use of colour, poor colour choices, mixed

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use of backgrounds, mixed use of dimensions to the graphs, presence or absence of gridlines; duplicate labelling. Strengths mostly relate to individual graphs that do not display weaknesses identified above, e.g. use of grid lines to assist reading the graph; overall change over time is clear and change over space can be seen for each variable.

The line graphs (Fig. 3): weaknesses: the most important is the inappropriate choice of different types of abiotic data for a joined up line. Others include: duplicate and overlapping labelling, incomplete units of measurement; only one site presented. Strengths: colour to distinguish days; the principal of using lines as opposed to bars.

The pie chart (Fig. 4): weaknesses: the most important is the inappropriate choice of a pie graph as the data is not a percentage of anything (it covers three sites which cannot have a 100% total relative humidity. Others include: duplicate labelling, lack of units of measurement; only one day presented. Strengths: there is a legend.

Improvements: reversing the individual weaknesses described above; locating bars or lines on a map; use of bars or line graphs – the latter must not suggest a relationship between the different abiotic factors (as in Fig. 3); one chart per day (grouped by site); one chart per site (grouped by day or abiotic factor); one chart per abiotic factor (grouped by site or day)

Qualities of A grade Candidates: Either with reference to the data presentation techniques in the resource, the Candidate discusses the weaknesses, strengths and improvements well / quite well; or weaknesses, strengths and improvements are discussed in less depth. The Candidate considers all the graphs. There is likely to be an overview of the 4 connected graphs in Fig. 2, rather than going through each one individually. There is likely to be an understanding of the inherent problems of Fig. 3 (a line graph connecting unrelated variables); and Fig. 4 (a pie chart does not make sense for the data used). The improvements are likely to be one new suggestion rather than numerous small ones to the existing graphs.

More able Candidates focussed on the need to show space and time: they used this as the basis for their suggested improvements, which were usually a different way of presenting the data on bar graphs, using one chart per site or per abiotic factor rather than per day; a few suggested a combination of bars and lines. They took an overview of Fig. 2 when discussing weaknesses and strengths rather than repeating individual characteristics for each graph.

Moderate Candidates covered two or three of the key elements, but the response tended to be poor for one of them, especially where all three were considered. Improvements were often written in terms of reversing individual weaknesses on the existing graphs rather than considering new graphs. These Candidates tended to work through each graph in Fig.2 in turn, repeating similar points in the process.

Weaker Candidates largely considered weaknesses. Improvements were either limited or incorrect, e.g. more pie charts or line graphs connecting temperature and humidity. Others misinterpreted the question and discussed the appropriateness of the table or suggested calculation of means to be plotted on a graph.

Very few did not consider all of Figs. 2, 3 and 4. An impressive range of points was noted by the Candidates overall, some of which are noted here, e.g. the

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presence of horizontal grid lines and the gaps between the bars in Fig. 2b; the different location of the legend in the charts for Fig.2; the pink and grey bases in Figs 2c and 2d; even the lack of a key to explain what RH means. A number of Candidates pointed out the general strength of the graphs was that they had been given titles which related to the content of the graphs – although several noted that Figs 2 and 3 referred to humidity rather than relative humidity. It was interesting that what some considered to be a strength, others thought of as a weakness, e.g. the labelling of the bars on Fig. 2 (although the great majority thought this to be a weakness); the use of 3D or 2D bars; the use of intervals of 5 on Fig. 2c. Credit was given where the case for the Candidate's opinion was well supported – except where it was suggested that the lines on Fig. 3 and the pie chart in Fig. 4 were appropriate. The most innovative improvements came from Candidates at one centre who suggested the use of triangular graphs. Few suggested locating bars or lines on a map. Other good improvements included the production of separate graphs for relative humidity, thereby enabling a more suitable scale to be used for the temperature data. Many noted in Fig. 2 that there were no units of measurement or even axis labels.

2690 Geographical Investigation 2

General Comments

The general standard of entries for this session was high with many candidates submitting inventive and well thought out reports. Application of marking criteria was, in most cases, very satisfactory. Many more Centres are writing comments on reports. This enables the moderation process to proceed smoothly and gain some insight into the ability of each candidate. There is however, still a tendency to be a little generous with marks at the top end of the scale particularly for projects that are rather peripheral to mainstream geography.

There is also a tendency to spot level criteria and award it automatically. Mention of the word 'bias' in a candidate's report does not necessarily mean that they have attained level 3. The bias must be explained somewhere in the text.

Choice of topic seems most satisfactory in the majority of cases and candidates are obviously receiving good guidance on this. There were fewer reports focusing on the potential for future development and suitability of leisure facilities which rarely make for good studies. Of concern however, is the trend for choices of topics that are beyond the bounds of geography. Cross curricular choices are, of course, to be encouraged, but some reports this session were rather peripheral and candidates struggled to make the relevant geographical links.

General Comments - Format

Many Centres are encouraging a more creative presentation of results and reports this session contained some excellent application of graphics combined with cartography. Some candidates are opting for large fold-out results sheets containing all data. This is acceptable providing that the information is legible, clearly laid out and that the page fits neatly into the project. A number of reports presented in this format contained too much information on one page and much of the graphical data was very small and difficult to read.

Cartographic skills seemed to have declined somewhat. A number of candidates chose to include hand-drawn maps which could have been dramatically improved by adhering to some traditional map drawing skills. This is still an important skill in geography and should be encouraged to a high standard.

More Centres are encouraging candidates the use sub-headings based on selected criteria in their reports - for example; geographical context in the Introduction, error and bias, extension and improvement in the Evaluation and so on. This is acceptable and to be encouraged if it helps less able candidates organise their work.

Many candidates use the term 'amount' when they really mean 'number'. In some cases this is not grammatically correct and detracts considerably from the report.

An increasing number of candidates are including rather large appendices containing all collected data, particularly questionnaires. It is only necessary to see a sample of the questionnaire used for the survey.

General Comments - Administration

The new cover sheets for reports now includes a comments box – it would be most helpful to moderators if this could be filled in to provide ideas about application of marking criteria and general performance of the candidate.

MS1 sheets were completed accurately; however care must be taken when underscoring the individual numbers. In a few cases this was not completed clearly. Such practice could well contribute to queries and delays in the awarding of marks.

Centres are to be commended on the efficient despatch of sample material and accurate paperwork this session.

2691 Issues in the Environment

General Comments

Candidates appear to have had no difficulty in completing the paper within the allocated time. Very few candidates failed to complete four questions as required. There were no significant rubric errors. The majority of candidates completed question numbers one and seven. In Section A questions three and four were attempted by a small number of candidates and question two by very few. In Section B, questions five and six were attempted by a small number of candidates and question eight by very few.

The general quality of responses was sound and very few responses showed a total lack of understanding. At the highest level candidates showed an impressive understanding and used examples effectively to develop their responses. Differentiation was largely due to the depth of response and use of examples.

Comments on Individual Questions

- 1 (a)** Candidates showed a good general understanding about flood management and measures that could be employed to reduce the risks of flooding. Most were able to describe a range of coastal defence measures, fewer considered the problem of land drainage and river flooding. Use of the Ordnance Survey Map was variable. It was clear that a small number of candidates found map interpretation difficult and made only vague or superficial comments. The majority of candidates focused only on the immediate coastal area and made only tentative observations about the rest of the landscape.
- (b) (i)** This question was attempted by very few candidates and responses varied from excellent description and clear explanation to general points about the relative conditions required for particular hazards. A small number of candidates attempted to address the question through the use of one or two examples. This was clearly not a very productive way to attempt a question which required a broad geographical perspective.
- (ii)** Candidates attempted this question in different ways. A number simply addressed the short term and long term impacts in LEDCs while others considered LEDCs in relative terms to MEDCs. Both of these approaches, when focused on the question, brought considerable success. The general use of examples was excellent; many candidates bringing in the recent earthquake in India/Pakistan and the Indian Ocean tsunami. It was clear that most candidates appreciated the idea of 'short' and 'long' term in this context and were able to develop coherent and thoughtful responses. At the highest level candidates identified the links to economic development and how natural disasters can impact broader economic and social policy.
- 2** Few candidates attempted this question and responses were variable. In part (a) the resource was generally used effectively to identify the potential health issues associated with global warming and then make observations about the relative impacts. A small number of candidates then went on to make the point that these potential health issues would be more critical in LEDCs; since it is in these areas that those types of health risk are already greater.

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In part (b) responses were often quite vague and generalised and lacked detailed exemplification. It was clear that a small number of candidates were unsure about the idea of 'urban microclimates' or 'international environmental management strategies'.

3 (a) Most candidates used the resource effectively and were able to share a good understanding of sustainable development. A significant proportion of candidates tended to focus on the environmental aspects of development and did not fully appreciate the wider human aspects. At the higher levels candidates brought in both environmental and socio-cultural factors and linked these closely to the resource.

(b) (i) This question was attempted by very few candidates and was generally completed either very well or very poorly. The better answers brought in theoretical models of climate change and linked the cycles of climate change to periods of glaciation. They then considered the current situation in relation to global warming and linked this to melting ice-caps and retreating glaciers in some areas. At the lower levels there was very little understanding and often no more than tentative ideas about changes in temperature creating different conditions for ice to advance or retreat.

(ii) The term 'leisure activity' was interpreted in many different ways – generally the broader the range of options the more successful was the response – especially when linked to locational exemplars.

At the higher levels candidates brought in a range of active leisure activities, often supported with examples from the Alps, Norway or Canada. They then went on to develop ideas about more passive activities, for example photography or simply observing wildlife. Examples used here were Alaska, Antarctica or the Canadian north.

4 (a) Candidates used the resource quite effectively, although many tended to repeat the message rather than consider the choice expressed. Those that did develop their response often used appropriate examples to examine the influence of over-exploitation in areas of tropical rain forest.

(b) (i) Responses to this question were either very effective, with detailed observations and a clear understanding, or simple descriptions of tropical environments. It was clear that a number of candidates did not fully understand the idea of 'ecosystem' and often resorted to a simple link between climate and plant life. At the higher levels candidates described key elements of both flora and fauna and linked these to patterns of rainfall and temperature. A small number of candidates used one tropical ecosystem to address the question – this was usually self-penalising.

(ii) This was not a very popular question, and most of the candidates who attempted it produced descriptive responses which simply identified hazards. These were usually linked to patterns of rainfall and focused on soil erosion, desertification or drought, often with only limited exemplification. The idea of how hazards 'constrained human activity' – as expressed in the question, was not usually fully explored.

5 (a) Most candidates used the resource effectively to identify the key points, although the level of discussion was variable. Many saw the issue of overnutrition as essentially an MEDC issue and made useful comparisons with LEDC areas of malnutrition. At a more sophisticated

level some saw the issue as essentially an American issue which was not at all global, and indeed was not a problem in many other MEDCs.

Those that saw the issue as global adopted two main avenues of thought. Firstly, some simply agreed with the question and made basic points. The second approach considered it to be more of a global issue because of the influence that the USA has on both other MEDCs and LEDCs. One idea here was that areas of LEDCs (Brazil) are being destroyed to develop cattle ranches to supply beef for fast food chains – consequently making the whole idea a global issue.

- (b) (i) Very few candidates attempted this question. Those that did often showed a good general understanding and were able to identify a number of factors that influence agricultural productivity. A range of economic and political factors were used to consider the question. In general terms those candidates who used a range of examples from different physical and economic areas were able to consider the question in depth. Where exemplification was narrow, perhaps simply using one or two areas in the United Kingdom, the full range of possible ideas was not easily considered.
- (ii) Responses to this question were often quite superficial with generalised observations about aid. Few candidates mentioned the names of aid agencies and there was a limited appreciation of short/long term aid. Those candidates who did base their responses on specific, named and located projects usually showed the best level of understanding.
- 6 (a) Most candidates used the resource effectively to describe the way that self-help schemes can improve living conditions. A number of candidates then went on to use other examples to develop their argument. Relatively fewer candidates considered the idea of 'extent', a small number considering that while self-help schemes are useful, larger government schemes are required in order to tackle such a major issue.
- (b) (i) (ii) Responses to both of these questions were often quite generalised and lacked depth. It was clear that candidates had an understanding about the ideas of 'inward investment' and 'sustainability' but they did not often fully develop their ideas. The 'holistic' idea of dealing with social, economic and environmental issues was often missed and the focus of responses was simply on one or two general points, such as industry or traffic congestion.
- 7 (a) Most candidates showed a good general level of understanding and used the resource effectively to develop their response. Many then went on to use examples which supported the view of the response and built up a detailed case which clearly identified the conflict between environmental management and local communities. A small number of candidates took a different view by using examples where this conflict was well managed. In doing this they were able to consider the idea of 'extent' in some detail. This was often a very successful approach to the question.
- (b) (i) Most candidates found this question quite manageable and a range of examples was used. A small number used more than one LEDC or inappropriate examples (Spain?), or simply based their response on one small area within a country. This was often self-penalising.

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Responses varied from basic ideas about wealth and job creation with only tentative links to broader economic considerations to complete responses which brought in detailed ideas about infrastructural developments. At the highest level candidates considered 'economic development' in its broadest sense, bringing in ideas about social improvements such as health, education, housing and basic security.

- (ii) For many candidates this question was an opportunity to describe tourism projects, some of which were clearly not ecotourism. This type of response was often able to show a basic understanding of the question, but usually did not fully develop the idea of being 'developed with sensitivity to the natural environment'. Candidates who selected specific ecotourism examples and clearly identified the fragile nature of the environment were usually better placed to express a full understanding of the question.

8 Very few candidates attempted this question.

- (a) Candidates generally used the resource effectively to describe the effects of the closure of the Dyson works in Malmesbury. The general links to globalisation and the impact of changing industrial location was not fully appreciated by many of the candidates. In a very small number of responses candidates began to consider broader global impacts, with observations about global manufacturing shift aiding economic development in LEDCs.

- (b) (i) This question was generally not well answered. A 'service industry' was not always selected and links to the service sector were often quite tentative. Information technology was often seen in a very narrow way by considering particular individual activities such as call centres. The global perspective of the question and the 'shrinking world' idea of information technology was rarely considered.

- (ii) Candidates generally showed a good level of understanding and were able to use well chosen and often well located examples. (Nike and Ford perhaps the most popular). The general locational description was often sound and many candidates identified the distinction between the location of Headquarters/Research facilities and manufacturing plants. The reasons for the locations and the locational shift were often more tentative, many candidates focusing simply on labour costs. A small number of candidates began to explore other factors such as resource availability, political decisions and changing market conditions.

Advanced GCE Geography (3833/7833)

January 2006 Assessment Session

Unit Threshold Marks

Unit		Maximum Mark	a	b	c	d	e	u
2687	Raw	90	50	44	38	32	27	0
	UMS	90	72	63	54	45	36	0
2688	Raw	90	73	64	56	48	40	0
	UMS	90	72	63	54	45	36	0
2689	Raw	60	47	42	38	34	30	0
	UMS	120	96	84	72	60	48	0
2690	Raw	90	71	62	54	46	38	0
	UMS	90	72	63	54	45	36	0
2691	Raw	90	69	62	56	50	44	0
	UMS	90	72	63	54	45	36	0

Specification Aggregation Results

Overall threshold marks in UMS (i.e. after conversion of raw marks to uniform marks)

	Maximum Mark	A	B	C	D	E	U
3833	300	240	210	180	150	120	0
7833	600	480	420	360	300	240	0

The cumulative percentage of candidates awarded each grade was as follows:

	A	B	C	D	E	U	Total Number of Candidates
3833	18.2	22.7	40.9	77.3	95.5	100	23
7833	0	0	100	100	100	100	1

For a description of how UMS marks are calculated see;
www.ocr.org.uk/OCR/WebSite/docroot/understand/ums.jsp

Statistics are correct at the time of publication

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