



Mark Scheme (Results) Summer 2015

Pearson Edexcel International
GCSE
in Geography (4GEO) Paper 1

Or

Pearson Edexcel Certificate
in Geography (KGEO) Paper 1

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be **prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.**
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the **mark scheme to a candidate's response, the team leader must be consulted.**
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Placing a mark within a level mark band

This guidance is to help with the rewarding of responses to the 6- and 9-mark items once the appropriate level mark band has been determined.

Level 1 responses will be valid but sketchy and show only basic awareness of the point of the question e.g. simple random points.

Level 3 responses will be developed and considered with range and/or depth e.g. good use of examples and facts.

Level 2 responses will show an attempt to address the command word with some development of the answer but will remain imbalanced (skewed) or restricted/partial/limited.

- **2 mark bands (the 6-mark "Explain" items)**
Start with the presumption that the mark will be the higher of the two. A poorly supported response gets the lower mark.
- **3 mark bands (the 9-mark "Discuss" items)**
Start with the presumption that the mark will be the middle of the three. A poorly supported response gets the lower mark. A well supported response gets the higher mark.

Where questions ask for a named location or example and the candidate fails to do so either at the outset or in the response, please limit 6-mark items to 3 marks and 9-mark items to 5 marks (Level 2). Example does not necessarily mean place. Max of L1 marks for HIC response when LIC requested and vice-versa.

Section A - The natural environment and people

Question 1 : River environments

| Question Number | Answer | Mark |
|-----------------|----------------|----------|
| 1(a)(i) | B. flood plain | 1 |

| Question Number | Answer | Mark |
|-----------------|---|--------------------|
| 1(a)(ii) | Accept any one of the following descriptive points about valley shape (not channel or flood plain) for 1 mark: wide (1); open (1); level around channel/flat bottomed (1); more sloping beyond plain on left bank/ asymmetric valley slopes (1). Double credit (2 marks) requires recognition of valley i.e. reference to both side and bottom e.g. wide floor and gentle slopes. | 2 (1+1) |

| Question Number | Answer | Mark |
|------------------|---|----------|
| 1(a)(iii) | Credit any one of following in-channel features/ landform shown and typical of middle courses: meander(1); river cliff/bluff(1); shingle bank/eyot (1); slip-off slope/point bar(1); wide channel (1); deposition (1). | 1 |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 1(b)(i) | For max mark expect full definition e.g. running water wearing away its channel (1) and removing the debris (1). Award 1 mark for part definition e.g. destruction of rocks; wearing away banks; abrasion/corrosion/hydraulic action ... Expect weathering outlined and transport mentioned for max marks. | 2 |

| Question Number | Answer | Mark |
|--|---|--|
| <p>1(b)(ii) Type 1 Item</p> | <p>Award 1 mark for each of the four following stages in lake formation process: meandering(1); narrowing of meander neck(1); cut through and course straightening(1); isolation of old course/lake(1).</p> <p>1 mark can be awarded for type of erosion e.g. lateral (1).</p> <p>Max marks can include latter plus 3 of the valid stages as above.</p> <p>Creditable responses can be - more than one diagram to show sequence of stages; a single diagram in which various stages evident; text alone; text and diagram combination. Expect some annotation for max mark diagram only answers.</p> | <p>4 (1+1+ 1+1)</p> |

| Question Number | Indicative content | |
|-----------------|--|---|
| 1 (c) | <p>This explanatory question is looking for an account of how and/or why a named water storage project has a range of impacts. These impacts can be intentional, unintentional, positive or negative. The construction and/or management of a water reservoir (with or without dam) impacts on economic and social life as well as the natural environment.</p> <p>Named projects are likely to be the well-known examples e.g. Aswan Dam/Lake Nasser; Hoover Dam/Lake Mead; Kielder; Carsington but accept others, including dam projects where the main focus is on flood control.</p> <p>Economic impacts might include potential for HEP, recreation and tourism; irrigation and boost to agriculture downstream; destruction of farmland; prevents flooding downstream; water supply supporting economic and population growth; benefits to employment esp. during construction (multiplier effects) ...</p> <p>Social impacts might include population displacement and community/family break up as land drowned; potential for recreational activities; dam ugly to some...</p> <p>For environmental impacts expect reference to interference with ecosystems and species, disturbance to river channels including discharge and river processes (e.g. deposition/silting), creation of new wildlife habitats (e.g. bird sanctuaries) as well as destruction of others ...</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect limited response to the question. Responses will have some or all of the following characteristics - one-sided, very short lists, generic, have a how-it-impacts/more descriptive flavour |
| 2 | 3-4 | Expect an attempt to make a partial explanation of some relevant impacts. Accept short lists; possibly some linkage to case-specific or generic impacts; strong responses that only focus on one area of impact. |
| 3 | 5-6 | Expect a sound and balanced explanation of a range (at very least, two) of impacts, perhaps socio-economic and environmental based on a named case study. The explanation should offer reasons and may justify why impacts are beneficial/disadvantageous |

| Question Number | Indicative content | |
|-----------------|---|--|
| 1 (d) | <p>The causes of flooding can be a combination of both physical (natural) and human factors. Candidates are asked to examine these factors which include :</p> <ul style="list-style-type: none"> • Physical – weather; rock; soil; relief; drainage density; vegetation • Human – deforestation; urbanisation; agriculture; channel changes <p>They should explain some of these factors eg. heavy rainfall from storms; spring snow melt; concreting/tarmacking flood plains. Better responses may refer to examples eg. weather events; building on named flood plains.</p> <p>An assessment of the relative importance of the two groups of factors i.e. rain causes flooding v. flooding is preventable and due to mismanagement should characterise high level responses.</p> <p>This is a high level command word item i.e. discuss which calls for not only the presentation of salient points but also the development of an supported argument : physical or human or a mixture ?</p> | |
| Level | Mark | Descriptor |
| 1 | 1-3 | Expect a limited response to the question. Responses will identify a few key physical and/or human factors behind flooding. They may offer one cause of flooding in an outline fashion. |
| 2 | 4-6 | Expect physical and/or human causes to be treated in a restricted manner with only some attempt to elicit their importance. Answers may focus on either physical or human causes alone but expect some clarity, some development, particularly about the main factors e.g. weather/urbanisation ... The consideration is likely to be unbalanced but some attempt to explain causation must be present. Reference to examples but not necessarily very appropriate ones. |
| 3 | 7-9 | Expect a sound and balanced discussion which develops at least 2-3 key factors, some in each group – physical and human. Attempt to evaluate the causes. The response should build up and put forward an argument about how flooding occurs e.g. combination of human and physical ... Credit examples, including from fieldwork. Assessment, evidence and/or exemplification should be offered at top of level. |

Question 2 : Coastal environments

| Question Number | Answer | Mark |
|-----------------|----------|----------|
| 2 (a)(i) | C. Stack | 1 |

| Question Number | Answer | Mark |
|-----------------|---|--------------------|
| 2(a)(ii) | <p>Credit each valid and distinct observation that describes EITHER beach sediment characteristic</p> <p>eg. bare rock (1); boulders (1); mixed deposit size (1); deposits from variety of rock types (1); rock pools (1); sand patches (1) ...</p> <p>OR a beach profile characteristic</p> <p>eg. low gradient (1); wide (1); NOT wave-cut platform</p> <p>BUT accept intermittent platform (1) ...</p> <p>Point marking approach or award 2 marks for a developed/described point eg. mixed deposit size (1) from large pebbles to boulders (1).</p> | 2 (1+1) |

| Question Number | Answer | Mark |
|------------------|---|----------|
| 2(a)(iii) | <p>Accept one of a range of cliff features</p> <p>Eg. height (1); shape (1); angle of slope/gradient (1); vulnerability to erosion/mass movement (1); profile /irregularity /ledges (1)</p> | 1 |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 2(b)(i) | <p>Full definition for max mark eg. the laying down of material (1) transported by sea (1).</p> <p>Part definition max. 1 mark eg. dumping (1)/sediment being dropped (1)</p> | 2 |

| Question Number | Answer | Mark |
|-----------------|--|----------------|
| 2(b)(ii) | <p>Award 1 mark to each of the following four stages in the spit formation process:</p> <ul style="list-style-type: none"> • longshore drift process identified (1) • longshore drift process outlined (i.e. material moved along coastline by waves) (1) • coastline changes direction (across bay; estuary ..) (1) • deposition in calm, shallow water (1) <p>1 mark can be awarded for description of a spit i.e. narrow beach attached to land at one end; may be curvature at seaward end. Development of the curvature point i.e. wind/wave change of direction a further process stage so worthy of 1 mark.</p> <p>Expect either one or series of annotated diagrams or a text only answer or a combination of text and diagram.</p> | 4 (4x1) |

| Question Number | Indicative content | |
|-----------------|---|---|
| 2 (c) | <p>The coastal ecosystems one might expect to be named are one of coral reefs, mangroves, sand dunes or salt marshes. Their biodiversity may be a source of value to people, especially with regard to coral reefs.</p> <p>Value to people should refer to agriculture and food supply; raw material supply e.g. building materials; tourist attraction and earnings; leisure/recreation activities; coastal protection; conservation potential ...</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect a limited response to the question. Candidates will consider the topic and offer a short list of relevant points about human value for either a specified ecosystem or in more generic terms e.g. farming and food. |
| 2 | 3-4 | Expect a reasonable attempt to answer the whole or part of the question. Some attempt at explanation of value to people for specified ecosystem. There may be some use of appropriate examples and reference to case studies but limited attempts to link to "value" . |
| 3 | 5-6 | Expect a sound and balanced explanation in which there is some specific detail about the human value of a chosen ecosystem. Some candidates may offer fieldwork experience. Reference to case study which makes links to its value to people. |

| Question Number | Indicative content | |
|-----------------|--|--|
| 2 (d) | <p>The management of retreating coastlines is contentious and a suitable topic for discussion e.g. consideration of conflicting viewpoints, analysis of argument ...</p> <p>Candidates should be aware that some people believe that along retreating coastlines there should be:</p> <ul style="list-style-type: none"> • nothing done • maintenance of existing defences to hold the line • improvement of the defences, perhaps to advance the line • retreat allowed, perhaps managed • or a combination of these. <p>Answers may legitimately stray into the “fors and against” soft engineering (eg. beach nourishment ..) versus hard engineering (eg. concrete sea walls ..) where the view that lines should be held or advanced are presented. Those exploring whether to protect or not and advocating managed retreat should refer to management of coastal environment. The question is as much about coastal management as merely coastal protection.</p> <p>The main thrust of the answer about the holding of different views should revolve around ideas of expense, cost-benefit analysis, conservation, sustainability and land value. Spatial context is important e.g. coastal towns viz-a-viz unpopulated stretches of coastline; highland viz-a-viz lowland coastlines....</p> <p>Sound answers may offer relevant examples, including from fieldwork, of coastlines and even case-study detail related to one specific coastline. Generic answers also give access to the top level.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-3 | Expect a limited response to the question. Candidates may offer basic points for or against protection or offer sketchy statements from case studies. May offer a brief list of coastal engineering types or of options for managing the coast. Expect simplistic points, imbalance in the answer and a generally very superficial treatment of the topic. |
| 2 | 4-6 | Expect a partial/one-sided/unbalanced attempt at discussion of the subject of whether or not to protect/manage retreating coastlines. The main types of protection e.g. holding the line; hard and soft engineering ... may be offered or the case for or against protection outlined. There may be some use of appropriate examples. Top of level responses will show some recognition that there may be conflict of views. |

| | | |
|----------|-----|--|
| 3 | 7-9 | Expect a sound and balanced discussion in which the key aspects of whether or not to protect and the main advantages and disadvantages of the different management options are addressed . Expect reference to stakeholders and peoples' preferences to be clear. There may be some attempt at a consideration of cost-benefit analysis. The response will put forward and build up an argument about the management conflicts faced along retreating coastlines. Focus to be on managing a coastal area rather than mere protection. Strong answers will offer assessment/evaluation, evidence and/or exemplification, perhaps from fieldwork experience and case study material. |
|----------|-----|--|

Question 3: Hazardous environments

| Question Number | Answer | Mark |
|-----------------|-----------|----------|
| 3(a)(i) | B. crater | 1 |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 3(a)(ii) | <p>Accept any two of the following volcanic landscape characteristics (descriptive points) :</p> <p>bare ground(1); mountainous/hills (1); irregular (1); many cones (1); uninhabited(1); smooth (symmetrical) slopes to volcanoes/cones(1); level at base of hills/volcanoes (1); crater (1); little or no vegetation (1)...</p> <p>Do not accept anything not evident on image e.g. fertile</p> | 2 |

| Question Number | Answer | Mark |
|------------------|---|----------|
| 3(a)(iii) | <p>Expect to see a standard reason as to why some people live in volcanic areas or other hazardous environments eg. fertile soil(1); building stone(1); born there/moving difficulties(1); assess risk as low(1); tourism income (1); geothermal heat (1); leaving unaffordable (1) ...</p> | 1 |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 3(b)(i) | <p>Full definition addressing both aspects of the phrase i.e. hazard (an event that threatens to adversely affect human life) and risk assessment (deciding how likely is a hazard event to affect people) = 2. Part coverage e.g. the probability of a hazard event = 1.</p> | 2 |

| Question Number | Answer | Mark |
|-----------------|---|-----------------------|
| 3(b)(ii) | <p>Look to award 1 mark each for up to four described not merely identified characteristics :</p> <p>two cloud banks with uplift (1); hours of heavy rainfall (1); strong winds into lower pressure towards centre (1); strong winds described e.g. force 12 (1) calm, low pressure eye (1).</p> <p>Max mark requires reference to both structure of storm (e.g. cross-section) and weather experienced. Unbalanced responses i.e. structure OR weather only limited to maximum of 3 marks.</p> <p>Responses that merely list eg weather: strong winds, heavy rainfall, eye .. limited to max of 2 marks.</p> | 4 (1+1+1+1) |

| Question Number | Indicative content | |
|-----------------|--|--|
| 3(c) | <p>Most earthquakes occur along plate margins, especially converging/destructive ones. Some knowledge of this global distribution e.g. Pacific Ring; Mediterranean ... important. Explanation of tectonic plates and their different directions of movement which leads to the types of margin – convergent/destructive; conservative ... is required.</p> <p>Discrimination in the responses will come in the form of the quality of the account of the mechanisms occurring at these margins, their link to resultant earthquake activity and the way in which margin types are distinguished. Named locations eg. Pacific Ring; California; Japan may be offered.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect a limited response which considers basic aspects of the topic. Simple and relevant points based on the realisation that earthquake distribution matches the pattern of plate margins. Some idea but incomplete of global distribution. |
| 2 | 3-4 | Expect a clear idea of global distribution and some attempt to explain why they occur where they do. Offers an outline account of a good range of the subject area i.e. both converging/destructive and conservative margin processes outlined or decent depth of explanation if range narrow. |
| 3 | 5-6 | Expect a reasonable explanation of the global earthquake distribution. Good account of tectonic processes and earthquake activity at both key types of plate margin to be offered at top of level. Named locations and/or annotated diagram(s) may be offered. |

| Question Number | Indicative content | |
|-----------------|--|---|
| 3(d) | <p>This is a high level command item requiring some analysis and assessment, and can be answered in the context of a case study (e.g. comparative impacts of tropical storms; tectonic event management).</p> <p>Candidates are being asked about the nature and effects of the hazard management eg. Indian authorities and tropical cyclone Phailin, Orissa, October 2013.</p> <p>Better quality hazard management and reduced disaster impact tends to be associated with countries having higher levels of economic development eg. earthquake-proofing in Japan; hurricane-mitigation in the USA</p> <p>Responses should deal with prediction and preparation (eg. education, early warning systems, risk assessment, shelters, defences) and with coping during and after the event (eg. evacuation, emergency aid, mitigation, rebuilding).</p> <p>Accept reference to any type of natural hazard events (ie. tropical storm, tectonic, river or coastal (inc. tsunami) flooding) either specifically or generically.</p> <p>Credit-worthy examples should refer to location and might include fieldwork experience (eg. hazard management survey).</p> | |
| Level | Mark | Descriptor |
| 1 | 1-3 | Expect a limited response which considers basic aspects of the topic. Simple and relevant points outlined eg. prediction; disaster relief etc. Points may be generic. |
| 2 | 4-6 | Expect some attempt to discuss the subject in which the effectiveness and quality of hazard management is clear. Presents some proactive and/or reactive management actions taken to mitigate hazard consequences. Likely focus will be on short-term impacts. Refers to named event but not necessarily specific knowledge of event. Top of level responses will refer to impacts beyond people themselves eg. property/environment. |
| 3 | 7-9 | Expect a sound discussion of the importance and workings of management and strategy in minimising hazard impact and consequences. Answer covers impacts on people but also other areas such as property and environment. Expect some assessment of effectiveness of management in impact reduction. Case study material, both proactive and reactive management and both short-term and long-term impacts may be offered. Use of appropriate evidence, perhaps fieldwork. |

Section B - People and their environments**Question 4 : Economic activity and energy**

| Question Number | Answer | Mark |
|-----------------|--------|----------|
| 4(a)(i) | B. 30% | 1 |

| Question Number | Answer | Mark |
|-----------------|---------|----------|
| 4(a)(ii) | Primary | 1 |

| Question Number | Answer | Mark |
|------------------|--|-------------------|
| 4(a)(iii) | The two changes sought are: * primary sector declined in importance (1) * tertiary/quaternary sector grew in importance (1). | 2 (1+1) |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 4(b)(i) | Full definition= max marks. eg. people creating their own employment without being registered as employed Part definitions= 1 mark eg. little or no job security (1); working unofficially (1). 2nd mark could be for example e.g. shoe shine boy. | 2 |

| Question Number | Answer | Mark |
|-----------------|--|-----------------------------|
| 4(b)(ii) | Award 1 mark to each valid factor identified eg. unskilled/semi-skilled workers (1); mass unemployment (1); LIC cities and rapid urbanisation (1); lack of opportunity (1); enabled by cheap raw materials (1) Where factors suitably outlined so that their role in promoting informal employment evident award 2nd mark in each case: eg. unskilled/semi-skilled workers (1), unable to obtain jobs in organised industry in formal sector (1). mass unemployment (1), difficulty of job appointment when so much competition (1). | 4 (1+1)+ (1+1) |

| Question Number | Indicative content | |
|-----------------|---|--|
| 4(c) | <p>This item requires understanding and explanation (reasons for) the rising demand for energy either globally.</p> <p>Economic development is associated with a rising demand for energy via increased manufacturing, service provision, transport availability and domestic use (e.g. heating and cooling ...). Increased domestic use results from advances in living standards. Increased economic production creates a rising demand for energy.</p> <p>The other basic cause of the rising demand is increase in population.</p> <p>The combined effect of rising population and economic development is rising energy demand which can create an energy gap i.e. the difference between a country's level of energy demand and its ability to produce enough energy to meet this level from its own sources.</p> <p>Accept generic responses across all spatial scales if well explained. Reference to smaller scale examples may be used to support points.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect basic factors identified e.g. manufacturing; population increase etc. or offer some minimal development of one factor if only one identified. |
| 2 | 3-4 | Expect an outline of the essential explanation. May cover population increase or economic development well or offer both in an outline way. Some degree of development of relevant factors in the response. |
| 3 | 5-6 | Expect thorough explanation, including development of the two basic factors i.e. population increase and economic development. Answer should offer coherence e.g. rising living standards as part of economic development etc. and range. May include examples of basic factors and refer to energy gap. |

| Question Number | Indicative content | |
|-----------------|--|---|
| 4(d) | <p>The distinction between tertiary (ie. a wide range of services enabling goods to be traded) and quaternary (ie. highly skilled services involving data and R & D) is worth making, especially as sector transition with quaternary following tertiary, especially in HICs. Examples may be relevant eg. website designers for quaternary.</p> <p>The growth of the tertiary sector eg. retail-led regeneration in many urban areas has often been associated with new locations e.g. out-of-town; inner city brownfield sites.</p> <p>Quaternary activity growth is recent. The enhanced role of universities and research in industry and economic growth has been an important contributor to the emergence of the quaternary sector. Changes in location are linked to this enhanced role eg. some now on university campuses. Others are now on greenfield sites on rural-urban fringes, by motorways, and on redeveloped brownfield sites in inner urban areas.</p> <p>Better answers will cover a range of reasons for the choice of new tertiary locations and initial quaternary locations eg. accessibility and road links by motorways and on greenfield sites; room for expansion; government incentives on brownfield sites (as well as the university-based location). Central urban locations remain popular with some tertiary sector employers.</p> <p>New tertiary and quaternary locations may contrast (eg. city edge shopping mall v. inner city university science park) and some candidates may recognise this.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-3 | Expect a limited response which considers the question at face value by identifying simple points/factors e.g. near motorways... |
| 2 | 4-6 | Expect a reasonable attempt to discuss the subject. Candidates should offer some development of some key factors but the answer may lack balance in terms of locational reasons. |
| 3 | 7-9 | Expect a sound discussion based on the key factors. May differentiate between tertiary and quaternary, and offer different locational reasons. Examples of appropriate activities may be given. |

Question 5 : Ecosystems and rural environments

| Question Number | Answer | Mark |
|-----------------|---------------------|----------|
| 5(a)(i) | Subsistence farmers | 1 |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 5(a)(ii) | C. All products used to feed the family | 1 |

| Question Number | Answer | Mark |
|------------------|--|-------------------|
| 5(a)(iii) | <p>The two changes are:</p> <ul style="list-style-type: none"> • decrease in subsistence farming percentage (1) • increase in urban shanty town percentage (1) <p>Must be a change eg. rural landless proportion static so not creditable.</p> | 2 (1+1) |

| Question Number | Answer | Mark |
|-----------------|--|----------|
| 5(b)(i) | <p>Max marks for full and accurate definition eg. a plant and animal community covering a large area of the Earth's surface</p> <p>1 mark for part definitions with some merit eg. large ecosystem (1); major vegetation type (1)</p> | 2 |

| Question Number | Answer | Mark |
|-----------------|--|-----------------------------|
| 5(b)(ii) | <p>To score more than 2 (2x1) marks biome must be named e.g. temperate grassland</p> <p>Credit up to two relevant basic factors, perhaps related to location with 1 mark eg. latitude(1); longitude(1); altitude (1); climate(1); temperature (1).</p> <p>2nd marks available in each case if factor developed so its role in causation outlined.</p> | 4 (1+1) +(1+1) |

| Question Number | Indicative content | |
|-----------------|---|---|
| 5(c) | <p>The impact on both the physical and human aspects of rural LIC settlements is relevant. However, it is to be expected that most will relate their answers to population changes and changes in occupations e.g. the out-migration to urban areas will leave an unbalanced structure among the remaining population.</p> <p>The remaining population is likely to be an ageing one. The loss of working age people will be drain on the settlements' resources and wealth. A vicious circle of rural decline might set in as services close (eg. shops, schools) and infrastructure deteriorates eg. number of transport/communication links reduces.</p> <p>Better answers could include a downward spiral diagram. Rural poverty can result from rural-to-urban migration unless there are compensating other changes eg. farming moves towards to mechanisation/commercialisation which requires less labour; other sources of income arrive such as tourism or aid spending on village facilities.</p> <p>As an explanation item the reasons behind the impact changes are sought but reasons related to the causes of the out-migration are not relevant.</p> <p>Candidates are likely to set their answer in the context of villages though hamlets and small rural towns are also acceptable. Impacts on farmsteads will limit the response to Level 1 marks. HIC settlements are not acceptable.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect some simple, perhaps random points as to how some LIC rural settlements have changed eg. ageing; depopulation |
| 2 | 3-4 | Expect an attempt to explain and develop valid rural change(s) eg. people left area > agricultural labour lost > farm output falls. Some range or depth in answer. |
| 3 | 5-6 | Expect a clear explanation of at least two valid impacts. Answer will depth and some range and be firmly located in context of LIC rural environments. Examples possibly given. |

| Question Number | Indicative content | |
|-----------------|--|---|
| 5(d) | <p>This is a high level command item requiring knowledge, understanding and application of a required case study.</p> <p>Candidates are asked to name a National Park or type of protected area e.g. SSSI, heritage coastline ... in any country.</p> <p>Within this context and expect most candidates to choose a National Park where the three purposes are : conservation; support local life; encourage visitor recreation/leisure. Candidates are called on to deal with how the authorities manage the natural environment and economic life of the area so that it lasts/remains durable into the future (i.e. sustainably). Better answers may introduce the concept of sustainable management and the need for compromise between conflicting ends.</p> <p>In the context of this question, the job of management is both environmental protection and protecting residents' interests e.g.by encouraging visitors.</p> <p>Better answers will refer to the role of management in resolving conflicts of interest over land use between the environment and local people (e.g.visitor income). Expect to read about the difficulty of finding the balance between say, environmental protection e.g. habitats and quarrying which damages landscape but serves the interests of residents.</p> <p>Good answers addressing the "how" will include reference to protection by law, planning regulations to control development and the work of managers in dialogue and public enquiries.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-3 | Expect a limited response based on a list of management actions largely or entirely focussed on environmental protection e.g. control building; build car parks; prevent wildlife damage ... Response may be generic |
| 2 | 4-6 | Expect some attempt to discuss the subject with reference to more than environmental protection i.e. residents' interests and/or public enjoyment at top of level. Needs to have at least two management actions related to a spatial setting. Touches on conflict management. |
| 3 | 7-9 | Expect a reasonable consideration of conflict management in a case study context. Case study used to deal with how management addresses needs of both local people and the environment. Expect reference to such procedures as dialogue, enquiry, compromise, legislation and planning in dealing with/minimising conflicts of interest. Needs to be a sense of environmental and/or economic sustainable management and some evaluation present at top of level. |

Question 6: Urban environments

| Question Number | Answer | Mark |
|-----------------|-------------------------------------|----------|
| 6(a)(i) | City centre (accept CBD or centre). | 1 |

| Question Number | Answer | Mark |
|-----------------|---------|----------|
| 6(a)(ii) | C.150 m | 1 |

| Question Number | Answer | Mark |
|------------------|--|---------------|
| 6(a)(iii) | <p>Each of the following relationships is worthy of 1 mark:</p> <ul style="list-style-type: none"> • land values highest (PLVI) in the city centre (shops and offices land use) (1) • secondary land value peak (small rise in land values on edge of town) around the out of town shopping mall (shopping land use)(1) • lower land values in suburban areas (housing land use) (1) <p>Straight reading of Figure 6 will suffice; no need to spell out land use at location.</p> | 2(1+1) |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 6(b)(i) | <p>Max Marks = full and accurate definition eg. cities with populations of over 10 million</p> <p>1 mark for part definitions with some credit eg. very large cities; the world's largest cities Needs to be about size not influence (eg. world cities) nor growth (eg. rapidly growing) so e.g.s not creditable.</p> | 2 |

| Question Number | Answer | Mark |
|-----------------|---|-----------------------------|
| 6(b)(ii) | <p>Credit each valid and distinctive factor with 1 mark eg. economic development (1); population growth (1); economies of scale (1); multiplier effect (1)</p> <p>Award 2nd mark where factor adequately developed so that reason behind growth explicit eg. industrialisation and fast economic growth attracts in-migration (1).</p> | 4 (1+1)+ (1+1) |

| Question Number | Indicative content | |
|-----------------|--|---|
| 6(c) | <p>This item requires candidates to explain the characteristics (i.e. symptoms or location) of the poor/deprived areas of HIC cities. Explanation can relate to the physical environment, aspects of many of the residents and their daily lives and/or locational characteristics (eg. inner city; outer council estate).</p> <p>The physical environment may be characterised by: inadequate housing (slums); unattractiveness (graffiti; noise); poor services (shops; medical facilities).</p> <p>Residents may show some of the following: minimal education; ethnic minority background; unemployed; unskilled, manual worker; criminal background or victim of crime; trapped in cycle of poverty; single-parent family; poor health.</p> <p>Some may build their answer around some of the quality of life indicators used to define deprivation, including multiple deprivation ie. income; employment; health; education; crime; access to housing and services; living environment.</p> <p>Some answers will rightly use their experience as urban dwellers and/or participants in urban fieldwork.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect some valid characteristics identified. Answer simple and basic and/or limited range whether generic or place-specific. |
| 2 | 3-4 | Expect an attempted explanation of a few typical characteristics but answer partial and unbalanced. Answers can be either generic or referenced to place-specific examples. Some range or depth present. |
| 3 | 5-6 | Expect a balanced and clear response in which a range (at least two) of characteristics eg. physical environment and location well explained with some detail. Some examples and place-specificity may be offered but strong generic explanations fine. |

| Question Number | Indicative content | |
|-----------------|--|--|
| 6(d) | <p>This high level command item calls on candidates to use their knowledge and understanding of the strategies employed to manage the squatter issue in one named LIC city. This is a required specification case study.</p> <p>Expect candidates to refer to some or all of the following strategies depending on city chosen :</p> <ul style="list-style-type: none"> • demolishing shacks/clearance of worst areas • provision of services/infrastructure on-site • building of government housing on-site or of new towns • self-help schemes • combination of some or all above • rural development programmes to slow out-migration. <p>Some responses may contrast management actions with locations where there is no management.</p> <p>Impacts can be on residents, the flow of incomers, the city population generally and the environment.</p> <p>Better responses may offer evaluation of effectiveness of management (eg. how well being managed; is it manageable?), perhaps in terms of urban sustainability and mitigation of shanty town problems eg. unenviable task for government given large numbers and lack of funding; all efforts inadequate; cooperation better than conflict therefore self-help schemes including security of tenure for squatters effective; quick-fix clearance; affordability of big building projects for slow-growing LICs; whole-city redevelopment programmes such as Vision Mumbai incorporating Dharavi and other shanty towns ok for growing India.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-3 | Expect a limited response either offering some basic shanty town management strategies, either place-specific or generic. Simple sketchy points. |
| 2 | 4-6 | Expect a clear but partial presentation using aspects of the case study e.g. having a big impact; impacts positives ... Some development of the key strategy(ies) to be offered. |
| 3 | 7-9 | Expect a good understanding and use of the case study with some focus on assessing the impact of the strategy(ies) on housing improvement and urban sustainability. Strategy(ies) will be well-developed and answer will have good range and/or depth. |

Section C – Practical Geographical Enquiry

Question 7: Coastal Environments Fieldwork

| Question Number | Answer | Mark |
|-----------------|---|----------------|
| 7 (a)(i) | <p>For full mark expect a fully stated more specific aim eg. to investigate conflicts (1) between development and conservation (1) along a coastline; to investigate coastal uses (1) their popularity (1). 1st mark needs to be about conflicts/competition/interactions (e.g. how one use affects another).</p> <p>Award 1 mark for outlines and broad intentions eg. coastal conflicts (1); deciding who uses coast more/local residents' opinions about use (1) or nature v. human activities (1)</p> | 2 (1+1) |

| Question Number | Answer | Mark |
|------------------|--|----------------|
| 7 (a)(ii) | <p>Mark can be for any legitimate fieldwork risk along coastlines generally, including urban coastal settlements.</p> <p>1st mark for identifying risk eg. slipping on wet rocks (1) with 2nd mark for explanation or detail (1) eg. strongly tidal stretch of coastline (1) so need to be aware of times for tides (1).</p> <p>Many other answers eg. overhanging cliffs (1); footpath/walking too near cliff edge (1).</p> | 2 (1+1) |

| Question Number | Answer | Mark |
|-------------------|---|---|
| 7 (a)(iii) | <p>This is a pre-fieldwork planning item. The pre-fieldwork issues other than health and safety and risk assessments that need considering are:</p> <ul style="list-style-type: none"> • site selection • sampling procedures • group or individual data collection • recording procedures • <p>Max of 3 marks for points marking (3x1). Max marks calls for at least one point developed/described.</p> <p>The following are eg.s of creditable points :</p> <ul style="list-style-type: none"> • consider accuracy of information (what is actual and true) (1) • consider representative of information (1) i.e. how many in sample ? (1) how do I ask the right people ? (1) – balanced age-range; people from range of backgrounds • will matrix do as a recording sheet ? (1) • decide on interview site (1); • make sure I give interviewees enough time ? (1) • how do I get permissions to interview ? (1) • I will need to see they understand what to do (1) • check weather conditions (1) • ensure not trespassing (1) <p>No credit for health and safety related answers.</p> | <p>4</p> <p>(1+1)+ (1+1)</p> <p>OR</p> <p>(1+1+1)+1</p> <p>OR</p> <p>(1+1+1+1)</p> |

| Question Number | Answer | Mark |
|-----------------|--|---|
| 7 (b)(i) | <p>Award initial mark for choice of suitable diagram ie. bar or line graph (1); both axes labelled (1); appropriate scale for number of people (1); accurate plotting of bars/line (1)</p> | <p>4</p> <p>(1+1)+ (1+1)</p> |

| Question Number | Answer | Mark |
|------------------|--|---------------------------|
| 7 (b)(ii) | <p>Award 1st mark for identifying a valid advantage of displaying the data on bird watching in the way chosen in b(i). 2nd mark for development so that advantage explicit.</p> <p>eg. for bar or line graph: easy to interpret (1) as enables activities to be visually compared/see pattern (1). Quick and easy to draw (1) as it can be IT-created (1). Self-evaluatory.</p> | <p>2 (1+1)</p> |

| Question Number | Answer | Mark |
|-------------------|---|-----------------|
| 7 (b)(iii) | <p>Disadvantage clearly based on choice of diagram but assuming most will opt for bar chart.</p> <p>Credit any valid disadvantage (see item as criticism of diagram drawn)</p> <p>eg. draw 9 separate bars time-consuming (1); already have information clearly on matrix so unnecessary(1)</p> | <p>1</p> |

| Question Number | Indicative content | |
|-----------------|---|---|
| 7(b)(iv) | <p>Conclusions are to be drawn from the matrix (Figure 7b) not Figure 7c, bird watching data only!</p> <p>There is a clear pattern in Figure 7b as to which pairs of activities most compete and conflict with each other :</p> <ul style="list-style-type: none"> • natural landscape protection competes heavily with the building of the leisure park and hotel complex. • a similar but less strong conflict occurs with wildlife protection. Most other development activities create some conflict for wildlife protection. • Camping/caravanning and road building pose a conflict (a quite strong ones!) for natural landscape protectors. • Other notable conflicts occur for bird-watchers (with eg. campers; the leisure park ...) and sailors (with eg. the fishing port and flood protection scheme). <p>There are a significant number of zeros ie. non-competing pairs. There is a general pattern of conflict between conservation (environmental protection) and some of the development activities.</p> <p>Supporting data should ideally be presented as evidence of pattern. There may be reference to such simple descriptive statistics as means.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect some reference to Figure 7c eg. stating competing activities with bird watching or listing key competing pairs. |
| 2 | 3-4 | Expect very limited conclusions with some of the key competing pairs highlighted. May use data in support. |
| 3 | 5-6 | Expect a good conclusion revealing the overall pattern of development-conservation conflict as witnessed by the main competing pairs. Some consideration of individual competing pairs. Simple statistics may be referred to, including supportive data used. |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 7(b)(v) | <p>Expect response to focus on either secondary sources eg. similar surveys elsewhere or previously (1); reports/articles on coastal conflicts of interest (1) or run the interviews again (1) with different sample (1).</p> <p>Max of 3 marks for responses on additional sources of information only.</p> <p>Max mark requires a comment as to how these additional sources may improve the investigation eg. similar findings elsewhere adds to reliability of these conclusions.</p> | 4 |

Question 8: Hazardous Environments Fieldwork

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 8(a)(i) | Award 1 mark for basic idea of investigating weather conditions/keeping weather diary. For full marks expect idea of variations eg. to investigate the day to day variations (1) in the weather (1). | 2 |

| Question Number | Answer | Mark |
|------------------|--|-------------------|
| 8 (a)(ii) | Mark can be for any legitimate weather fieldwork risk. 1 st mark for identifying risk eg. slipping on wet grass (1) 2 nd mark for explanation or detail (1) eg. dangerous to measure wind speeds during storm (1) need to avoid being hit by falling objects (1) | 2 (1+1) |

| Question Number | Answer | Mark |
|-------------------|---|---|
| 8 (a)(iii) | This is a pre-fieldwork planning item. The pre-fieldwork issues with regard to measuring and recording data other than health and safety and risk assessments that need considering are : <ul style="list-style-type: none"> • location of recordings (1) e.g. ensure site gives valid and reliable readings (1); preparation so that know how to read accurate measurements (1) • timing and number of recordings (1) e.g. can visit at same time every day (1); how many recordings to make (1) • recording procedures (1) e.g. single-handedly or with help (1); need for a longer-term log (1) • equipment risks (1) e.g. broken mercury thermometer (1); tripping over rain gauge (1) <p>Max of 3 marks for points marking (3x1). Max marks calls for at least one point developed/described. No credit for health and safety related answers.</p> | 4 (1+1)+(1+1) OR (1+1+1)+1 OR (1+1+1+1) |

| Question Number | Answer | Mark |
|-----------------|--|-----------------------|
| 8(b)(i) | Award initial mark for suitable choice of diagram e.g. line graph (1); bar chart (1)... ; axes labelled and roughly numbered (1) ; 1 mark for accuracy of initial plots (1); 1 mark for line if graph or for bar drawing if chart (1). | 4 (1+1+1+1) |

| Question Number | Answer | Mark |
|------------------|--|-----------------------------|
| 8(b)(ii) | <p>Award 1st mark for identifying a valid advantage of displaying the weather data in the way chosen in b(i). 2nd mark for development so that advantage explicit.</p> <p>eg. patterns clearly visible (1) straightforward to draw (1) and can be IT-created (1). Self-evaluatory.</p> | <p>2 (1 + 1)</p> |
| Question Number | Answer | Mark |
| 8(b)(iii) | <p>Disadvantage clearly based on choice of diagram (line graph or bar chart). Self-criticism.</p> <p>Credit any valid disadvantage eg. plotting 10 pieces of data time-consuming (1); already have information clearly on matrix so unnecessary(1)</p> | <p>1</p> |

| Question Number | Indicative content | |
|-----------------|--|--|
| 8(b)(iv) | <p>Conclusions to be reached from Figure 8b and not only Figure 8c (temperature and rainfall).</p> <p>There are clear patterns in the data :</p> <ul style="list-style-type: none"> • higher air pressure and higher max temperatures • no cloud and no rainfall when pressure and temperature higher • cloud cover and rainfall when pressure and temperatures lower • 15 August when pressure lowest and 17 August when pressure rising noteworthy • dry when warmest (11-14 August – Figure 7c). <p>Limited to 7 days readings so correlation may not be a relationship. Supporting data as evidence of association i.e. weather data and days. Reference to simple descriptive statistics includes trend and correlation.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect some reference to Figure 8c, perhaps simple observations e.g. temperature goes down then up .. and/or basic descriptive statements about changes within one or more of the weather elements. |
| 2 | 3-4 | Expect limited conclusions with some attempt to see pattern and association between weather elements e.g. simple links pointed out. May use data in support of observations. |
| 3 | 5-6 | Expect at least two good conclusion revealing the overall pattern of change over the week with the correlations between the weather variables made. Supporting data should be offered and the idea of trend and correlation evident. |

| Question Number | Answer | Mark |
|-----------------|--|----------|
| 8(b)(v) | <p>Expect response to focus on either secondary sources (1) eg. official meteorological station records (1); BBC/synoptic charts (1); newspaper extracts (1); climatic data for that area (1) or take further readings(1) to develop a longer-run record (1). or do it again/differently (1) or do more variables (1) e.g. wind speed (1). Max of 3 marks for responses on additional sources of information only.</p> <p>Max mark requires a comment as to how these additional sources may improve the investigation eg. climatic data adds reliability of conclusions by enabling comparisons to long-term average (1).</p> | 4 |

Question 9: Economic Activity and Energy Fieldwork

| Question Number | Answer | Mark |
|-----------------|----------------------|----------|
| 9(a) | 3. C 5. E 6. B | 3 |

| Question Number | Answer | Mark |
|-----------------|--|----------|
| 9(b)(i) | Award 1 mark per valid aim e.g. reasons for choice of location (1); which location factors most important (1); type of factories on estate (1) | 2 |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 9(b)(ii) | Clearly, data/information needs to be linked to aims offered in 9bi. For an investigation into factory location factors (as per spec), valid data would be : managerial interviews on locational advantages (1); ranking of relevant locational factors (1); estate site plan (1); output by factory (1); traffic counts (1) ... Adopt a points marking strategy. Information sought can relate to one or both aims stated in 9bi. | 4 |

| Question Number | Answer | Mark |
|------------------|--|----------|
| 9(b)(iii) | Look for three valid and distinctive areas of health and safety hazard whose likelihood can be assessed e.g. security/human safety (1); weather (1); physical nature of the ground (1); traffic/transport (1) e.g. road accident (1); getting lost (1) | 3 |

| Question Number | Answer | Mark |
|-----------------|---|---------------|
| 9(b)(iv) | <p>Depends on precise aims and therefore, data to be collected. There are many possibilities e.g. noise survey, EQ survey, pollution survey ... so examiner discretion called on.</p> <p>For factory location investigations generally, following points for example, are creditable:</p> <ul style="list-style-type: none"> • Equipment eg. clipboard (1); base map (1); camera (1); recording sheets (1); questionnaire (1) ... • Field techniques eg. sketching (1); recording (1); interviewing (1); individual and/or group work (1) .. <p>Mark each section out of 4 on a points basis with 2 marks for a developed point eg. clipboard (1) so can easily write on sheets (1).</p> <p>Development will usually take form of detail or of use/purpose.</p> | 8(4x4) |

| Question Number | Answer | Mark |
|-----------------|---|----------|
| 9(c) | <p>Credit each valid and distinctive point relevant to end-of-enquiry review. Max marks requires reference to both fieldwork process i.e. methodology and results/conclusions.</p> <p>Max of 3 if both not referred to.</p> <p>Creditable points include: return to objectives re validity (1); appropriate sampling (1); suitable equipment (1); valid sites (1); accurate and sufficient data (1); additional information inc. secondary sources (1) ...</p> <p>Look to credit evidence of real fieldwork.</p> | 5 |

Question 10: Ecosystems and Rural Environments Fieldwork

| Question Number | Answer | Mark |
|-----------------|----------------------|----------|
| 10(a) | 3. C 5. E 6. B | 3 |

| Question Number | Answer | Mark |
|-----------------|--|-----------------|
| 10(b)(i) | Award 1 mark per valid aim e.g. farm production study (1); investigate land use on farm (1); how farm operates as a system (1) | 2 1+1 |

| Question Number | Answer | Mark |
|------------------|---|----------|
| 10(b)(ii) | Clearly, data/information needs to be linked to aims offered in 10bi. For an investigation into farming as a system (as per spec), valid data would be : farmer/farm manager interviews on inputs (1); observation of farm processes (1); field plan with land use(1); outputs from farm (1); farm building sketches (1) ... Adopt a points marking strategy. Information sought can relate to one or both aims stated in 10bi. | 4 |

| Question Number | Answer | Mark |
|-------------------|--|-------------------|
| 10(b)(iii) | Look for three valid and distinctive areas of hazard for health and safety whose likelihood can be assessed eg. security/human safety (1) eg. animal attacks (1); disease (1); weather (1); physical nature of the ground (1) eg. falling (1); traffic/transport (1); getting lost (1) | 3 1+1+1 |

| Question Number | Answer | Mark |
|------------------|---|--|
| 10(b)(iv) | <p>Depends on precise aims stated and therefore, data to be collected. There are many possibilities e.g. land use survey, soil survey ... so examiner discretion is called for. For farming system investigations generally, following for example, may be creditable :</p> <ul style="list-style-type: none"> • Equipment e.g. clipboard (1); base map (1); camera (1); recording sheets (1); questionnaire (1) ... • Field techniques e.g. sketching (1); recording (1); interviewing (1); individual and/or group work (1).... <p>Mark each section out of 4 on a points basis with 2 marks for developed point</p> <p>eg. clipboard (1) with plastic cover in event of rain and spoilt sheets (1). Development usually in form of detail or of its use/purpose.</p> | <p>8 (1+1+1+1)+ (1+1+1+1)</p> |

| Question Number | Answer | Mark |
|-----------------|---|-----------------|
| 10(c) | <p>Credit each valid and distinctive point relevant to end-of-enquiry review. Max marks requires reference to both fieldwork process ie. methodology and results/conclusions.</p> <p>Max of 3 if both not referred to.</p> <p>Creditable points include : return to objectives re validity (1); appropriate sampling (1); suitable equipment (1); valid sites (1); accurate and sufficient data (1); additional information inc. secondary sources (1) ...</p> <p>Look to credit evidence of real fieldwork.</p> | <p>5</p> |

Section D - Global issues**Question 11: Fragile environments**

| Question Number | Answer | Mark |
|-----------------|----------|----------|
| 11(a)(i) | B. 0.5 C | 1 |

| Question Number | Answer | Mark |
|------------------|--|----------|
| 11(a)(ii) | <ol style="list-style-type: none"> 1. upward trend; increasing/rising trend... (1) 2. little change/little increase... (1); fluctuating trend (1). | 2 |

| Question Number | Answer | Mark |
|-------------------|---|----------|
| 11(a)(iii) | <p>Relationship = increasing average temperature (1) and increasing CO₂ concentration (1). Positive correlation also worthy of max marks.</p> <p>Any reference to anomaly in the general trend (i.e. around 1940) can be awarded (1)</p> <p>Award 1 mark for vague statements like both go up.</p> | 2 |

| Question Number | Answer | Mark |
|-----------------|--|----------|
| 11(b)(i) | <p>Max marks for full and accurate definition eg. long-term changes in atmospheric conditions (2); new average/normal pattern of weather (2).</p> <p>1 mark for part definitions with some credit eg. new weather patterns (1)</p> | 2 |

| Question Number | Answer | Mark |
|------------------|--|--------------------------------------|
| 11(b)(ii) | <p>Award 1 mark for each valid and distinctive consequence, positive or negative identified.</p> <p>Clearly, consequences depend on type of change but as most will associate climate change with contemporary global warming expect consequences as follows:</p> <p>eg. rising or changing sea levels (1); more weather hazards/extremes (1); ecosystem changes/changing natural vegetation (1); alterations/disruptions to food supply (1); changing water availability (1)</p> <p>Reserve 2nd mark in each case for description e.g. rising sea levels (1) > flooding of lowlying islands and coastlines (1).</p> | <p>4 (1+1)+ (1+1)</p> |

| Question Number | Answer | Mark |
|-------------------|---|--------------------------------------|
| 11(b)(iii) | <p>For identifying a valid and distinctive way of adapting award 1 mark with 2nd mark for outlining how it adapts.</p> <p>Ways of adapting include growing new crops (1) more suited to growth in the new climate (1); developing new industries (1) eg. French-style tourism in southern England (1); migration (1) to areas of more plentiful rainfall (1); new building styles (1) with different heating/cooling systems (1)</p> | <p>4 (1+1)+ (1+1)</p> |

| Question Number | Indicative content | |
|-----------------|--|---|
| 11(c) | <p>This is a question on the causes of desertification. Desertification works through soil erosion; better answers may offer clarification as to the meaning of and difference between the two terms. Expect candidates to refer to such physical causes as drought and climate change as well as a range of human causes ie. population pressures, fuel supply, food supply, overgrazing and migration.</p> <p>Explanation of how these factors lead to loss of soil which in turn causes the spreading of deserts into previously not desertified areas eg. savanna is the crux of the answer sought.</p> <p>Areas at risk of desertification occur worldwide. Candidates need not have direct knowledge of areas at risk of desertification in Australia.</p> <p>Desertification in the Sahel, for instance, is caused by :</p> <ul style="list-style-type: none"> • climate change e.g. rainfall decrease & temperature increase reducing ground and surface water • agriculture e.g. land badly managed; overcultivation and overgrazing to feed growing population • deforestation e.g. forests cleared to provide wood and farmland leave ground vulnerable to soil erosion. | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect basic points about causation e.g. identification of some key contributory factors; brief description of desertified area... |
| 2 | 3-4 | Expect some attempt to explain one or two key causes which show some development. Meaning of desertification to be clear. Answer will have either some range or some depth |
| 3 | 5-6 | Expect a well-developed and balanced account of the key human and natural causes (at least two or three factors in all). Answer to have good depth and/or range. The role of soil erosion to be clear. Desertification seen as a process. |

| Question Number | Indicative content | |
|-----------------|---|--|
| 11(d) | <p>This is a specification case-study item. Candidates should be familiar with a located area of TRF threatened by deforestation and its management.</p> <p>They should also have studied sustainable forest management in a more generic sense (eg. agro-forestry; selective logging and replanting; logging licenses and policing; biosphere reserves; ecotourism; tree cropping) and be aware that effective management calls on international cooperation.</p> <p>Better answers may refer to an area where management is for sustainability; environmental and economic ie. the forest provides income for local people now and is preserved for future generations.</p> | |
| Level | Mark | Descriptor |
| 1 | 1-3 | Expect a limited response that merely lists management actions eg. reducing deforestation; re-planting; forest wardens ... May be generic. |
| 2 | 4-6 | Expect some attempt to consider the subject, and may introduce ideas of sustainability. Shows awareness that management involves controlling economic development activities e.g. commercial logging. Some management actions outlined and some evidence of case-study material. |
| 3 | 7-9 | Expect a good understanding of sustainable forest management with at least two or three management actions well developed. Answer will have good range and/or depth and have a strong located case-study context. |

Question 12: Globalisation and migration

| Question Number | Answer | Mark |
|-----------------|------------------|----------|
| 12(a)(i) | C. net migration | 1 |

| Question Number | Answer | Mark |
|------------------|---|-------------------|
| 12(a)(ii) | Changes from negative net to positive net (1) as countries develop economically (1). Also accept following : HICs experience positive net migration (1); LICs experience negative net migration (1). Credit UAE & Mexico (MICs) as anomalies to trend (1). | 2 (1+1) |

| Question Number | Answer | Mark |
|-------------------|---|----------|
| 12(a)(iii) | Max marks for full statement that covers Mexican emigration and USA immigration e.g. Helps to explain why Mexico has negative net migration (loses population)(1) and USA gains population (positive net migration)(1). USA is a HIC so is attractive to Mexican immigrants living in a MIC (1). Generally, people migrate from MICs/LICs to HICs (1). A large proportion for USA immigration is Mexican (1) crossing a land border is easier than entering a country by sea or air (1). Accept for 1 mark idea that there will be a lot of movement across border (1). | 2 |

| Question Number | Answer | Mark |
|-----------------|--|----------|
| 12(b)(i) | Full and accurate definition e.g. moving home (1) not by choice (1) or by push factor(s) (1). Having to leave home area (2). Migration to be defined for max. Part definitions with some validity, perhaps just forced or migration addressed e.g. have no choice but to go (1); pushed out (1); refugee (1); asylum seeker (1). | 2 |

| Question Number | Answer | Mark |
|------------------|--|---------------------------------------|
| 12(b)(ii) | <p>Credit each of the two basic mechanisms – push and pull with an initial clarification mark</p> <p>eg. push: something about the present home area that drives someone out (1); pull: something about another area that attracts people to it (1).</p> <p>2nd mark available in each case for :</p> <ul style="list-style-type: none"> • example of push factor e.g. poverty (1); example of pull factor e.g. jobs (1) • linkage of push to forced process (1); linkage of pull to voluntary process (1) <p>NB. Credit responses that refer to the combination of push and pull in encouraging migration. Worth 1 mark if merely stated but 2 marks if both push and pull addressed.</p> | <p>4 1 + 1 + 1 + 1</p> |

| Question Number | Answer | Mark |
|---|---|---|
| 12(b)(iii) Type 1 item | <p>Credit each valid and distinctive factor with 1 mark. Factors can relate to immigration and/or emigration. Possible reasons for controlling/managing immigration</p> <p>eg. resource pressures (1); social harmony (1); stopping illegal immigrants (1); attracting highly skilled immigrants (1); filling labour shortages (1)</p> <p>Immigration control = management and can be about encouraging it. Guard against racist and xenophobic responses!</p> <p>Expect most responses to focus on immigration but some will refer to the consequences of uncontrolled emigration and therefore a rationale for controlling it i.e. loss of skills/"brain drain"(1); loss of money if wealthy leave (1)</p> <p>2nd marks in each case are for developing an identified factor into a full and clear reason i.e. outlining eg. resource pressures (1) ensuring immigrants are job seekers or holders (1).</p> <p>Two developed reasons = max.</p> | <p>4 (1 + 1) + (1 + 1)</p> |

| Question Number | Indicative content | |
|-----------------|---|---|
| 12(c) | <p>The growth of global tourism can be explained in terms of increased leisure time, rising prosperity, modern transport, the package holiday, the marketing of travel and the internet.</p> <p>Each of these six factors can be developed so that they explain why tourists from any one country, esp. HICs can be found in all parts of the globe.</p> <p>The idea of mass tourism and case study material of a sustainable tourism project may be introduced in explaining the growth of global tourism.</p> <p>Responses may be generic or show some link to countries in Figure 12b (data-stimulus resource) eg. many nationalities visiting France, Spain, USA ...</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect some simple points with little or no development e.g. factors such as jet planes; greater wealth ... A scatter of basic ideas, perhaps random (eg. may pick points off Figure 12b) with minimal extension. |
| 2 | 3-4 | Expect some attempt to explain a factor or two behind the growth. Likely to be partial eg. one full reason. Answer will have some range or depth but be unbalanced though may offer an example. |
| 3 | 5-6 | Expect a series of well developed reasons (eg. at least 2-3) for the growth and a clear appreciation that it is global tourism (ie. tourist to all parts of the globe) eg. airlines to everywhere; online hotel bookings anywhere. Focus of answer must be explanatory. Good range and/or depth and may be some case study reference. |

| Question Number | Indicative content | |
|-----------------|--|---|
| 12(d) | <p>This is a specification case study item in which candidates need to look at both the reasons behind and the consequences of either China or India becoming major players in the new global economy. As a required case study in the specification it is reasonable to expect detail in the answers, esp. at the top level.</p> <p>For candidates opting for China they should be familiar with the fact that China now has the 2nd largest economy, has long had the largest population and has had population control policy since the 1970's</p> <p>For candidates opting for India they should be familiar with the fact that India has the 5th largest economy and is about to have the world's largest population.</p> <p>For both countries the consequences are mass exports, growing trade surpluses, foreign investment in LICs & HICs, raw material grabs overseas, TNCs operating worldwide. Behind this growing influence and power of both countries lies the global shift in manufacturing and services, cheaper labour, government support for industry and exporting. Better candidates will build up an argument about how their chosen country has grown economically both home and abroad and how this impacts on the world economy</p> <p>eg. In the case of India refusing overseas aid; Tata group industries in Europe; the "back office of the world;" the growth of its software and ICT services sector...</p> <p>eg. As for China – ownership of much of USA debt; investment in UK infrastructure projects; the "workshop of the world"</p> | |
| Level | Mark | Descriptor |
| 1 | 1-3 | Expect a very limited response which identifies some changes in chosen country's economy and/or touches on their growing global influence in terms of a few basic statements. |
| 2 | 4-6 | Expect a clear but restricted consideration of a changing economy. Expect some use of appropriate evidence/examples from their case study. Introduces their chosen country's growing global role and offers some development of these consequences or of the reasons behind this increasing power. There will be some breadth or depth in the answer. |
| 3 | 7-9 | Expect a sound case study knowledge and understanding. The consequences of a powerful India or China to the rest of the world economy in terms of trade, aid, investment overseas should be clear. Expect at least two or three well developed points covering both the reasons for and consequences of their growing economic influence around the world. Top answers may be evaluative. |

Question 13: Development and human welfare

| Question Number | Answer | Mark |
|-----------------|-------------------------|----------|
| 13(a)(i) | D. Northern Ireland (1) | 1 |

| Question Number | Answer | Mark |
|------------------|---|----------------|
| 13(a)(ii) | Credit - unemployment higher north of divide than south of it or vice versa (1) 2 nd mark given for contrasting data for two regions or regional names in terms of average (eg. South West, South East & East Anglia all below UK average) from Figure 13a (1). | 2 (1+1) |

| Question Number | Answer | Mark |
|-------------------|---|----------------|
| 13(a)(iii) | Credit any valid statement extracted from a Figure 13a comparison of the 2007 and 2013 data. Basic point for initial mark is that divide has widened because unemployment in North has increased more than it has in South (1) eg. unemployment up from under 5% to 7.5-10% in Scotland but only from under 5% to 6-7.4% in the South East & East Anglia(1). 2 nd mark for this or similar statistical support from Figure 13a e.g. North unemployment up around 4% whereas in South West only 1-2% (1) or for non-data supported observations that indicate gap widening e.g. all regions in North ... (an observed trend). | 2 (1+1) |

| Question Number | Answer | Mark |
|-----------------|--|----------|
| 13(b)(i) | Full and accurate clarification/definition of emerging economy eg. MICs or NICs or BRICS (1) where economic development has recently taken off /recent growth from low base(1). Part definitions with some truth e.g. countries with new economic power (1); recently industrialising countries (1); rapid economic growth (1); catching up HICs (1). | 2 |

| Question Number | Answer | Mark |
|------------------|--|----------------------------------|
| 13(b)(ii) | <p>The changing pattern of global development refers to the recent changes to the traditional North-South global divide = 1 mark.</p> <p>The changes to this pattern come from eg. the Asian Tigers (1); BRICS (1); the OPEC & Gulf States (1); awakening economies e.g. Nigeria (1); stagnant economies in both HIC & LIC (1) .</p> <p>Each source of change worth 1 mark.</p> <p>Candidates may creditably refer to narrowing or widening of the global development gap through emergence/awakening or stagnation (1).</p> <p>Developed points can earn a 2nd mark.</p> | <p>4 1+1+ 1+1</p> |

| Question Number | Answer | Mark |
|-------------------|--|--|
| 13(b)(iii) | <p>Award 1 mark for each valid and distinctive causal factor eg. natural resources (1); manufacturing industry (1); political history (1); international trade (1); government corruption (1); environmental conditions/problems (1); dependency/debt (1) ...</p> <p>Award 2nd mark for developing factor into a clear cause of either high or low economic development ie. slowing down or encouraging the development process eg. most LICs were colonies (1) which restricted their exports and world trade (1); natural hazards in tropical climates (1) cause damage and set back development (1).</p> | <p>4 (1+1)+ (1+1)</p> |

| Question Number | Indicative content | |
|-----------------|--|--|
| 13(c) | <p>This is a specification case study item and the named aid agency and its project can be either:</p> <p>Multilateral UN* eg. UNDP (Development Programme); WHO (World Health Organisation),</p> <p>NGO eg. Oxfam</p> <p>Governmental eg. UK DFID (Dept. For International Development).</p> <p>Better responses are unlikely to use one of the two named agencies in Figure 13b as their named example. However, responses may be stimulated by some of the material in Figure 13b. 0 marks for pure lifts without any development.</p> <p>The expectation is that answers will offer case-study material on how a specific project in a LIC whether short-term emergency bilateral aid e.g. DFID & ebola crisis in Sierra Leone or longer term projects e.g. Save the Children's work on infant mortality in Ethiopia; Comic Relief's work in rural Kenya ... Better answers will make the link to quality of life i.e. health, food and water supplies, jobs and security, education ... and may be evaluative eg. how effective the actions have been in improving quality of life.</p> <p>*accept World Bank</p> | |
| Level | Mark | Descriptor |
| 1 | 1-2 | Expect some basic comments, perhaps generic about aid projects/agencies e.g. disaster relief; gifts; save lives ... |
| 2 | 3-4 | Expect an attempt at explanation with some development of one or two pertinent points about a named aid agency's work. Response will be partial and unbalanced yet have some range or depth. Strong hints of case study. Examples possibly given. |
| 3 | 5-6 | Expect a sound understanding of the impact of a specific named project on quality of life. A coherent answer based on actual actions and their quality of life impact. A strong sense of case study present and may be evaluative. |

| Question Number | Indicative content | |
|-----------------|---|--|
| 13(d) | <p>This item is based on the fact that the nature of development is complex and multi-stranded as well as subject to change over time. Candidates will need to look at some of these strands and refer to :</p> <ul style="list-style-type: none"> • various development indicators with an economic focus eg. GDP/GNI pp; employment by sector; energy consumption • various quality of life indicators with their human welfare/social focus eg. housing; health; diet; literacy <p>Development is difficult to define and is a continuum. Each country has a development profile with indicators often giving a different picture of that country. Not all LICs have low quality of life. Using a range of indicators improves the accuracy and validity of the measure.</p> <p>The complex nature of development has meant that indexes e.g. HDI may be more representative of the lives of ordinary people. GDP pp tells nothing about government spending priorities and not necessarily much about quality of life of all.</p> <p>Candidates may also refer to the accuracy of individual indicators eg. GDP pp is only a national mean which hides variations around that figure. Countries show spatial variations in the level of development e.g. pockets of poverty and prosperity close to each other ie. LICs with high quality of life, pockets of poverty in generally prosperous cities etc....</p> | |
| Level | Mark | Descriptor |
| 1 | 1-3 | Expect simple points about development indicators. Likely focus on GDP/GNP/GNI but may list others. A sketchy response but showing awareness that the point of the question has been understood. |
| 2 | 4-6 | Expect a clear but partial answer. There should be some indication of the range of ways in which development can be measured e.g. economic focus; quality of life ... and some suggestion of contradiction/conflict between economic development and quality of life. Indexes may get a passing mention. |
| 3 | 7-9 | Expect a sound consideration of the subject supported by argument. The weakness of indicators using means and looking at the standard of living (e.g. GDP) versus quality of life (social and ordinary peoples' lives) debate should be offered. Indexes such as HDI may be referenced as a way of trying to deal with the difficulties of measuring development. Examples of complex nature of development to be offered. |

