

GCSE

Geography A

General Certificate of Secondary Education

Unit A671/01: Extreme Environments (Foundation Tier)

Mark Scheme for June 2012

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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.

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Annotations

| Annotation | Meaning | | | |
|------------|--|--|--|--|
| * | Correct response (use only to credit in point marked questions). | | | |
| × | Incorrect response (use only to indicate incorrect in point marked questions). | | | |
| | Information omitted. | | | |
| ? | Unclear. | | | |
| Heer | Irrelevant (this can also be used to indicate unused additional pages). | | | |
| 1944 | Development. | | | |
| LNK | Two statements are linked. | | | |
| [] | To indicate the full extent of a statement which is credited. | | | |
| 1111 | Benefit of doubt given. | | | |
| | Level one. | | | |
| 12 | Level two. | | | |
| 1.5 | Level three. | | | |

| Q | uesti | on | Answer | Marks | Guidance |
|---|-------|------|---|-------|---|
| 1 | (a) | (i) | On map. | 1 | Centre of X is either on line 32 degrees or above. If more than one X is indicated and all are correct then mark as correct. However, if one cross is incorrect then the whole answer must be marked as incorrect. |
| | | (ii) | On map. | 1 | Shading must be the majority of Mauritania (i.e. over 50%) to gain the mark. However, if candidates shade large parts of the area outside of Mauritania then no mark is awarded. |
| | (b) | | Ideas such as: overhead sun/high angle of sun/close to the sun/sun's rays are concentrated/direct/stronger rays/sun's rays don't have far to travel; lack of cloud cover/skies are clear/no clouds etc. | 2 | 2 @ 1 mark. The following answers = 0 marks: Long hours of sunshine/dry/no rain. The following answers need further development for credit (use annotation): Sun is hot/lots of sunshine/sun beats down/near Equator/low latitude/high pressure. |
| | (c) | (i) | varies less desertification spreading | 4 | 4 @ 1 mark. |
| | | (ii) | People collect firewood for fuel Tribes graze large herds of animals People try to grow crops in dry areas | 3 | 3 @ 1 mark. If candidates underline 4 options they can gain a max of 2 marks if 3 out of 4 options are correct. If candidates underline 5 options they can gain a max of 1 mark if 3 out of 5 options are correct. If candidates underline all 6 options then they gain no mark. |

| C | Question | | Answer | Marks | Guidance |
|---|----------|-------|--|-------|---|
| | | (iii) | soils exhausted of nutrients/becomes infertile/becomes useless; crops fail/they can't grow food/crops won't grow/crops die/problems for farming; loss of income from farming; people starve/not enough food/malnutrition/famine/lack of food; soil blown away by wind/sand blown onto land/soil replaced by sand; water holes dry up for animals/pasture becomes poor/animals can't graze or be fed; livestock/animals die/become scarce/become thin; dehydration/lack of drinking water/wells dry up; people forced to drink polluted water/causes water borne disease; no trees available for fuel/people have to walk further to collect fuel wood; people have to travel further to collect water; people die/unable to survive; etc. | 3 | The following answers = 0 marks: Cause drought. Overpopulation. Lack of resources. Overgrazing. Overcultivation. The following answers need further development for credit (use annotation): Causes sickness/illness. Not as much water/water supply/hard to find water. Land dries out. There are no trees/trees die. No shelter. Difficult to live. Heat stroke. Lose jobs. |
| 2 | (a) | (i) | It has wide feetto stop it sinking into the sand It has a humpso it is able to last a long time without food and water It has long eyelashes so that sand does not get in its eyes | 3 | 3 @ 1 mark. If candidates draw 4 lines they can gain a max of 2 marks if 3 out of 4 lines are correct. |

| Question | Answer | Marks | Guidance |
|----------|--|-------|---|
| (ii) | Ideas such as: to carry loads/pull carts; to transport/travel through the desert; provide meat/milk/blood/food; to make money from tourist rides/for tourism/adventures in desert/trekking; race for fun/camel races; skin/fur for clothing/tents; shelter/warmth;etc. | 2 | 2 @ 1 mark. |
| (b) | Level 3 [5-6 marks] Demonstrates good knowledge and understanding of the issue with at least two developed ideas. For full marks candidates need to give examples (eg cactus, creosote bush, ephemerals, xerophytes). Written work is legible and spelling, grammar and punctuation are accurate. Meaning is communicated very clearly. Level 2 [3-4 marks] Demonstrates sound knowledge and understanding of how vegetation survives in hot deserts. One or more ways by which vegetation survives in deserts with development/clear links. Survival mechanisms are described clearly. (eg spikes prevent large amounts of evaporation, they can store water in their fleshy stems, they can reach down to underground water supplies, they remain dormant until it rains then flower quickly/spread their seeds etc.) Written work is legible and spelling, grammar and punctuation are mostly accurate. Meaning is communicated clearly. | 6 | This response should be marked holistically. Do not label L1/L2 within response – just the overall level awarded at the end of the response will suffice. Highlighting examples would be acceptable. For Level 3 at least two examples are required for full 6 marks e.g. cactus and ephemerals also take into consideration the whole quality of written communication for full 6 marks. Hence, if two named examples are used but quality of written communication is weak then full marks should not be awarded. If only one example is provided e.g. cactus then award 5 marks. |

| C | uestion | Answer | Marks | Guidance |
|---|---------|--|-------|--|
| | | Level 1 [1-2 marks] Demonstrates limited knowledge and understanding of how vegetation survives in hot deserts. One or more ways by which vegetation survives in deserts with little or no development. Features are identified/described in basic terms. (eg spikes, they can store water, long roots) Written work contains mistakes in spelling, grammar and punctuation, which sometimes hinders communication. 0 marks Response does not address the question. | | |
| 3 | (a) | One mark for example of polar or mountain environment linking with type of extreme environment chosen. | 1 | Name of area must be linked with the area identified – if not indicated which one they have studied then no mark should be awarded. Name of individual mountain or mountain range is acceptable – accept example at any scale. Name of continent with the exception of Antarctica = 0. May accept appropriate country name e.g. Nepal. Do not accept location it must be a name. |
| | (b) | Two appropriate photographs selected to match with type of extreme environment chosen: Polar A and B Mountain C and D | 2 | 2 @ 1 mark. Pictures identified must match with the area identified in 3(a). So if no area is identified then candidates do not gain a mark. |
| | (c) | Level 3 [5-6 marks] Demonstrates good knowledge and understanding by the use of developed statements which explain why the area is extreme with reference to people. Written work is legible and spelling, grammar and punctuation are accurate. Meaning is communicated very clearly. | 6 | This response should be marked holistically. Ignore the scaffold provided for candidates in the answer booklet. Points made by candidates must be valid in relation to photograph selected. Do not label L1/L2 within response – just the overall level awarded at the end of the response will suffice. |

| Question | Answer | Marks | Guidance |
|----------|--|-------|---|
| | Level 2 [3-4 marks] Demonstrates sound knowledge and understanding by the use of simple statements which explain why the area is extreme with reference to people. Written work is legible and spelling, grammar and punctuation are mostly accurate. Meaning is communicated clearly. Level 1 [1-2 marks] Demonstrates limited knowledge and understanding by the use of simple statements which describe the features shown in the chosen photograph. Written work contains mistakes in spelling, grammar and punctuation, which sometimes hinders communication. 0 marks Response does not address the question. | | |
| (d) | One mark reserved for name of process, eg: • freeze thaw; • plucking; • abrasion; • calving; • landslide/avalanche; • subduction; etc. Two further marks for appropriate description, eg (freeze thaw): • water gets into cracks; • freezes and expands; • breaks rock into pieces etc. | 3 | 1 + 2 @ 1 mark. Be prepared to accept a range of processes if appropriate in terms of mountain or polar areas. The name of the process can be named within the description. May allow a max 2 of description marks if the process named is incorrect or not named. The following answers = 0 marks: Exfoliation. Desert processes. The following answers need further development for credit (use annotation): Weathering. Erosion. Deposition. |

| Question | Answer | Marks | Guidance |
|----------|---|-------|--|
| (e) | Ideas such as: melting ice might prevent skiing/winter sports; reduction of snow/ice cover may put off tourists/area may become less spectacular; destruction of habitat of fauna; damages ecosystems/food chains; change in water temperature may reduce fish/food stocks; water becomes scarce/less water supply in relation to people; increased rainfall/storms/causes flooding; avalanche/landslides; plants/crops won't grow/lack of food to eat/vegetation won't grow; loss of income due to less tourists; animals find it hard to survive/die out/extinction;etc. | 3 | 3 @ 1 mark. NB One mark reserved for people/natural environment. This must relate to a polar or mountain environment area. Climate change in relation to climate getting hotter not colder. The following answers = 0 marks: Heatstroke. The following answers need further development for credit (use annotation): Kills vegetation. Mountains are destroyed. Difficult to climb. Melts the ice. Increased rainfall. Loss of income. Houses damaged. |
| 4 (a) | Ideas such as: interest in adventure holiday/exploration/expedition/extreme sports; as people want to visit areas where they can challenge themselves; sight seeing/scenery/natural beauty/views; photography; calm/peaceful/relaxing; see wildlife/animals/plants/flora/fauna; skiing/winter-sports; rock climbing; increased access; as a result of new roads built to access mountains/use of helicopters; more availability of packages; (eg skiing packages/cruises) | 4 | 4 @ 1 mark. The following answers = 0 marks: To experience the extreme environment. Global warming. Scientists. New resorts/hotels built. The following answers need further development for credit (use annotation): To see how cold it is. For a holiday. Because they are interesting. |

| Question | Answer | Marks | Guidance |
|----------|---|-------|--|
| | greater affluence; long/paid holidays; TV programmes/internet raise awareness; Film/documentary making; Historic value/culture; New/different experience; Education about area/study/gain understanding about area; etc. | | |
| (b) | Level 3 [5-6 marks] Demonstrates good knowledge and understanding of the issue with at least two developed ideas. For full marks candidates must include developed statements about the effects on people and natural environment and some place detail. Written work is legible and spelling, grammar and punctuation are accurate. Meaning is communicated very clearly. Level 2 [3-4 marks] Demonstrates sound knowledge and understanding of the issue. One or more impacts of tourism on mountain or polar environment with development. Impacts are described clearly. Written work is legible and spelling, grammar and punctuation are mostly accurate. Meaning is communicated clearly. Level 1 [1-2 marks] Demonstrates limited knowledge and understanding of the issue. One or more impacts of tourism on mountain or polar environment with little or no development. Impacts are described in basic terms. | 6 | This response should be marked holistically. Ignore the scaffold provided for candidates in the answer booklet. Level 3 – 5 marks if response refers to people and natural environment and 6 marks if it also includes some place detail. Responses may refer to negative and/or positive impacts. Do not label L1/L2 within response – just the overall level awarded at the end of the response will suffice. |

| Q | uestion | Answer | Marks | Guidance |
|---|---------|---|-------|----------|
| | | Written work contains mistakes in spelling, grammar and punctuation, which sometimes hinders communication. | | |
| | | 0 marks Response does not address the question. | | |

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