GCSE

Geography B (Short Course)

General Certificate of Secondary Education **A772/01**

Key Geographical Themes (Foundation Tier)

Mark Scheme for June 2010

Question				Expected Answers	Mks	Rationale
1	(a)		Study **Fig. 1** a storm hydrograph.			
		(i)	**At what time was peak rainfall?**	1 mark for 04.00 (hours)	[1]	No mark if a range of times given containing the correct answer
		(ii)	**At what time was peak river discharge?**	1 mark for 07.00 (hours)	[1]	No mark if a range of times given containing the correct answer
		(iii)	**What was the lag time between peak rainfall and peak discharge?**	1 mark for 3 hours	[1]	
	(b)		**Suggest <u>two</u> reasons to explain why peak river discharge happened some time after peak rainfall.**	**Content Guide:** *Reasons should include reference to stores and slow transfers of water into river channel eg interception, soil moisture, throughflow, percolation, ground water flow, overland flow,water stored in lakes/reservoirs explanation should include how water is trapped and/or delayed time taken for water to travel through the river network/drainage basin*	[4]	(2 x 2) 1 mark for each valid reason second mark for each explanation of how water is trapped/delayed give 1 mark for basic idea about rainwater taking time to reach the river Full marks if two valid transfers/stores described with detail even if key words not used.
	(c)		**Study Fig. 3 a photograph of the town of Tewkesbury during the flood of 2007. Tewkesbury is located on the floodplain of the River Severn. What is a floodplain?**	1 mark for *land which is flooded or similar* second mark for further valid point *eg flat land near river, at sides of river*	[2]	No mark for flat land only, must be linked to river or flooding
	(d)		**Suggest how people's lives would be affected by flooding.**	**Content Guide:** *Upset/distress, loss of life Damage to property/furniture; evacuation; costs of repairs; increased insurance costs. Shops, workplaces, schools flooded/damaged*	[4]	1 mark for each valid way (4 x 1) credit for development of one/two ideas including accurate facts/data no credit for vague ideas about people's lives

				[4]	
			Unable to get to work/access shops & services due to flooded roads/transports *Disruption of relief operations* *People stranded/cut off*		being disrupted
	(e)	**State two methods which can protect people and property from flooding.** **Explain how each method works.**	**Content Guide:** Methods could include prediction and early warning systems, evacuation to safety. Short term preparations eg sand bags etc Longer term schemes such as drainage channels, flood barriers, planned floodplains etc Restrict building/development on floodplains Houses on stilts Explanation should include how water is prevented from affecting property and/or how people are warned and given time to evacuate or protect their property	**[4]**	(2 x 2) 1 mark for each valid method second mark for each explanation of how method works If more than two methods given without any explanation, credit two methods for two marks only No credit for vague ideas about walls/barriers.
	(f)	**CASE STUDY: An example of a river landform. You need a relevant example.** • **Name one example of a river landform.** • **Draw a detailed, labelled sketch diagram to show what the landform looks like.** • **Explain in detail how some processes (such as weathering, erosion, transport and deposition), have created the landform.**	Case study will be marked using 3 levels **0 marks** Response does not address the requirements of the question. **Level 1 (1–3 marks)** Demonstrates limited knowledge and understanding. Gives a relevant example and one basic idea. Names a valid river landform **and** Shows one relevant feature in a sketch **or** States a relevant process Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinder	**[8]**	Named landform could be named example or a type of landform eg High Force or waterfall. Full marks available if landform not named at top of answer but clearly labelled in sketch/text Max 2 marks, if no named river landform given or sketch or coastal example used, but relevant ideas about how river processes affect river landforms. 1 mark if only gives a valid river landform.

| | | | communication.
Level 2 (4–6 marks)
Demonstrates sound knowledge and understanding.
Gives a relevant example, a basic idea in each section, with one section developed in detail.
Names a valid river landform
and
Shows one relevant feature in a sketch
and
States a relevant process
and
Adds relevant detail to the sketch
or
Explains how the process has created the landform with detail or additional ideas
Written work is legible and spelling, punctuation and grammar are mostly accurate.
Meaning is communicated clearly.
Level 3 (7–8 marks)
Demonstrates thorough knowledge and understanding.
Gives a relevant example, with developed ideas in each section.
Names a valid river landform
and
Shows one relevant feature in a sketch
and
States a relevant process
and
Adds relevant detail to the sketch
and
Explains how the process has created the landform with detail or additional ideas

Written work legible and spelling, punctuation and grammar are accurate.
Meaning is communicated very clearly. | | 1 mark for basic sketch of a recognisable river landform but no name given

Max 5 marks if no sketch but named landform in text with detailed explanation of relevant process(es) |

Question	Expected Answers	Mks	Rationale
	Content Guide: Named landform could be a named example or a landform type eg High Force or waterfall. A named example not needed for full marks. Specification Content = meanders, interlocking spurs, floodplains, river cliffs, valleys, waterfalls Accept other valid landforms eg river terraces, delta, ox-bow lake, gorge. Characteristic features in sketch will show shape/structure of landform. Labels could indicate size/relief, rock type and/or other relevant features eg plunge pool, point bar, thalweg, distributaries. Will need to explain how process operates for L2/3 by either describing how process has shaped/is shaping the landform or by use of appropriate vocabulary for processes eg abrasion, hydraulic action, solution. Credit for valid place detail added to sketch or text No credit for simple repetition of words weathering, erosion, transport and deposition. Full credit if ideas about processes are added to the sketch.		
	Total	**[25]**	

Question				Expected Answers	Mks	Rationale
2	(a)		Study <u>Fig. 4</u> a map showing coastal erosion on the Holderness coast of England.			
		(i)	How many settlements have been lost to coastal erosion?	1 mark for 25.	[1]	No mark for a range of numbers including the correct answer
		(ii)	What is the approximate length of the coastline being eroded?	1 mark for 70km.	[1]	Credit if correct answer is indicated without a circle No marks if more than one answer given
		(iii)	Which of these settlements is most at risk of future erosion?	1 mark for Withernsea.	[1]	Credit if correct answer is indicated without a circle No marks if more than one answer given
	(b)		Briefly describe the evidence of coastal erosion shown in <u>Fig. 5</u>.	1 mark per valid *eg cliff collapsed/slumped, fence collapsed, exposed soil/clay, loss of garden, building on edge of cliff, vegetation on cliff side, vertical cliff face*	[2]	No credit for 'it has eroded' or similar statement without evidence
	(c)		Describe how people's lives would be affected by coastal erosion.	**Content Guide:** Credit for damage to/destruction of property, loss of land, decline in property values, no insurance cover, need to move, upset/distress, danger of people/vehicles falling, roads closed, impact on tourism/local business, expense of coastal defences	[4]	1 mark for each valid way (4 x 1) credit for development of one/two ideas no credit for loss of life no credit for vague ideas about people's lives being disrupted
	(d)		Describe <u>two</u> natural processes which could cause the erosion shown in <u>Fig. 5</u>.	**Content Guide:** Relevant processes are abrasion/corrasion, hydraulic action, solution/corrosion. Detail could be definition of process and/or explanation how it operates to erode the cliff Credit reference to slumping/undercutting as this is evident in Fig. 4.Full marks if two valid processes described with detail even if key words not used.	[4]	(2 x 2) 1 mark for valid process second mark for detail no credit for attrition or use of word erosion if not linked to how process operates credit for naming a process without description eg hydraulic action only

Question			Expected Answers	Mks	Rationale
	(e)	**State two methods which can be used to protect the coast from erosion. Explain how each method works**	**Content Guide:** Credit for hard engineering options eg sea wall, rock armour, rock barriers, gabions, groynes, sea bees and softer options such as beach replenishment/nourishment. stabilising dunes eg planting marran grass Explanation should include how method forms a barrier to protect coastline from erosion. Full marks if two valid methods described with detail even if key words not used.	**[4]**	(2 x 2) 1 mark for valid method second mark for explanation or detail no credit for managed retreat, resettlement and 'do nothing' No credit for vague ideas about walls/barriers
	(f)	**CASE STUDY: An example of a coastal landform.** **You need a relevant example.**	Case study will be marked using 3 levels **0 marks** Response does not address the requirements of the question.	**[8]**	
		• **Name one example of a coastal landform.** • **Draw a detailed, labelled sketch to show what the landform looks like.** • **Explain how some processes (such as weathering, erosion, transport and deposition), have created the landform.**	**Level 1 (1–3 marks)** Demonstrates limited knowledge and understanding. Gives a relevant example and one basic idea. Names a valid coastal landform **and** Shows one relevant feature in a sketch **or** States a relevant process Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinder communication. **Level 2 (4–6 marks)** Demonstrates sound knowledge and understanding. Gives a relevant example, a basic idea in each section, with one section developed in detail.		Named landform could be named example or a type of landform eg Old Harry or a stack. Full marks available if landform not named at top of answer but clearly labelled in sketch Max 2 marks, if no named coastal landform given or sketch or river example used, but relevant ideas about how coastal processes affect coastal landforms. 1 mark if only gives a valid coastal landform. 1 mark for basic sketch of a recognisable coastal landform but no name given Max 5 marks if no sketch but named landform

Question			Expected Answers	Mks	Rationale
			Names a valid coastal landform **and** Shows one relevant feature in a sketch **and** States a relevant process **and** Adds relevant detail to the sketch **or** Explains how the process has created the landform with detail or additional ideas Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly. **Level 3 (7–8 marks)** Demonstrates thorough knowledge and understanding. Gives a relevant example, with developed ideas in each section. Names a valid coastal landform **and** Shows one relevant feature in a sketch **and** States a relevant process **and** Adds relevant detail to the sketch **and** Explains how the process has created the landform with detail or additional ideas Written work legible and spelling, punctuation and grammar are accurate.		in text with detailed explanation of relevant process(es)

Question	Expected Answers	Mks	Rationale
	Meaning is communicated very clearly. **Content Guide:** Named landform could be a named example or a landform type eg Old Harry or stack. A named example not needed for full marks. Specification Content = cliffs, headland, cave, arch, stack, beach, spit. Accept other valid landforms eg wave cut platform, stump, bars, tombolo, bay Characteristic features in sketch will show shape/structure of landform. Labels could indicate size/relief, rock type and/or other relevant features eg recurved end, blowhole, beach ridge. Will need to explain how process operates for L2/3 by either describing how process has shaped/is shaping the landform or by use of appropriate vocabulary for processes eg abrasion, hydraulic action, solution. Credit for valid place detail added to sketch or text No credit for simple repetition of words weathering, erosion, transport and deposition. Full credit if ideas about processes are added to the sketch.		
	Total	**[25]**	

Question			Expected Answers	Mks	Rationale
3	(a)	Study <u>Fig. 6</u>, an Oxfam advert for an aid project in Malawi, an LEDC in Africa.			
		(i) Which type of animal is given to a family in need?	1 mark for cow or cattle.	[1]	No mark for calf or calves
		(ii) State <u>two</u> outputs produced by the animal.	milk, manure, calves.	[2]	1 mark for each output no mark for meat or money
	(b)	How could the family's quality of life be improved by this aid project?	**Content Guide:** Credit for: • increased income spent on clothing, school equipment, food supplies if needed • milk and crops – improved diet/health. • credit for manure increasing crop yields for sale/consumption	[4]	1 mark for each valid way (4 x 1) credit for development of one/two ideas no credit for outputs being sold must focus on good points for family 1 mark only for copied ideas about school etc
	(c)	Explain <u>two</u> ways in which the aid project shown in <u>Fig. 6</u> is sustainable.	**Content Guide:** Sustainability features need to make reference to the future of the project and not repeat (b) above. • Environmental – fertility of soil improved by manure for future use, without damaging the environment (chemicals) • Economic – calves are produced for future use/sale • Social – family control the project, can pass on knowledge/skills to others; – access to education – improved career prospects; health of family improved for future	[4]	(2 x 2) 1 mark for each valid way second mark for each explanation or detail Must have clear reference to future for credit
	(d)	Explain <u>one</u> possible problem with this type of aid project.	eg cow dies/stolen, overgrazing by cow, cow fails to breed, low income from 'middlemen'. small scale only helps individual families, limited development/wealth/job creation. Credit for reliance on aid donor	[2]	1 mark for a valid problem second mark for detail or development

Question			Expected Answers	Mks	Rationale
	(e)	**Suggest two ways in which development in LEDCs can be measured. Explain how each way measures development.**	**Content Guide:** Could include: GNP/GDP per capita, purchasing power, literacy, girls in school, infant mortality, death rate, birth rate, fertility rate, life expectancy, calorie consumption, access to water. Explanation should include how score/data indicates development eg high/low score. eg high death rate shows poor health care, low literacy shows poor education provision .	**[4]**	(2 x 2) 1 mark for each valid way (term or definition) second mark for each explanation of how development is measured Full marks if two valid ways described and explained even if key terms not used (e.g. GNP per capita not used but clear ideas about wealth/income)
	(f)	**CASE STUDY: An example of an economic activity in an LEDC. You need a relevant example.**	Case study will be marked using 3 levels **0 marks** Response does not address the requirements of the question.	**[8]**	
		• **Name the LEDC.** • **Name one example of an economic activity in your chosen LEDC.** • **Describe in detail the location of the economic activity.** • **Explain in detail why this is a good location for this example of an economic activity.**	**Level 1 (1−3 marks)** Demonstrates limited knowledge and understanding. Gives a relevant LEDC, example and one basic idea. Names a valid LEDC **and** Names a valid economic activity **and** Describes one feature of the location of the economic activity **or** gives a relevant location factor Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinder communication.		Named example could be primary eg a farm, secondary eg factory, tertiary eg a health clinic. Max 2 marks, if no named example but relevant ideas about location factors Max L2 (6 marks) for MEDC example with detail about location and location factors 1 / 2 marks if only names a valid LEDC and economic activity. 1 mark if only names a valid LEDC or economic activity.

Question	Expected Answers	Mks	Rationale
	Level 2 (4–6 marks) Demonstrates sound knowledge and understanding. Gives a relevant LEDC, example, one basic idea in each section, with one section developed with detail. Names a valid LEDC **and** Names a valid economic activity **and** Describes one feature of the location of the economic activity **and** Explains the given location factor **and** Develops the description of the location features **or** Explains the location with valid detail or additional ideas Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly. **Level 3 (7–8 marks)** Demonstrates thorough knowledge and understanding. Gives a relevant LEDC and example with both sections developed with detail, including place specific detail. Names a valid LEDC **and** Names a valid economic activity		Max 7 marks if both sections are developed but without any credible place-specific detail.

Question	Expected Answers	Mks	Rationale
	and Describes one feature of the location of the economic activity **and** Explains the given location factor **and** Develops the description of the location features **and** Explains the location with valid detail or additional ideas **with** Some valid place-specific detail Written work is legible and spelling, punctuation and grammar are accurate. Meaning is communicated very clearly. **Content Guide:** *Place specific detail could include company name or name of example given eg Brooke Bond Plantation and/or credible number data such as size of activity, number of workers and/or additional place names such as street, road numbers, settlement, region where activity is located.* Example could be primary eg a farm, secondary eg a factory, tertiary eg health clinic. Location features could include named places, region of country, named features eg Brooke Bond Flower Plantation in Kenya highlands, near to Lake Naivasha. Credit for global location of given LEDC e.g. Kenya is in East Africa		

Question			Expected Answers	Mks	Rationale
			Explanation of location factors could include references to: access to natural resources/raw materials; climatic factors; transport networks; power supplies; population thresholds/markets; government policies/aid project support. For Level 2/3 needs to be related to the stated economic activity eg Kenyan highlands have fertile soil for good crop yields, water from Lake used for irrigation.		
			Total	**[25]**	

Question				Expected Answers	Mks	Rationale
4	(a)		Study <u>Fig. 7</u>, pie charts showing employment structures of three countries in 2008.			
		(i)	Which country had the largest proportion of <u>primary</u> workers?	1 mark for Nepal.	**[1]**	
		(ii)	Which country had the largest proportion of <u>tertiary</u> workers?	1 mark for USA.	**[1]**	
		(iii)	What was the proportion of <u>secondary</u> workers in Brazil? <u>Circle</u> the correct answer	1 mark for 24%.	**[1]**	Credit if correct answer is indicated without a circle No marks if more than one answer given
	(b)		Use <u>Fig. 7</u> to explain <u>two</u> pieces of evidence which show that <u>Nepal</u> is the least economically developed country.	**Content Guide:** High primary % = farmers growing own food/subsistence. Low secondary % = lack of industry/investment/ technology. Low Tertiary % = poor population/lack of demand/limited service provision in LEDC. credit for reference to line on Fig. 7 which indicates 'increasing level of economic development' Only credit reference to Brazil/USA percentages if clear comparison with Nepal (no credit for this as a developed point)	**[4]**	(2 x 2) 1 mark for each piece of evidence second mark for each explanation linked to primary/secondary/tertiary data credit for developed explanation(s) without reference to specific evidence/data

Question				Expected Answers	Mks	Rationale
	(c)		Study <u>Fig. 8</u> a photograph of child workers in an LEDC in South America.			
		(i)	What type of worker are these child workers? <u>Circle</u> the correct answer.	1 mark for tertiary.	[1]	Credit if correct answer is indicated without a circle No marks if more than one answer given
		(ii)	Briefly explain your answer.	1 mark for providing a service or similar or not making/producing anything.	[1]	Credit correct idea even if (i) is incorrect
	(d)		Why are there lots of child workers in some <u>LEDCs</u>?	**Content Guide:** Poverty-children need to work to support families. Street children need to support themselves Lack of education opportunities, lack of employment legislation as per MEDCs. Child labour easier to exploit	[4]	1 mark per idea (4 x 1) credit for development of one/two ideas
	(e)		Give <u>two</u> reasons to explain why multi-national companies choose to invest in <u>LEDCs</u>.	**Content Guide:** Access to cheap resources/raw materials, cheap labour, access to growing consumer markets, fewer planning/environmental restrictions, less competition from rivals. LEDC governments encourage/welcome MNC investment etc Explanation could compare to MEDC scenario and/or relate to drive for increased profits.	[4]	(2 x 2) 1 mark for each reason second mark for each explanation or detail No credit for three/four separate points
	(f)		CASE STUDY: An example of a multi-national company (MNC) in a country. You need a relevant example.	Case study will be marked using 3 levels **0 marks** Response does not address the requirements of the question.	[8]	

Question			Expected Answers	Mks	Rationale
		• **Name of multi-national company (MNC).** • **Name of <u>one</u> country in which the MNC operates.** • **Explain in detail the <u>advantages</u> of the MNC for the people who live in your chosen country.** • **Explain in detail the <u>disadvantages</u> of the MNC for the people who live in your chosen country.**	**Level 1 (1–3 marks)** Demonstrates limited knowledge and understanding. Gives a relevant example, country and one basic idea. Names a valid MNC **and** Names a valid country where the MNC operates **and** Gives one advantage of the MNC **or** Gives one disadvantage of the MNC Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinder communication. **Level 2 (4–6 marks)** Demonstrates sound knowledge and understanding. Gives a relevant example, country, one basic idea in each section, with one section developed with detail. Names a valid MNC **and** Names a valid country where the MNC operates **and** Gives one advantage of the MNC **and** Gives one disadvantage of the MNC **and** Explains the advantages **or** Disadvantages with valid detail or additional ideas. Written work is legible and spelling, punctuation and		Named MNC must be a credible example; country can be an LEDC or an MEDC. 1/2 marks if only names a valid MNC and/or country. Max L2 (6 marks) if no named country given but valid ideas about named MNC Max L2 (6 marks) if named company is not an MNC but valid ideas about MNCs Max L2 (6 marks) if no named MNC given but valid ideas about MNCs

Question	Expected Answers	Mks	Rationale
	grammar are mostly accurate. Meaning is communicated clearly. **Level 3 (7–8 marks)** Demonstrates thorough knowledge and understanding. Gives a relevant example and country with both sections developed with detail, including place specific detail. Names a valid MNC **and** Names a valid country where the MNC operates **and** Gives one advantage of the MNC **or** Gives one disadvantage of the MNC **and** Explains the advantages **and** disadvantages with valid detail or additional ideas. **with** Some valid place-specific detail Written work is legible and spelling, punctuation and grammar are accurate. Meaning is communicated very clearly. **Content Guide:** *Place specific detail could include credible number data such as size of the MNC's operations, number of workers or factories/outlets and/o information about the MNC's products or services, and/or additional place names such as street, road numbers, settlement, region where MNC operations are located.*		Max 7 marks if both sections are developed but without any credible place-specific detail.

Question			Expected Answers	Mks	Rationale
			MNC must be a credible example; country can be an MEDC or LEDC. Advantages could include: Job creation, facilities for workers eg schools, clinics, pension funds, workers' incomes generate multiplier effect, investment by other companies, improved services or access to consumer goods, development of transport infrastructure. Disadvantages could include: low wages; poor conditions; lack of employment opportunities eg top jobs to outsiders; pollution of environment; products/services not for locals; profits leave the country; MNC branch may close during times of economic hardship. For L2/L3 will need to explain why points are advantages or disadvantages for the local people. Full credit for one well explained advantage and one well explained disadvantage. Maximum 6 marks if no named country. If only names a valid MNC/names a country = 1/2 marks.		
			Total	**[25]**	

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