

**GCSE**

**Geography B**

Unit **A772/02**: Key Geographical Themes (Higher Tier)

General Certificate of Secondary Education (Short Course)

**Mark Scheme for June 2015**

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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.

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

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These are the annotations, (including abbreviations), including those used in scoris, which are used when marking

Annotation	Meaning
	<b>Blank Page – this annotation must be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.</b>
	Correct response
	Incorrect response
	Benefit of the doubt not given
	Information omitted
	Unclear
	Open bracket
	Close bracket
	Development
	Example/reference
	Relevant place detail
	Level 1
	Level 2
	Level 3
	Just

## MARK SCHEME

Question		Answer/Indicative content	Mark	Guidance
1	a	<p>Peak discharge is higher in 2010            PD is 90 cumecs in 2010 and 40 cumecs in 1980/ 50 cumecs higher in 2010            PD occurs more quickly in 2010/ shorter lag time            PD occurs after 6 hours in 2010 and 14 hours after in 1980/ 8 hours quicker in 2010</p>	3	<p>3 x 1 (✓)             Need comparison            No credit for rising/falling limb, base flow or rainfall            Accept answers from 1980 point of view            Credit 'only' as comparison            Reserve 1 mark for data (needs cumecs)</p>
	b	i	4	<p>4 x 1             1 mark for each valid explanation (✓)            Need comparison/reference to change            Accept answers which refer to 1980            Don't credit ref to straightened channel / urbanisation             1 mark for each valid development which must be coherently linked to the explanation identified (DEV)             Can go up to 3 dev marks with one basic idea            3 marks max for 'basic' ideas (i.e. without development),            There must be development of one idea to gain 4 marks max.             The development can relate to different ideas. Do not credit the same development twice.</p>
	b	ii	4	<p>2 x 2             1 mark for each factor identified (✓)             1 mark for each valid explanation which must be coherently linked to the factor identified (DEV)</p>

Question	Answer/Indicative content	Mark	Guidance
c	<p>✓(dev)            Impermeable rocks ✓ so water cannot infiltrate and runs off surface quickly ✓(dev)            High drainage density ✓ so rainwater from catchment area quickly taken to river / reaches river at the same time ✓(dev)            Low bridges ✓ so debris gets caught/acts like dam ✓ (dev)            No dredging of the river ✓ so build up of silt reduces channel capacity ✓ (dev)            Straightening the river/channelisation ✓ increases flood risk <u>downstream</u> ✓ (dev)            Ploughing downslope ✓ so more run-off from surrounding fields ✓(dev)</p> <p>Methods such as:</p> <p>Build / strengthen embankments / levees / make banks higher ✓ to prevent river overflowing/ increase capacity ✓ (dev)            Straighten river course / cut off meanders ✓ to take water away more <u>quickly</u> ✓(dev)            Build a dam across river ✓ to control water flow ✓(dev)            Afforestation / plant trees / vegetation ✓ to soak up water / increase interception ✓(dev)            Deepen / widen channel/dredging ✓ to accommodate more water ✓(dev)            Build flood barriers alongside river ✓ to hold more water in river channel ✓(dev)            Build tidal barrier across estuary ✓ to prevent inflow of sea water ✓(dev)            Construct diversionary spillways / overflow channels ✓ to divert excess water ✓(dev)            Widen / higher bridges <u>over</u> the river ✓ to prevent water damming up behind debris ✓(dev)            Develop management strategy on floodplain ✓ to control /</p>	4	<p>Can accept ref to deforestation/ impermeable surfaces <b>if not already credited in b(i)</b></p> <p>Don't credit failed flood defences (e.g. levees)</p> <p>The development can relate to different factors. Do not credit the same development twice.</p> <p>2 x 2</p> <p>1 mark for each method identified (✓)</p> <p>1 mark for each valid explanation which must be coherently linked to the method identified (DEV)</p> <p>The development can relate to different methods. Do not credit the same development twice.</p> <p>Credit methods of prevention and response to flooding</p>

Question		Answer/Indicative content	Mark	Guidance
		<p>plan new house building ✓(dev)  Flood plain zoning ✓ so less valuable land use is next to river ✓(dev)  Wash lands/flood meadows ✓ allows water to flood into less valuable areas ✓(dev)  Use information in flood risk areas maps ✓ to insist that all new homes built in flood risk areas have their own flood defences ✓(dev)  Monitoring/ give warnings ✓ so people can evacuate ✓(dev)  Sandbags ✓ to stop water getting into houses ✓(dev)  Evacuate people ✓ and move them to safety ✓(dev)  Emergency response/aid ✓ to support affected people ✓(dev)</p>		
<b>d</b>	<b>i</b>	<p>Impacts such as:</p> <p>Loss of property / homes/ buildings/ fall into the sea / homeless  Forced to move  Unable to get house insurance  Falling house prices/ can't sell their home/ can't afford to move  Whole villages disappear/ break up of community  Roads become unusable/ fall into sea  Community cut off/ difficult to travel to work etc  Loss of farmland  Loss of businesses/ tourism  Loss of income/ jobs/ unemployment  Stress/fear of future damage</p>	<b>4</b>	<p>4 x 1</p> <p>1 mark for each valid impact (✓)</p> <p>No DEV</p> <p>Don't credit reference to deaths/ injuries</p>
<b>d</b>	<b>ii</b>	<p>Coastline is being built up / deposition is taking place  Constructive waves/ swash is greater than backwash  Contains features such as spit, bar, tombolo, beach</p>	<b>2</b>	2 x 1 (✓)

Question	Answer/Indicative content	Mark	Guidance
e	<p><b>Case study: coastline management</b></p> <p><b>Indicative content</b> Coastline may be from any location or at any scale</p> <p>Methods used to manage coastal erosion may include soft or hard engineering or managed retreat</p> <p>Conflicts could be short-term or long-term, such as cost of management methods for local / national government, cost of maintenance of hard engineering methods, visual impact of hard engineering methods, restriction of access to beach, loss of sand replenishment further down the coastline, disruption to properties where erosion of coastline is allowed, loss of compensation as a result of managed retreat, impact on the environment etc.</p> <p>Level 3 (7–9 marks)</p> <p>A comprehensive and place specific answer including <b>well developed</b> ideas which <b>both</b> describe the management methods <b>and</b> describe the conflicts caused.</p> <p><b>Level 2 (4–6 marks)</b></p>	9	<p>Case study will be marked using 3 levels:</p> <p>Annotate with <b>L3</b>, <b>L2</b> or <b>L1</b> at the end of the answer Use <b>DEV</b> in the answer to show development Use <b>PLC</b> to indicate place specific detail at Level 3</p> <p><i>Note carefully:</i> <i>Answer consistently meets the criteria for the level</i> <i>Award mark at <b>top</b> of level</i></p> <p><i>Answer meets the criteria but with some inconsistency</i> <i>Award mark at <b>middle</b> of level</i></p> <p><i>Answer just meets the criteria for the level</i> <i>Award mark at <b>bottom</b> of level</i></p> <p><b>Level 3</b> A key discriminator of an answer at the top of Level 3 is place detail</p> <p>Full level 3 answer needs three well developed ideas plus relevant place-specific detail, (such as place names, financial costs).</p> <p>Well developed ideas which make a <b>comprehensive</b> answer (i.e. describe methods and conflicts caused) = bottom of Level 3</p> <p>A comprehensive answer + <b>place-specific detail</b> = top of Level 3</p> <p><b>Level 2</b></p>

Question		Answer/Indicative content	Mark	Guidance
		<p>Demonstrates sound knowledge through <b>developed</b> ideas which describe the management methods <b>and/or</b> describe the conflicts caused</p> <p><b>Level 1 (1–3 marks)</b></p> <p>Demonstrates limited knowledge through <b>simple / undeveloped</b> ideas which describe the management methods <b>and/or</b> describe the conflicts caused</p> <p><b>0 marks</b> No evidence submitted or the response does not address the question.</p> <p>Spelling, punctuation and grammar (SPaG) are assessed using the separate marking grid on page 16.</p>		<p>A key discriminator of an answer at the top of Level 2 is that descriptions of management methods and/or conflicts caused are developed.</p> <p>Full level 2 needs three developed ideas plus a named example of a coastline area.</p> <p>Could be a combination of method and conflict combined to give the developed idea</p> <p><b>Level 1</b></p> <p>Full level 1 needs three simple ideas plus a named example of a coastline area.</p> <p>Credit name of coastline area, at bottom of level if no other relevant idea</p>
2	a	<p>Largest number of employees are in Japan Most employees are in Asia Smallest number of employees are in Europe / S America / Africa Employs people in only 1 country in Africa / 2 countries in</p>	3	<p>3 x 1 (✓)</p> <p>Where employment figures are used they must be accurate &amp; compare two countries</p>

Question	Answer/Indicative content	Mark	Guidance
	<p>S. America / 2 countries in Europe <b>or</b> named countries  Employs more people in USA than Canada. (needs comparison)  Employs 10,000 in South Africa &amp; 4,000 in UK  Uneven distribution etc</p>		<p>No credit for LEDC/MEDC  No credit for 'all over the world'</p>
<b>b</b>	<p>Toyota produces cars on a worldwide scale / across the world / in all continents  Production has spread from Japan / HQ is in Japan</p>	<b>2</b>	2 x 1 (✓)
<b>c</b>	<p>Lower wages / lower labour costs in LEDCs ✓ so production costs are cheaper ✓(dev)  Less powerful trade unions in LEDCs ✓ so wages are lower ✓(dev)  Access to growing markets as countries develop economically ✓ so increase in production / profit ✓(dev)  Access to markets without trade restrictions ✓ so can avoid barriers such as tariffs / quotas ✓(dev)  Improvement in communications through satellite / IT ✓ so companies can control world-wide operations ✓(dev)  Improvement in transport such as sea containers ✓ results in faster / cheaper movement of raw materials / goods around world ✓(dev)  Headquarters / research and development stays in MEDCs ✓ because of skilled workforce / expertise ✓(dev)  Financial incentives given by governments ✓ which reduce production costs ✓(dev)</p>	<b>4</b>	<p>2 x 2  1 mark for each reason identified (✓)  1 mark for each valid explanation which must be coherently linked to the reason identified (DEV)</p>
<b>d</b>	<p>Creates jobs / income for local people ✓ which can create a multiplier effect in the local economy ✓(dev)  Raises living standards of local employees ✓ so they can afford better education / medical care / food ✓(dev)  Improves skills of local employees ✓ which leads to transfer of skills into other industries ✓(dev)</p>	<b>4</b>	<p>4 x 1  1 mark for each valid suggestion (✓)  1 mark for each valid development which must be coherently linked to the suggestion identified (DEV)</p>

Question	Answer/Indicative content	Mark	Guidance
e	<p>Increases exports of the host country ✓ which enhances the country's international reputation / boosts the economy ✓(dev)</p> <p>Investment by MNC attracts further investment ✓ which creates a 'growth pole' / cluster of economic activity ✓(dev)</p> <p>Exploitation of local workforce ✓ through low wages and poor working conditions ✓(dev)</p> <p>Competition for local companies ✓ which results in their closure because they cannot compete ✓(dev)</p> <p>Little long-term job security ✓ because factory may be closed at short notice and production transferred overseas ✓(dev)</p> <p>Over-dependence on MNC by the host country ✓ can result in large-scale economic hardship if company re-locates abroad ✓(dev)</p> <p>Uses up raw materials ✓ which could have been sold ✓(dev)</p> <p>Government receives taxes / money ✓ to spend on improving hospitals / schools / transport etc ✓(dev)</p> <p>Credit any economic activity including transport, agriculture, electricity generation, manufacturing, forestry, fishing and mining.</p> <p>Burning fossil fuels in power stations/ factories / vehicle emissions ✓ give off CO<sup>2</sup> ✓(dev)</p> <p>Rice growing / cattle grazing ✓ produce methane ✓(dev)</p> <p>Power stations / vehicle emissions / fertilisers ✓ give off NO<sup>2</sup> ✓(dev)</p> <p>Greenhouse gases (build up) in the atmosphere ✓</p> <p>Incoming short-wave radiation passes through the greenhouse gases ✓ (dev)</p> <p>Outgoing long-wave radiation is trapped beneath /</p>	4	<p>3 marks max for 'basic' ideas (i.e. without development), there must be development of one idea to gain 4 marks max.</p> <p>4 x 1</p> <p>1 mark for each valid explanation (✓)</p> <p>1 mark for each valid development which must be coherently linked to the explanation identified (DEV)</p> <p>3 marks max for 'basic' ideas (i.e. without development), there must be development of one idea to gain 4 marks max</p> <p>Only credit ideas relating to one economic activity</p>

Question	Answer/Indicative content	Mark	Guidance
f	<p>absorbed by the greenhouse gases ✓ (dev)            Atmosphere becomes warmer / global warming ✓</p> <p>Subtropical dry belts will expand to north and south /            expansion of deserts ✓ which will affect wildlife habitats            ✓(dev)            Changing pattern of rainfall ✓ which leads to reduced /            different vegetation cover ✓(dev)            Species of plants / animals will find it difficult to adapt to            change in climate ✓ which leads to reduction in numbers /            possible extinction ✓(dev)            Melting ice caps / glaciers caused by increasing            temperatures ✓ which leads to rising sea levels ✓(dev)            Change in weather patterns ✓ which results in more            severe weather events such as colder winters / heavier            snowfall ✓(dev)</p>	4	<p>2 x 2</p> <p>1 mark for each effect identified (✓)</p> <p>1 mark for each valid explanation which must be coherently            linked to the effect identified (DEV)</p> <p>No credit for effect on people</p>
g	<p><b>Case study: aid project in an LEDC</b></p> <p><b>Indicative content</b>            The aid project can be any scale which must be located in            an LEDC.</p> <p>Aid project could focus on food production, education,            family planning, water supply, industry, energy, etc.</p> <p>Sustainability could be considered as economic, social or            environmental. Answer could explain how an aid project is            or is not sustainable.</p>	9	<p>Case study will be marked using 3 levels:</p> <p>Annotate with <b>L3</b>, <b>L2</b> or <b>L1</b> at the end of the answer            Use <b>DEV</b> in the answer to show development            Use <b>PLC</b> to indicate place specific detail at Level 3</p> <p><i>Note carefully:</i>  <i>Answer consistently meets the criteria for the level</i>  <i>Award mark at <b>top</b> of level</i></p> <p><i>Answer meets the criteria but with some inconsistency</i>  <i>Award mark at <b>middle</b> of level</i></p> <p><i>Answer just meets the criteria for the level</i>  <i>Award mark at <b>bottom</b> of level</i></p>

Question	Answer/Indicative content	Mark	Guidance
	<p>Level 3 (7–9 marks)</p> <p>A comprehensive and place specific answer including <b>well developed</b> ideas which explain how sustainable the aid project is for <b>both</b> for local people <b>and</b> the natural environment</p> <p><b>Level 2 (4–6 marks)</b></p> <p>Demonstrates sound knowledge through <b>developed</b> ideas which explain how sustainable the aid project is for local people <b>and/or</b> the natural environment.</p> <p><b>Level 1 (1–3 marks)</b></p> <p>Demonstrates limited knowledge through <b>simple / undeveloped</b> ideas which explain how sustainable the aid project is for local people <b>and/or</b> the natural environment.</p> <p><b>0 marks</b></p>		<p><b>Level 3</b></p> <p>A key discriminator of an answer at the top of Level 3 is place detail</p> <p>Full level 3 answer needs three well developed ideas plus relevant place-specific detail, (such as place name, examples of aid).</p> <p>Well developed ideas which make a <b>comprehensive</b> answer (i.e. explain how sustainable the project is for local people and the natural environment) = bottom of Level 3</p> <p>A comprehensive answer + <b>place-specific detail</b> = top of Level 3</p> <p><b>Level 2</b></p> <p>A key discriminator of an answer at the top of Level 2 is that explanations are developed</p> <p>Full level 2 needs three developed ideas plus a named example of an LEDC with an appropriate aid project.</p> <p>A developed answer which focuses on an aid project in an <b>MEDC</b> cannot gain full Level 2 credit.</p> <p><b>Level 1</b></p> <p>Full level 1 needs three simple ideas plus a named example of an LEDC with an appropriate aid project.</p> <p>Credit name of LEDC and appropriate aid project at bottom of level if no other relevant idea</p>

Question	Answer/Indicative content	Mark	Guidance
	<p>No evidence submitted or the response does not address the question.</p> <p>Spelling, punctuation and grammar (SPaG) are assessed using the separate marking grid on page 16</p>	3	

**Spelling, punctuation and grammar (SPaG) assessment grid**

<b>High performance 3 marks</b>
Candidates spell, punctuate and use rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.
<b>Intermediate performance 2 marks</b>
Candidates spell, punctuate and use rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.
<b>Threshold performance 1 mark</b>
Candidates spell, punctuate and use rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.
<b>0 marks</b>
0 marks should be awarded when: The candidate writes nothing. The candidate's response bears no relation to the question. The candidate's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning.

**OCR (Oxford Cambridge and RSA Examinations)**  
1 Hills Road  
Cambridge  
CB1 2EU

**OCR Customer Contact Centre**

**Education and Learning**

Telephone: 01223 553998

Facsimile: 01223 552627

Email: [general.qualifications@ocr.org.uk](mailto:general.qualifications@ocr.org.uk)

[www.ocr.org.uk](http://www.ocr.org.uk)

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**OCR (Oxford Cambridge and RSA Examinations)**  
Head office  
Telephone: 01223 552552  
Facsimile: 01223 552553

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