

# Mark Scheme (Results) Summer 2007

GCE B

## GCE Geography (6472) Paper 1

<p><b>QUESTION 1</b></p> <p><b>A</b></p> <p>Study Figure 1 on page 2 in the Resource Booklet. It shows a farming area in Canada in 1970 and 2005.</p>	<p><b>B</b></p> <p>The graph below shows the results of a survey of young people in rural Canada.</p>	<p><b>C</b></p> <p>With reference to examples of rural areas, examine how decision makers have managed the problems resulting from one of the following:</p> <ul style="list-style-type: none"> <li>▪ The development of recreation and tourism</li> <li>▪ The extraction of resources</li> <li>▪ Intensive agriculture (10)</li> </ul>
<p><b>(i) In 1970 it was an area of mixed commercial farming. Explain the meaning of this term (2)</b></p>	<p><b>(i) Describe and suggest reasons for the perceptions shown in the graph. (6)</b></p>	<p>Answers at L2 and above should focus on management not just problems.</p>
<p>Arable &amp; Pastoral indicated (accept crops and animals) ① For profit / sale ① 2x1 marks</p>	<p>Rural perceived as very safe, and therefore good for families; more private and easier to purchase a home (lower cost); urban services strongly perceived as better (agglomeration); economic opportunities much higher due to threshold for Colleges and HE and concentration of jobs (choice; higher wages)</p>	<p><u>REC &amp; TOURISM:</u> Zoning and the creation of honeypots (Grasmere); parking and traffic control including park and ride services; footpath management using local materials to restore eroded paths; management and zoning of coral reefs; development of ecotourism in Africa or Ecuador. Planning regulations associated with NPs.</p>
<p><b>(ii) Describe and suggest reasons for the changes in agricultural land use shown. (5)</b></p>	<p><b>L3 (5-6) Detailed desc expect figures; range of explanations, rural and urban.</b></p>	<p><u>RESOURCES:</u> Can be water, mining, forestry or a mix; replanting and RIL for forestry (Kielder), use of FSC mark for sustainable timber, zoning and creation of reserves to protect some areas. Management to increase diversity in softwood stands. Details of planning enquiry for Isle of Harris superquarry; management of noise, traffic and runoff for quarrying, NP planning regulations e.g. Peak District. Problems and management of dams e.g. Kielder; overabstraction of groundwater (Ashwell).</p>
<p>Description: large farms to the west focus more on wheat &amp; oilseed (barley, oats, cattle, declined) with larger fields. New crops (potatoes, bison, lentils) and smaller fields in east. More wetlands. Larger fields. Explanation: Specialised farms benefit from economies of scale and specialised equipment (harvesting); suits mechanised farming/ economies of scale. Diversified areas taking advantage of niche (higher profits e.g. bison)) and new markets; spreading risk; possible grants for wetland creation and conservation. Other realistic reasons. Do not accept nos. of farms/settlement. <b>L3 (5)</b> Detailed desc of change with reasons for changes; range of explanations. <b>L2 (3-4)</b> Some desc and exp but less complete / unbalanced. <b>L1 (1-2)</b> Basic desc; few if any reasons. Max 2 desc only.</p>	<p><b>L2 (3-4) Some desc and exp but less complete. Max 3 desc only.</b> <b>L1 (1-2) Basic desc; few if any reasons</b></p>	<p>Management to increase diversity in softwood stands. Details of planning enquiry for Isle of Harris superquarry; management of noise, traffic and runoff for quarrying, NP planning regulations e.g. Peak District. Problems and management of dams e.g. Kielder; overabstraction of groundwater (Ashwell). <u>INT AGRICULTURE:</u> eutrophication and management e.g. Norfolk Broads NP; creation of NSAs as part of the CAP; farm woodland schemes and set-aside to reduce biodiversity loss; organic farming as a chemical free alternative; soil conservation using shelter belts and no-till farming in East Anglia / Prairies.</p>
<p><b>(iii) Describe, and suggest reasons for the changes to the settlement pattern that occurred between 1970 and 2005. (3)</b></p>	<p><b>(ii) Using examples, suggest how the negative perceptions shown in the graph might be improved (4)</b></p>	<p><b>L3 (9-10) Detailed, structured account; focus on management; specific located examples.</b></p>
<p>More sparse / less dense ① town has grown ①; Fewer farms ① due to farm mergers ① and migration to central place ① 2 marks max for desc only or reasons only.</p>	<p>Ideas likely to focus on improved service provision and mobility; mopeds in Cumbria / dial-a-bus schemes; rural job opportunities such as Eden Project; construction of village sports facilities or creation of clubs; rural internet access to increase social contacts. Distance learning courses to improve employability skills. Examples can be any rural areas. <b>L2 (3-4) Exemplified, specific schemes or ideas. Likely to be located for 4.</b> <b>L1 (1-2) One or two general suggestions only</b></p>	<p><b>L2 (5-8) Some structure in a satisfactory account; uses some examples; more general and increasingly about problems. Max 7 if one place only.</b> <b>L1 (1-4) Basic general statements; problems only. Lacks exemplification.</b></p>

<b>QUESTION 2</b>	<b>A</b>	<b>B</b>	<b>C</b>
Study Figure 2 on page 3 in the Resource Booklet. This shows the pattern of food shortages in rural Sudan, 2003.	Study the drawing below. It is about an LEDC rural development project for collecting and storing rainwater.	<b>Referring to any named rural areas, examine the factors causing either an increase or a decrease in population (10)</b>	
<b>(i) The majority of farmers in LEDCs such as Sudan are subsistence farmers. Define this term.(2)</b>	<b>(i) The strategy shown above is an example of sustainable rural development. With reference to the drawing, explain what this means. (4)</b>	<b>INCREASE</b>	
<i>They farm to feed themselves 1 with surplus sold 1 or traded OR none to sell / trade 1 mark for basic point 1 mark for extension</i>	<i>Any points from sustainable/suitability for rural development.</i>	<i>Most likely areas of counter-urbanisation close to major cities e.g. Home Counties, West Midlands. Expect named locations. Factors include better transport links, increased car ownership. Decentralisation of commerce reduces travel times to work; desire for a better QoL free from city stress, crime, pollution. Lower house prices and the rural idyll.</i>	
<b>(ii) Using data from Figure 2 (a) Describe the pattern of food shortages in rural Sudan in 2003. (4)</b>	<i>The basic resource is freely available/environmentally friendly and the construction resources are low cost; technology used is simple/appropriate and uses local skills and materials; the system should last for years, is easy to maintain, The scheme improves QoL (development)e.g. irrigation, clean water, bottom up, promotes social justice. Accept any feasible point.</i>	<i>In LEDC areas natural increase due to BR may be the main cause; also development linked to tourism or resources (Rondonia).</i>	
<i>North/Central areas have largest shortages (up to 300,000 N Darfur) resulting from civil war; southern areas have smaller numbers (100-200,000) resulting from drought; in between is an area of refugees/migrants (plus mixed) with some provinces up to 300,000 having shortages.</i>  <b>L2 (3-4)</b> <i>Detailed desc across the map quoting or making use of data.</i> <b>L1 (1-2)</b> <i>Basic desc; lacks precision and pattern</i>	<i>1 mark for a basic point; 2 marks for an extended point. (note the change from a levels mark scheme)</i>	<b>DECREASE</b> <i>Isolation and remote rural areas; opportunity/mobility/ household deprivation leading to migration of young; lack of job opportunities and career ladders. In some cases high house prices (Lake District) and declining services linked to tourism dependence and holiday homes. In LEDCs, poverty, civil strife, AIDS in Botswana. Lack of resources and environmental degradation.</i>	
<b>(iii) Suggest how civil war and refugee migration may have contributed to the food shortages shown in Figure 2. (4)</b>	<b>(ii) Using examples, suggest how improvements in water supply might have a positive impact on the lives of the rural poor in LEDCs. (6)</b>	<i>Factors will depend on choice of areas.</i>	
<i>Disruption to food supply by war (road blocks, deliberate destruction of crops, loss of male labour). Migration could result from both conflict in the north and drought in the south. Migrants add to population in refugee areas adding to pressure on food supplies.</i> <b>1</b> mark for a basic point, 2 marks for a more extended statement for <b>both</b> war and migration. Max 3 if only war / migration.	<i>Examples might be health related (reducing waterborne disease, lowering IM); agricultural in terms of irrigation, improving yields, food supply and income; reducing labour in collecting water; improved reliability of supply. Bangladesh tube wells, wateraid schemes and even dams may be used as support.</i> <b>L3 (5-6)</b> <i>Several impacts supported by specific examples</i> <b>L2 (3-4)</b> <i>Several impacts but generalised.</i> <b>L1 (1-2)</b> <i>One or two general ideas, likely to focus on Fig2b.</i>	<b>L3 (9-10)</b> <i>Wide range of factors linked to examples of the chosen change. Structured, exemplified detail.</i> <b>L2 (5-8)</b> <i>Some factors linked to change; less precise examples and depth.</i> <b>L1 (1-4)</b> <i>A few general ideas explaining change; lacking depth / examples.</i>  <i>If both increase and decrease covered; mark both and credit the better.</i> <b>Max 7 if only 1 place mentioned.</b>	

QUESTION 3	A	B	C
Study Figure 3 on page 4 in the Resource Booklet. It is a map of Sao Paulo, Brasil.	The wealthy suburb of Alphaville is shown on Figure 3.	<b>Show how the cycle of urbanisation below can be applied to urban areas you have studied (10)</b>	
<b>(i) Sao Paulo is described as a mega-city. Explain this term. (2)</b>	<b>(i) Give reasons why some wealthy residents have chosen to live on the edge of Sao Paulo. (4)</b>	<p><i>Any urban areas are acceptable. The cycle is urbanisation, suburbanisation, counter-urbanisation. Expect some technical terms linked to the Figure.</i></p> <ul style="list-style-type: none"> <li>▪ Expect a sequence of growth, especially during the Ind Rev (e.g. London, Manchester) linked to migration for work.</li> <li>▪ Drift to the suburbs in later 19<sup>th</sup>. C and especially 20<sup>th</sup> to escape pollution etc. Facilitated by rail then road (e.g. Surbiton, Headingly)</li> <li>▪ Move to the fringe and countryside in the later 20<sup>th</sup>. Century facilitated by the car; decentralisation of jobs and services. Commuter villages may be mentioned.</li> </ul> <p><i>An LEDC approach is possible, and equally acceptable.</i></p> <p><b>Reurbanisation is not shown. Credit it's inclusion but do not expect it.</b></p> <p><b>L3 (9-10)</b> Structured coverage of the full cycle shown, with good use of terms; linked to named locations to illustrate main points.  <b>L2 (5-8)</b> Covers most of the cycle; some examples used but less depth. Max 8 if only 2 parts of the cycle are covered.  <b>L1 (1-4)</b> Patchy coverage of the cycle; may be one or two general processes lacking linkage. Limited examples if any.</p> <p><i>Areas within one city is acceptable at L3.</i></p>	
<p><i>Population 8 / 10 million ①</i>  <i>Extension mark for example / very large area / there are 28 or other reasonable.</i></p>	<p><i>The benefits include:</i></p> <ul style="list-style-type: none"> <li>▪ More space, a less congested site.</li> <li>▪ Possibly better air quality away from the CBD.</li> <li>▪ Lower property prices / larger properties.</li> <li>▪ Perceived lower crime / better safety</li> <li>▪ Access to employment if not in the CBD.</li> <li>▪ Other realistic reasons</li> </ul> <p><i>1 mark for a basic reason, 2 marks for an extended reason up to Max 4.</i></p>		
<b>(ii) Describe and Suggest reasons for the distribution of low income housing in Sao Paulo. (4)</b>	<b>(ii) Alphaville is a planned 'gated community' with its own security force and restricted access. Outline the disadvantages of living in such a community. (4)</b>		
<p><i>The housing areas are peripheral / urban edge. Most are to the west and east, some around lakes to the south. There are some satellite areas (Ribeiro Pires and Francisco Morato). Some might see ribbon development along rail and road links. Recent migrants on urban edge; low value land near lakes, but close to city for services and employment. Rail links to commute to work.</i></p> <p><i>Note change from levels.</i></p> <p><i>1 mark for each desc max 2. 2 further marks for linked explanation.</i></p>	<p><i>High cost lifestyle (housing/rent, paying for additional security)</i></p> <p><i>May generate fear of 'outside'</i></p> <p><i>Feeling of being watched; claustrophobic.</i></p> <p><i>May be resentment from the excluded groups.</i></p> <p><i>Any other feasible ideas, including social segregation.</i></p>		
<b>(iii) Define the term urban sprawl. (2)</b>	<b>L2 (3-4)</b> Several clearly stated ideas, linked to the idea of living in a gated community. <b>L1 (1-2)</b> One or two ideas, less well stated		
<p><i>(rapid) growth outward ① of built up area into countryside / rural ①, often unplanned ①</i></p> <p><i>One mark basic point, 2 for extension.</i></p>			
<b>(iv) Briefly state the likely impacts that urban sprawl is having on rural areas close to Sao Paulo (4)</b>			
<p><i>Loss of farmland / land grabs</i></p> <p><i>Pollution of water courses due to waste</i></p> <p><i>Visual pollution from squatters settlements</i></p> <p><i>Uncontrolled development. Other feasible impacts e.g. crime.</i></p> <p><i>One mark for a basic point, 2 marks for an extended point up to Max 4.</i></p>			

<b>QUESTION 4</b>	<b>A</b>	<b>B</b>	<b>C</b>
Study Figure 4 on page 5 in the Resource Booklet. It shows some sustainable city initiatives.	Study the image below. It shows part of an application form for the US 'City Livability Awards', 2002.	<b>With reference to named LEDC cities, assess the success of schemes designed to improve living conditions in urban areas (10)</b>	
<b>(i) Define the term sustainable city. (2)</b>	<b>(i) Choose two of the subject areas A-F above and for each one, explain how it might make the city more 'livable'. (6)</b>	<i>The question is focussed on living conditions i.e. people.</i>	
<i>An urban area that minimizes / manages environmental impact ① and maximizes quality of life for residents ①. Example ①. Reference to sustainable city system (quality of life/social justice/equity). The full Brundtland definition ①, if linked to urban areas = ② 1 mark for basic point, 2 marks for extended/exemplified definition.</i>	<i>Likely choices are brownfields (cleaning up eyesores; creating new houses / services); Community development &amp; housing (better homes improving QoL); Economic development (creation of jobs, raising income levels). ① mark for a basic point linked to making a city a good place to live; award ② marks for an extended point / example up to max 3. 2x3 = 6 max.</i>	<i>Answers may focus on housing, and the improvements that can be made through: Self-help, or aided self-help schemes in Mumbai or Mexico City. Tolerating and improving squatter areas e.g. city of the dead in Cairo. Many areas receive security of tenure as a first step on the road to improvement.  Planned housing, for instance new settlements or government housing schemes (which often have a poor track record due to ongoing costs). The Brown Agenda for LEDC cities may feature, with its focus on environmental health, sanitation and water supply e.g. in Mexico City. Income generation schemes such as money for waste in Curitiba and Cairo (higher incomes leading to more money for housing improvements.) Wider transport and environmental schemes are acceptable, but will need to be linked into improved living conditions / QoL.</i>	
<b>(ii) Using Figure 4 and your own knowledge, suggest how some cities might "lead the way to a greener world" in terms of: (8)</b>	<b>(ii) Outline some possible benefits for a city that wins a 'city livability award'. (4)</b>		
<i>IMPROVING TRANSPORT-reducing air pollution and congestion by cutting traffic (Bogota, Vienna,) may add London CC of other examples; using new fuels to cut toxic emissions (Delhi). REDUCING WASTE – recycling schemes (San Diego); energy efficiency (Melbourne) and alternative energy (Boston). Other examples they know of should feature. <b>L3 (4)</b> Range of specific, sustainable ideas using the figure and own knowledge <b>L2 (2-3)</b> Range of specific sustainable ideas. Max 3 if no link to Figure 4 or use of own knowledge. <b>L1 (1)</b> One or two ideas poorly stated and generalised.  2 X 4 MAX</i>	<i>Largely to do with image and prestige, especially if image was poor before the award. Recognition of the success of regeneration perhaps. Encourages migration of people and businesses and can stimulate growth in a competitive market. May discourage emigration and decline. May give people of the city morale boost e.g. Glasgow city of culture. Note: many ideas are possible here ① mark for a basic suggested benefits, ② marks for an extended point / example up to max 4.</i>	<i><b>L3 (9-10)</b> Structured account with range of named examples in some depth, linked to improvement in living conditions. Clear assessment. <b>L2 (5-8)</b> Some structure and uses some examples, in less depth; some linkage to living conditions. Unlikely to assess; may imply it. <b>Max 7 if one named city only.</b> <b>L1 (1-4)</b> One or two generalised ideas only. No assessment.</i>	

<b>QUESTION 5</b>	<b>A</b>	<b>B</b>	<b>C</b>
Study Figure 5 on page 6 in the Resource Booklet. It shows two photographs of Cardiff		<b>Despite regeneration, some CBDs are still struggling to attract business whilst out of town complexes are thriving. Using examples, explain why this is happening. (10)</b>	
<b>(i) Although the site shown in Photograph A is derelict it has a high land value. Explain why this is so. (2)</b>	<b>(i) Identify the evidence in Photograph B that suggests this area is part of a CBD regeneration scheme. (4)</b>	Expect areas to be named – likely to pick local CBD, OOT may include Metrocentre, Meadowhall, Bluewater etc. The range of reasons is very large, do not expect all: PARKING – difficult and expensive in CBD –v-free and plentiful in OOT. WEATHER – open to elements in CBD –v-covered and AC / Heating in OOT. Some may suggest CBD attempts to produce covered malls. ACCESS – difficult in CBD (Park and Ride in York, Durham) and often some distance from suburbs whereas OOT may be nears and less congested. COST – lower land cost for OOT town means huge developments, larger shops, more space and related developments such as cinemas, restaurants etc. CBD more congested and cluttered – some may mention safety aspect, or even higher pollution in CBD from buses etc. EXPECTATIONS – of a clean modern environment; most OOTs have been updated since opening in 80s/90s whereas CBD finds it harder and more costly to do this (conservation areas, pre-existing roads etc.)	
<i>The site has good access ① (road / rail), close to CBD (also bid rent) ①, has redevelopment potential ①, brownfield site ① Prestige ①.1 + 1 or 2 marks for an extended point..</i>	Older buildings can be seen (1887) and have been cleaned up, and combined with new building. Range of new materials used - glass and steel. Mixed use redevelopment (residential, bars, restaurants). Clear attempt to create 'café culture'. The landuse is CBD – commercial on lower floors, residential above. <b>L3 (4) Well evidenced links to CBD and regeneration.</b> <b>L2 (2-3) Provides evidence for regeneration.</b> <b>L1 (1) One or two basic observations.</b>		
<b>(ii) Outline a programme of fieldwork you could undertake to investigate the environmental quality of the type of area shown in Photograph A. (5)</b>	<b>(ii) Outline the environmental and economic benefits of urban regeneration. (6)</b>		
<i>Fieldwork techniques are called for and should largely be primary; Credit secondary if linked to environmental quality e.g. LA traffic surveys.</i> ▪ EQS / EIA could be carried out ▪ Traffic counts and surveys at various times of the day ▪ Air pollution monitoring; Noise levels ▪ Use of photograph sequence ▪ Questionnaires if linked to EQ <b>L3 (5) Range of appropriate techniques in detail, linked to EQ</b> <b>L2 (3-4) Some range, with some linkage to EQ; less depth</b> <b>L1 (1-2) One or two general techniques, limited EQ link. Max 2 if an undeveloped list.</b>	<b>ECONOMIC</b> <i>Regenerated areas receive an injection of capital; may renew infrastructure and make are attractive to investment; job creation through new types of employment (services in the case of the Photo); virtuous cycle of growth.</i> <b>ENVIRONMENTAL</b> <i>Improved quality of the urban environment; eyesore buildings given new uses; derelict and contaminated land may be cleaned up. Often new trees and landscaping are used.</i> <b>L3 (5-6) Balanced eco/env; range of ideas likely to be supported by examples.</b> <b>L2 (3-4) Some balance but less depth and exemplification. Max 3 if eco or env only.</b> <b>L1 (1-2) One or two general ideas; may be from the Photo.</b>		
<b>(iii) Suggest and justify a new use for this site, once the derelict building has been demolished. (3)</b>		<b>L3 (9-10) Structured account with range of named examples in some depth, both CBD and out of town. A range of reasons are explored.</b> <b>L2 (5-8) Some structure and uses some examples, in less depth; may be unbalanced towards CBD or OOT. Some reasons but less range and depth.</b> <b>L1 (1-4) One or two generalised ideas only. Cursory use of examples, if at all.</b>	
<i>Accept reasonable suggestions (Hotel, Office Space, Apartments, Retail, urban park) = ① mark. Justification could be building up (as ground rent is high) and good access (therefore commercial). Accept CBD edge as commercial use justification ① for basic justification, ② if extended Max 2.</i>			