2013 Geography

Higher Paper 2

Finalised Marking Instructions

Part One: General Marking Principles for GEOGRAPHY HIGHER PAPER 2

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the specific Marking Instructions for each question.

(a) Marks for each candidate response must always be assigned in line with these general marking principles and the specific Marking Instructions for the relevant question. If a specific candidate response does not seem to be covered by either the principles or detailed Marking Instructions, and you are uncertain how to assess it, you must seek guidance from your Team Leader/Principal Assessor.

(b) Marking should always be positive ie, marks should be awarded for what is correct and not deducted for errors or omissions.

GENERAL MARKING ADVICE: GEOGRAPHY HIGHER PAPER 2

The marking schemes are written to assist in determining the "minimal acceptable answer" rather than listing every possible correct and incorrect answer. The following notes are offered to support Markers in making judgements on candidates' evidence, and apply to marking both end of unit assessments and course assessments.

1. The maximum mark for Paper 2 is 100. Markers are encouraged to use the whole range of marks and to give a high assessment for an answer of high quality.

2. The total marks assigned by you for each complete question should be entered in the outer right-hand margin of the answer book. When a question consists of more than one part, the marks assigned to each part MUST BE SHOWN SEPARATELY in the column provided on the inner right-hand side of the book.

It is of great importance that the utmost care should be exercised in adding up the marks. Where appropriate, all summations for totals and grand totals must be carefully checked. Where a candidate has scored zero marks for any question attempted "0" should be shown against the answer.

The TOTAL mark for the paper should be recorded in the box at the top right-hand corner on the front cover of the script.

3. It is helpful in later procedures if points receiving marks are clearly indicated. In general a mark should be awarded for a correct statement.

4. All mistakes MUST be underlined in red pen. A wavy line (~~~~~~~) should be used for something that is not quite right, a single line (-------) for mistakes which, though not very serious, are undoubtedly wrong, and a double line (=======) for gross blunders. These corrections are valuable when borderline cases and appeals are being considered. Where a page shows neither a correction nor a mark, a red tick MUST be placed at the bottom right-hand corner.

5. The marker should take the candidate's answers strictly as they are written; no attempt should be made to read into answers ideas which the candidate may have intended to convey but which have not been successfully conveyed. A caret (λ) should be used to indicate an important omission. A question mark (?) should be used to indicate that the marker cannot understand the meaning intended. The letter "R" should be used to indicate that the candidate is repeating something already stated in the answer.

6. Care should be taken that no credit whatsoever is given to irrelevant parts of answers, however accurate the irrelevant passages may be. Irrelevant passages should be square-bracketed [ ].

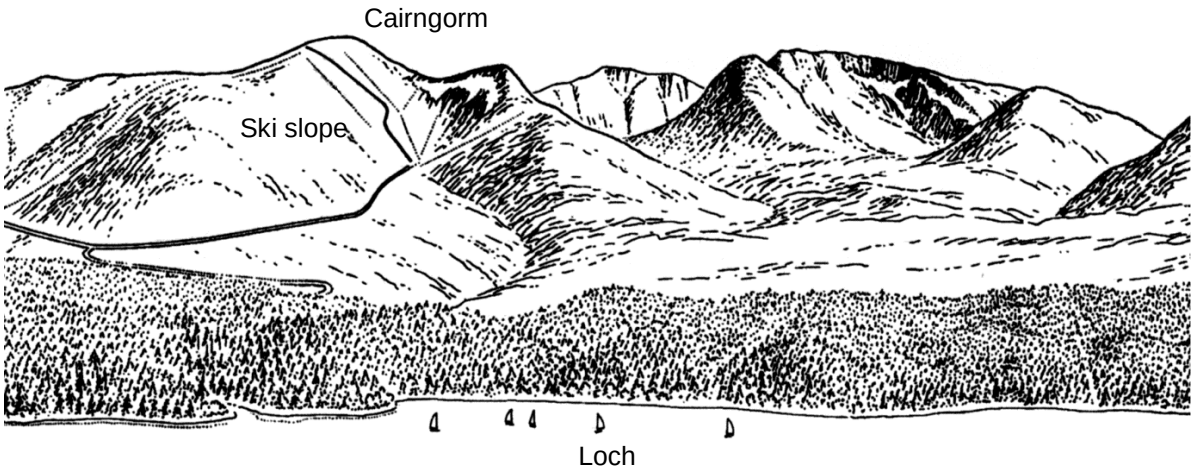
It should be noted, however, that a fact or argument which is irrelevant in one candidate's answer may be made quite relevant by another candidate who has the ability to connect it to the question.

Part Two: Marking Instructions for each Question

Question 1 – Rural Land Resources

Question			Expected Answer/s	Max Mark
1	**a**		**Describe and explain, with the aid of annotated diagrams, the formation of the main features of glaciation in the Cairngorms National Park or any other glaciated upland area you have studied.** Assess out of 20. Award a maximum of 2 marks for any one process eg plucking, abrasion, freeze-thaw. Maximum 2 marks for an unexplained list of processes. For an answer to achieve full marks, well annotated diagrams must be used. Although unlikely, if an answer does not have a diagram then mark out of 15. Up to 3 marks can be awarded for correctly named examples of features, eg for a corrie points could include: • snow accumulates in north/east facing hollow due to lack of melting • successive layers of snow compress into ice/neve • ice moves downhill under gravity • freeze-thaw weathering occurs on the backwall • rocks embedded in ice grind away at bottom of the corrie • abrasion carves out armchair-shaped depression due to rotational movement • rate of erosion decreases at edge of corrie leaving a rock lip	**20**

Question			Expected Answer/s	Max Mark
1	b		**Study Diagram Q1.** **With reference to the Cairngorms National Park or any other upland area you have studied, explain the social and economic opportunities created by the landscape.** Assess out of 8. Answers are expected to link these opportunities to the physical landscape and answers must mention both social and economic opportunities for full marks. Award up to 2 marks for specific named examples not already credited in part (a). Award 1 mark for each list of similar pursuits. Explanation can be developed from: Social Opportunities • mountaineering, hill walking and skiing • forest walks, picnic sites and orienteering • sailing, fishing and other water sports • nature conservation Economic opportunities • tourism and associated employment and profits • development of hotels, bunkhouses and campsites • hill sheep farming • forestry plantations • HEP and water supply • quarrying	8

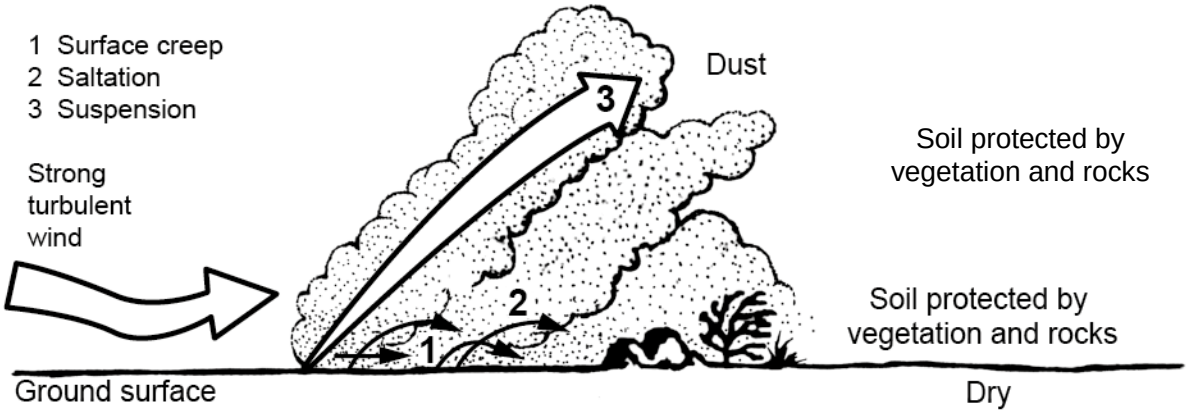


Question			Expected Answer/s	Max Mark
1	c		**Referring to named examples within the Cairngorms or any other upland or coastal area you have studied:** Assess each part out of 11. Award up to 4 marks for specific place names across (i) and (ii), not already credited. Non-authentic answers that fail to supply place names should be given a maximum of 18 out of 22 marks. Award a maximum of 6 marks for any one conflict or any one solution.	
		i	**describe and explain the environmental conflicts that have occurred;** Answers should be able to describe/explain the environmental conflicts including: • traffic congestion on narrow country roads, in honeypot sites, car parks etc • air, noise and water pollution (eg from traffic, some water sports, quarrying) • footpath erosion, damage to walls, fences etc and other forms of visual pollution (eg unsightly visitor centres, the Cairngorm funicular railway, caravan/campsites) • some visitors may cause problems for farmers and landowners (eg litter, animal disturbance)	**11**
1	c	ii	**Describe the solutions to these environmental conflicts commenting on their effectiveness.** To achieve full marks candidates must refer to the effectiveness of their solution. Solutions might include a variety of environmental conflicts depending on the area chosen but for traffic congestion it could include: • Traffic restrictions in more favoured areas/at specific peak times eg one-way streets, bypasses, the use of permits or complete closures eg the Goyt Valley Traffic Scheme or separate 'tourist routes' • Encourage the use of public transport eg park and ride, minibuses and the use of alternative transport eg cycle paths and bridle ways	**11**

Question 2 – Rural Land Degradation

Question			Expected Answer/s	Max Mark
2	**a**		Study Diagram Q2. **Describe and explain the processes of soil erosion by wind.** Assess out of 6 but both description and explanation needed for full credit. The three main processes can be described from the reference diagram: • Surface Creep – the slow movement of the larger particles across the land surface. • Saltation – the 'bouncing' along of lighter particles. • Suspension – the lightest particles (dust) being blown in the air. • The explanation should focus on the principle that the wind can move smaller (lighter) particles more easily than larger (heavier) particles – hence the difference in process. • The largest (and heaviest) particles (stones and boulders) will not be moved by the wind.	**6**

Diagram Q2: Selected processes of wind erosion



Question			Expected Answer/s	Max Mark
2	**b**		**Describe and explain how human activities, including inappropriate farming techniques, have caused land degradation in North America.** Assess out of 14 marks with a maximum of 3 marks for specific named locations. For the Dust Bowl, answers may include: • Use of techniques better suited to the moister eastern states. • Monoculture, especially of wheat or demanding crops (cotton) depleted the soil of moisture and nutrients. • Deep ploughing of fragile soils (previously these had been held in place by natural grasslands). • Marginal land ploughed – particularly in wet years – leaving them in a fragile condition in dry years. • Ploughing downslope creating opportunities for rill erosion. • Farm sizes being too small so forcing farmers to over crop – particularly when prices were low and therefore income was low. • Overuse of irrigation leading to salination of soil in places. For the Tennessee Valley: • Removal of shelter belts leading to increased risk of wind erosion. • Mining and farming cleared the natural vegetation and led to soil erosion. • Overcropping had already weakened the soil. • Lack of fertiliser caused the soil to lose its structure and become vulnerable to erosion.	**14**

Question			Expected Answer/s	Max Mark
2	c		**Referring to named locations in either Africa north of the Equator or the Amazon Basin, describe the impact of land degradation on the people, economy and the environment.** Assess out of 10 marks with a maximum of 2 marks for specific named areas/tribes. For full marks, effects on the people, economy and the environment must be included. For Africa, north of the Equator, answers for the impact on people and the economy may include: • Crop failures and death of livestock, reducing food supply, leading to malnutrition and famine. • Increased infant mortality rates / death rates eg Ethiopia, Sudan • Collapse of the traditional nomadic way of life • Large scale rural migration into overcrowded urban areas, causing more pressure and the growth of shanty towns • Conflict within and sometimes, between countries as people move and re-settle –growth of large refugee camps • Countries increasingly reliant on international aid Environmental effects may include: • Soil structure deteriorates due to over-cropping and over-grazing • Wind erosion can remove large amounts of dried out soil • Advance of the Sahara desert – desertification • Water tables lowered • Torrential rains can lead to gully erosion • Intensified drought due to the albedo effect For the Amazon Basin, answers for the impact on people and the economy may include: • Destruction of the way of life of the indigenous people eg clashes between the Yanomami and incomers • Destruction of the formerly sustainable development eg rubber tappers and Brazil Nut collectors • Clashes between competing groups eg the violent death of Chico Mendez allegedly at the behest of ranchers • Creation of reservations for indigenous people • Increase in 'western' diseases and alcoholism Environmental effects may include: • Adverse effect on the nutrient cycle in the rainforest • Leaching of minerals, removal of top soil and increased laterisation • Increased surface run-off, flooding and silting up of rivers • Loss of biodiversity with danger of extinction in some cases • Loss of potential life-saving drugs • Increased risk of climate change	**10**

Question			Expected Answer/s	Max Mark
2	**d**		**For named areas in North America and Africa north of the Equator or the Amazon Basin:**	**20**
		i	**describe and explain soil conservation strategies that have reduced land degradation;**	
		ii	**comment on the effectiveness of these strategies.**	
			Assess out of 20 marks with a maximum of 12 marks for one geographical area. Award maximum of 8 marks for any one conservation strategy and up to 4 marks for correctly named locations not already credited in (b). Award a maximum of 16 if there is no effectiveness. Answers should provide reasonably detailed information about farming methods and include some explanations eg: Shelter belts on low-lying land affected by strong winds are rows of trees grown across the direction of the prevailing wind. They act as a barrier to slow down winds and protect the soil. **For North America**, answers may include: • Crop rotation • Diversification of farming types • Keeping land under grass or fallow • Trash farming / stubble mulching • Replanting shelter belts • Strip cultivation and intercropping • Contour ploughing • Terracing • Use of natural fertilisers • Soil banks • Improved irrigation Effectiveness may include eg – most likely TVA area or Dust Bowl. For **Contour ploughing** – ploughing round, rather than up and down, slopes – rain has more time to infiltrate rather than form rills and gullies down slopes – the water soaks into the land providing extra moisture as well as preventing damage to the soil on the slope. For **Shelter belts** – planting rows of trees at right angles to the direction of the prevailing wind – these act as a barrier for the land behind by reducing the force of the wind – the higher the barrier / trees the greater the protection.	

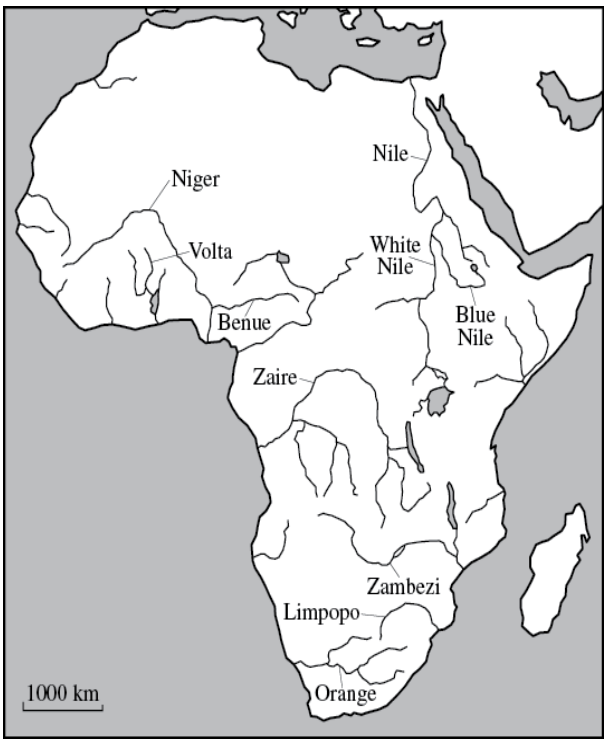
Question			Expected Answer/s	Max Mark
2	**d**		**(cont)** For **Africa, north of the Equator**, answers may include: • Diguettes or 'magic stones' • Dams built in gullies • Animal fences • Dune stabilisation Effectiveness may include eg For **Animal fences** – movable fencing allows farmers to restrict grazing animals to specific areas of land and allows remaining land to recover. This allows farmers to move animals between fenced areas, reducing the dangers of overgrazing and trampling of soil and allowing the soil and land to recover between grazing sessions. For **"Magic Stones"** – This is a simple but very effective method of conserving soil. Diguettes are lines of stones laid along contours of gently sloping farmland to catch rain water and reduce soil erosion. Diguettes allow the water to seep into the soil rather than run off the land. This prevents soil being washed away and can double the yield of crops such as groundnuts. For **the Amazon Basin**, answers may include: • Agro-forestry schemes • Crop rotation • Purchase by conservation groups • Return land to traditional farming Effectiveness may include eg For **Agroforestry schemes** – Agroforestry is the growing of both trees and agricultural / horticultural crops on the same piece of land. They are designed to provide tree and other crop products and at the same time protect and conserve the soil. It allows the production of diverse crops benefiting both land and peoples. For **Purchase by conservation groups** – conservation groups, both national and international, aim to conserve soils by reforestation and the protection of existing forests eg the Amazon Region Protected areas (ARPAs) – created in 2002 by the Brazilian government in partnership with WWF, Brazilian Biodiversity Fund, German Development Bank, Global Environment Facility and World Bank – is a 10 year project aimed at increasing protection of the Amazon. By 2008, 32 million hectares of new parks and reserves were created in the Brazilian Amazon under ARPA, among them the 3.88 million-hectare Tumucumaque Mountains National Park, one of the world's largest national parks.	

Question 3 (River Basin Management)

Question			Expected Answer/s	Max Mark
3	a		**Study Maps Q3A, Q3B and Q3C.** **For North America, Africa or Asia, describe and explain the general distribution of river basins.** Assess out of 9 marks with a maximum of 6 marks for either description or explanation. Award up to 2 marks for named rivers not on the map. Description should include reference to the general patterns / numbers of rivers, and should refer to the directions of flow. Explanation should refer to the fact that drainage basins are determined by the location of the main continental watersheds and that major rivers rise in the main mountain ranges that have greater precipitation, eg the Rockies and Appalachians in North America. Description and explanation for North America river basins might include: • west-flowing rivers are fed from the western side of the continental divide. Rivers like the Columbia-Snake and the Colorado flow west into the Pacific Ocean • north-flowing rivers drain to the Arctic Ocean or to Hudson Bay and are fed from the Canadian Shield • the St Lawrence system is fed from the Great Lakes areas and flows east to the Atlantic Ocean • most of south-eastern USA is dominated by the Mississippi and its tributaries which are fed from the Rockies in the west and the Appalachians in the east and flow to the Gulf of Mexico	9

Map Q3A:
Major river basins of North America

Map Q3B:
Major river basins of Africa



Map Q3C: Major river basins of Asia

Question			Expected Answer/s	Max Mark
3	**b**		**"*The Mississippi river basin extends into 31 states of the USA as well as into southern Canada. It is the third largest river basin in the world"*.** **Study Maps Q3A, Q3D and Diagram Q3.** **Describe and explain why there is a need for water management within the Mississippi River Basin.** Assess out of 10 marks with a maximum of 2 marks for named examples/data lifted from diagrams. Descriptions and explanation of need for water management might include: • Map Q3D indicates that the Mississippi River has many tributaries (such as the Missouri, Platte and Tennessee named on map Q3A), some of which have major tributaries of their own • These give the river basin a very high drainage density leading to unpredictability of river flow which is dependent on when and how quickly snow melts in surrounding mountain areas such as the Appalachians and the Rockies • The river basin extends into 31 states of the USA, leading to a need to manage water supply to satisfy the increasing demand for water for domestic, power, industrial needs across such a huge area • Increasing demands from farmers for irrigation water to try and feed increasing population • Rainfall graphs for Denver, Minneapolis and Memphis indicate variable seasonal nature of rainfall across the river basin – eg fairly dry in Denver most of the year but heavy precipitation throughout the year in Memphis by which time most of the tributaries have already reached the Mississippi – leading to flooding and also run-off of water that could be stored and used in dry months • Temperature graphs for Denver, Minneapolis and Memphis indicate variable seasonal nature of temperatures throughout the year leading to high evaporation rates in the summer but much colder conditions throughout the basin in winter • Diagram Q3D indicates that there is a need to regulate flow of river to prevent flooding during peak discharge and to keep water level high enough for navigation in dry months	**10**

Map Q3D: Mississippi River Basin

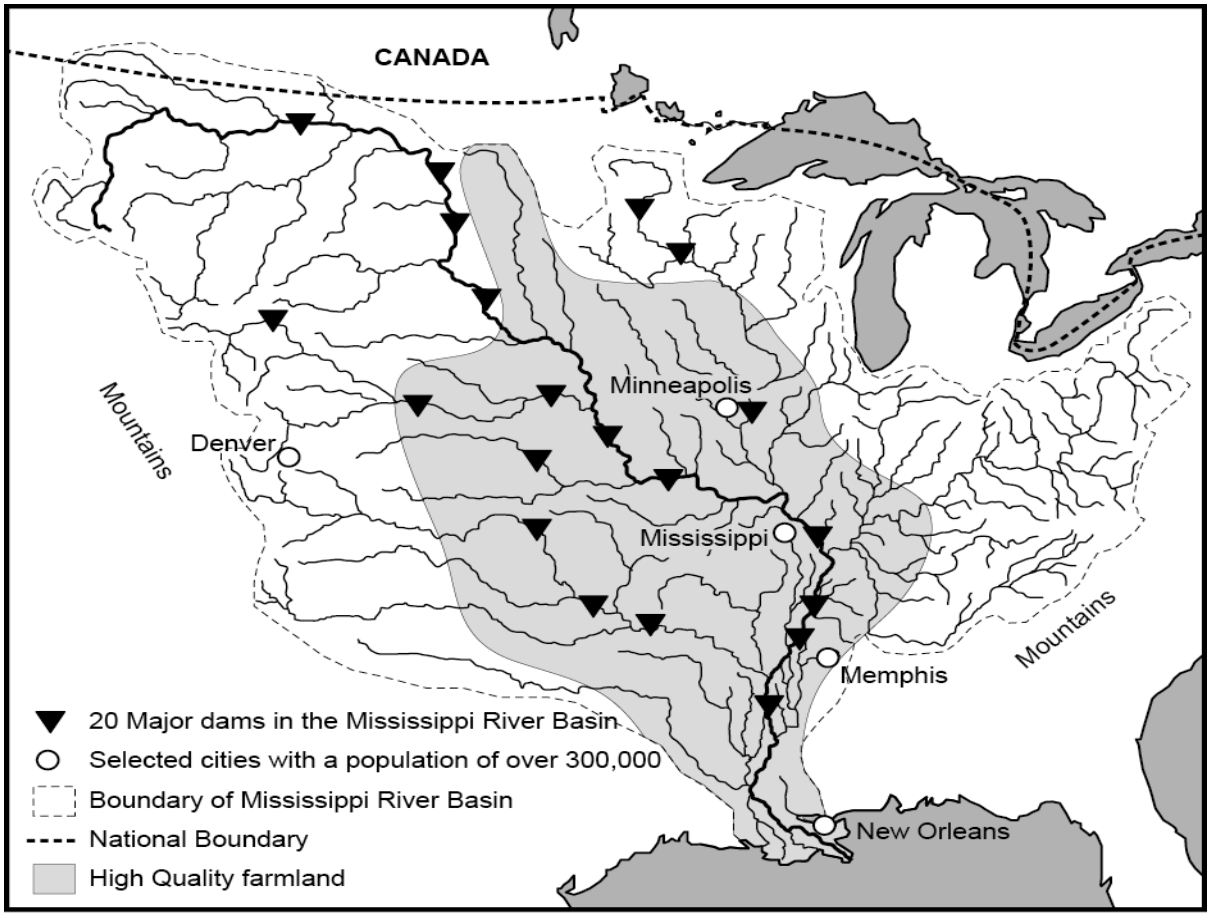
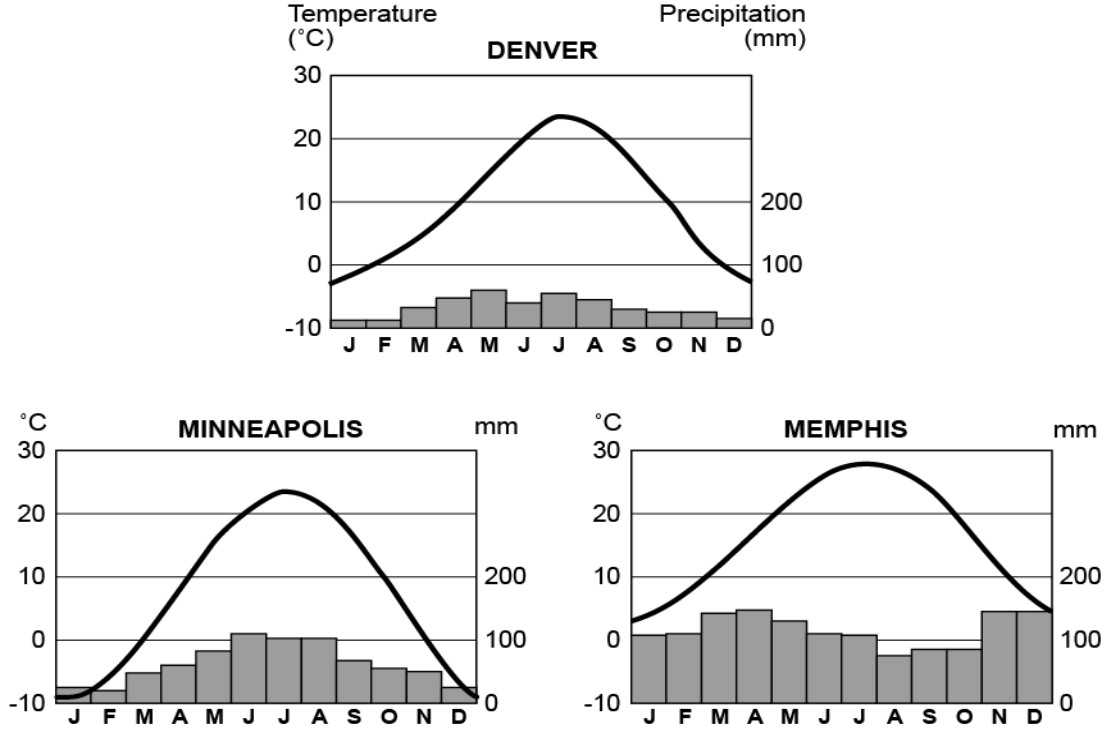


Diagram Q3: Climate Graphs



Question			Expected Answer/s	Max Mark
3	c		**For the Mississippi River Basin or any other river basin management project in North America or Africa or Asia, explain the political problems that may have resulted from the project.** Assess out of 7 marks. Political problems for the Mississippi might include: • difficulties between the 31 states which are represented by different political parties • sharing allocation of water rights • changing needs of different states including increasing populations and increasing irrigation • increased pollution and salinity downstream affecting water quality • shared costs of purification, flood prevention, navigation control and desalination plants • impact of dam construction on consumers downstream • relationship with Canada which has a small part of the Upper Mississippi basin	7

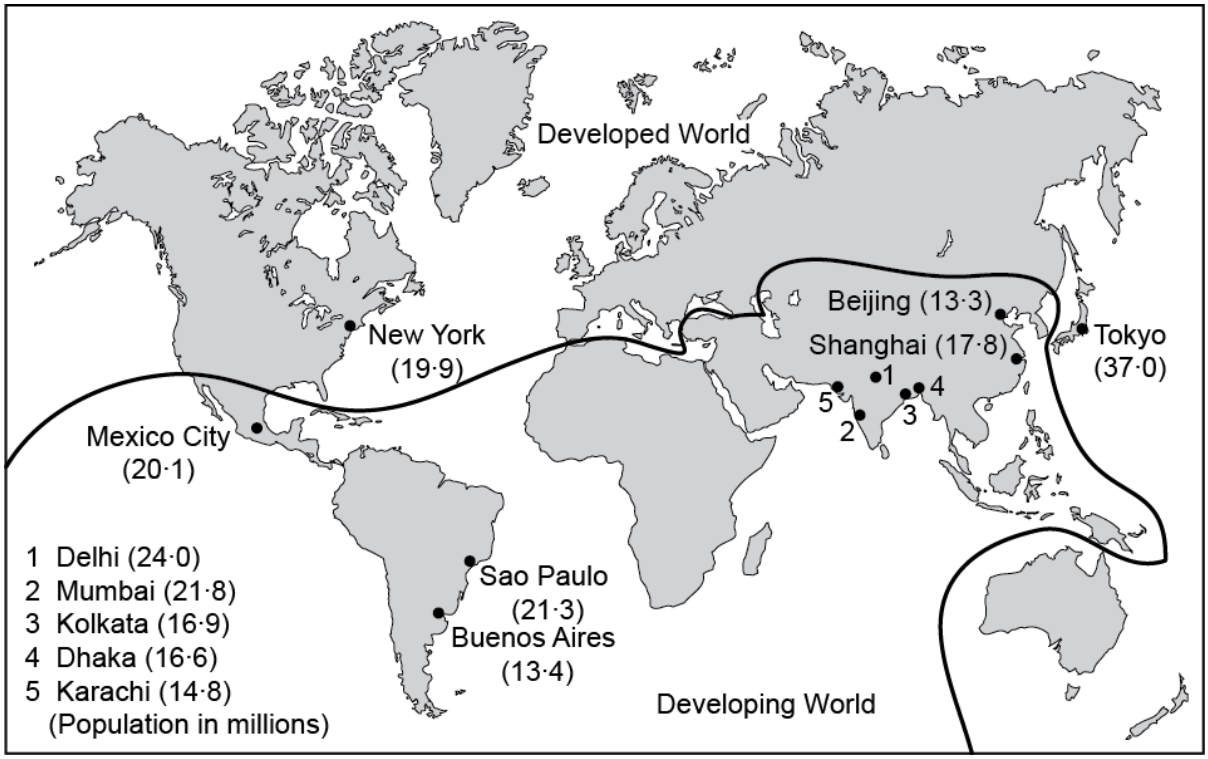
Question			Expected Answer/s	Max Mark
3	d		**Describe and account for the economic, environmental and social benefits and adverse consequences of a named water control project in Africa, Asia or North America.** Assess out of 24. Answers should be authentic for the chosen river basin. Up to 6 marks may be awarded for appropriate named examples illustrating the benefits and adverse consequences of the chosen scheme. Candidates must refer to all 6 sections for full marks. Award a maximum of 20 if only benefits or adverse consequences mentioned. Answers will depend on the river basin chosen. However, for the River Nile they might include: **Social benefits:** • greater population can be sustained with increased food supply • less disease and poor health due to better water supply and more food being available • areas at reservoirs, eg Lake Nasser, give opportunities for tourism, eg game fishing for Nile perch and Tiger fish • regulation of river flow greatly improves flood control on river **Social adverse consequences:** • people had to be moved off their land as valley areas were flooded eg 90,000 Nubians from the Aswan High dam/reservoir site • loss of burial sites and other Nubian sacred areas. Destruction of Nubian nomadic pastoralist lifestyle • increased incidence of water borne diseases such as Bilharzia due to snails in irrigation channels **Economic benefits:** • HEP attracted industries eg Aluminium smelting, fertiliser industries • regulation of river flow improved navigation below the Aswan dam • expansion of irrigated land led to improved farming outputs with possible surplus for sale • improved communications with a weekly ferry from Aswan to Wadi Haifa on Lake Nasser • initial reduction by up to half the sardine and shrimp stock off the delta but now back to pre-dam levels. Mediterranean fishery off the Nile delta has expanded due to run-off of fertilisers and sewage discharges – landings of fish are 3 times pre-dam levels	24

Question			Expected Answer/s	Max Mark
3	d		**(cont)** **Economic adverse consequences:** • huge cost of building the dams eg Aswan cost 1 billion US $. This put Egypt into debt to Russia • high cost of maintaining dams, power plants and irrigation channels • 98% of the silt that used to fertilise the lower Nile is now being trapped behind the Aswan Dam • The red-brick industry, which depended on delta mud, has been severely affected **Environmental benefits:** • Improved and more reliable scenic opportunities for tourist industry. Nile cruises etc. • Lake Nasser provides a sanctuary for waterfowl and wading birds and has more than 32 species of fish • Reliable seasonal water flow for plant and animal life **Environmental adverse consequences:** • water in river and on farmland becomes saline with high evaporation rates – farmers downstream have to switch to more salt-tolerant crops • Poor irrigation techniques have led to waterlogging of soils • change in river regime has caused the loss of many animal habitats eg the drying up of the Nile delta area may lead to inundation of sea water • flooding of archaeological/historical sites eg UNESCO provided 40 million US $ to rescue Abu Simbel and 19 other monuments • the water table is rising in the Nile valley, causing major erosion of foundations of ancient temples and monuments	

Question 4 – Urban Change and Management

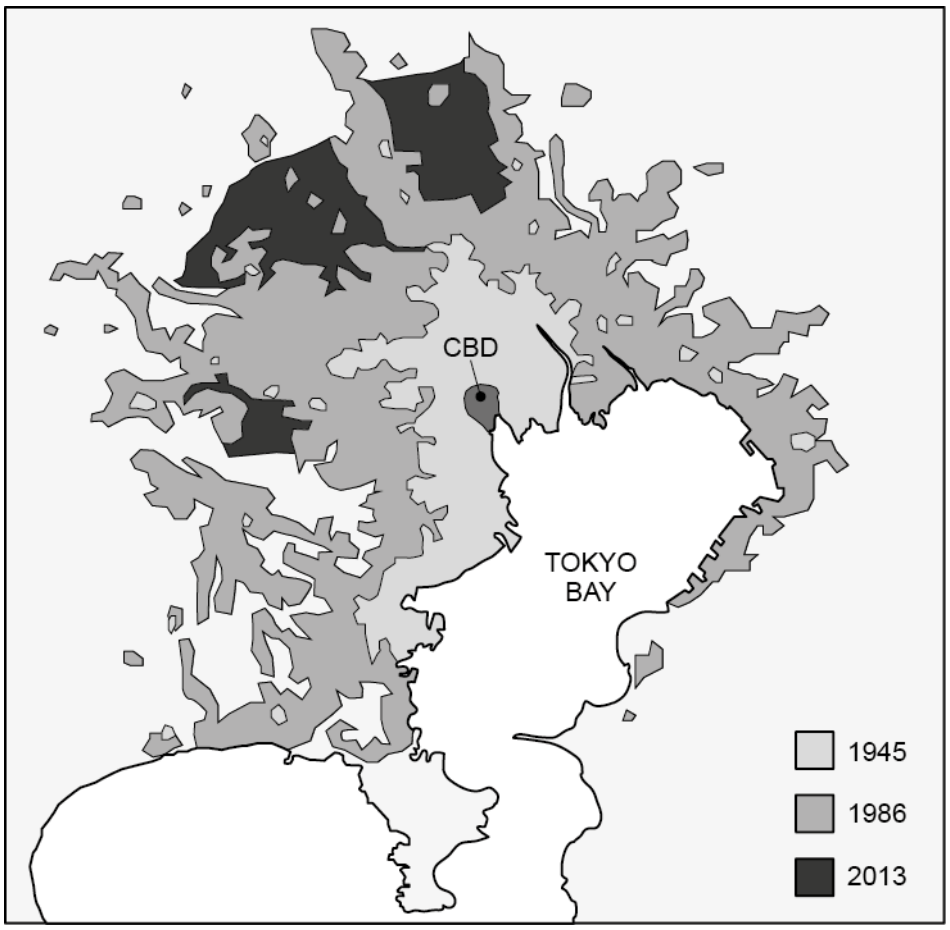
Question			Expected Answer/s	Max Mark
4	a		**Study Map Q4A.** **Describe and account for the projected distribution of the world's largest urban areas.** Assess out of 14 with a maximum of 6 marks for description. Answers may include: • Ten of the twelve largest urban areas expected to be in the Developing World • Tokyo and New York are the only examples from the Developed Countries • Concentration in Asia, where there will be eight out of twelve urban areas, including three in India and two China • Majority on or near coast Explanations could include the following: • Historical / political / strategic factors in location of capital / primate cities • Coastal / river locations for trade, communication and transport of raw materials etc • Mainly areas of low-lying, flat land for ease of building • Access to raw materials leading to proliferation of industrial growth • Accessibility / route centres • Higher birth rates and more rapid growth in Developing areas as opposed to stable or declining rates in Developed areas • 'Push' and 'Pull' factors with improved levels of health, education and economy perceived to be present in the urban areas of the developing world. Large movements of migrants	14

Map Q4A: Twelve largest urban areas in the world 2015 (projection)



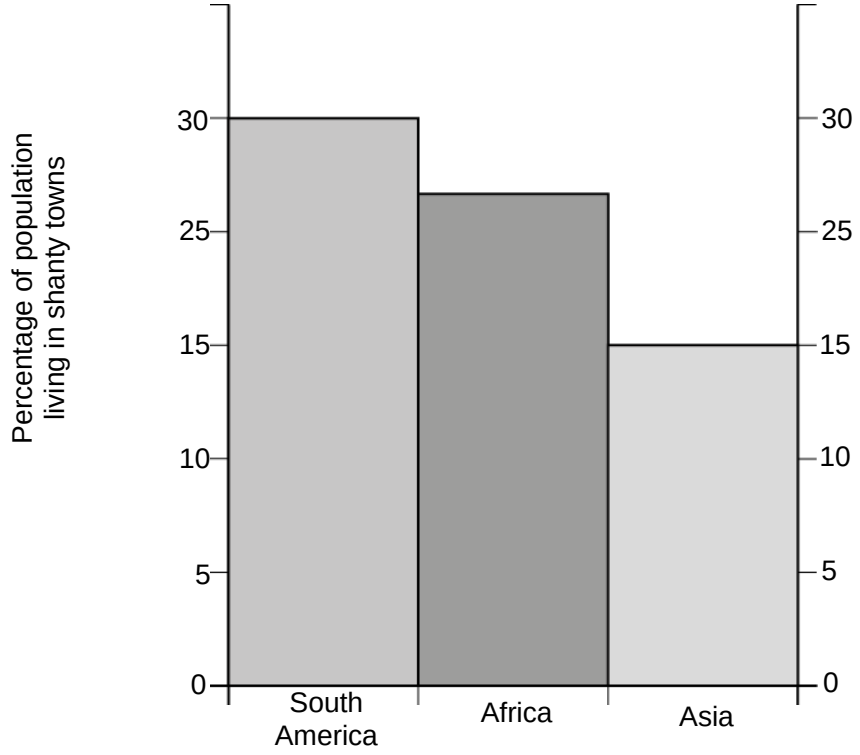
Question			Expected Answer/s	Max Mark
4	b		**Study Map Q4B.** **Referring to Tokyo or any other named city that you have studied in the Developed World:** Assess out of 18 with a maximum of 12 marks for part (i) or (ii). Assess out of 15 if candidates fail to use a named city and a maximum of 3 marks for specific named examples. Award a maximum of 16 marks if no attempt to mention effectiveness. Some candidates may produce a composite answer.	18
		i	**Outline the problems caused by urban sprawl.** Problems might include: • Recreational and farmland used up by urban sprawl • Sprawl threatens biodiversity / wildlife habitats and removes clean air lungs and open land • Increased commuting leading to traffic congestion and increasing levels of air pollution • Buildings and services in inner urban areas not being used or become run down or derelict eg housing, schools, factories and shopping areas	
		ii	**Explain the ways in which the city has tried to resolve this problem and comment on their effectiveness.** Solutions for example of traffic congestion may include: • Policies to reduce cars eg car sharing, high occupancy vehicle lanes, new car charges • congestion charges, cycle routes • Promotion of improved public transport, including lower pricing, trams and integrated transit systems • Park and Ride schemes • Changing road systems eg flexi-time travel, tidal flows, coordinating traffic lights, bus lanes	

Map Q4B: Urban Growth of Tokyo 1945-2013



Question			Expected Answer/s	Max Mark
4	c		**Study Diagram Q4.** **With reference to a named city that you have studied in the Developing World:**	12
		i	**describe the social, economic and environmental problems found in shanty town areas;** Assess out of 12 with a maximum of 4 marks in parts (i) and (ii) for specific named examples eg of 'shanties' or schemes relevant to the chosen city. • Inefficient urban infrastructure eg incomplete water and sewerage supplies and connections, leading to disease spreading • Unemployment / underemployment with the growth of the 'grey' economy and black market • Drugs, crime etc common and pose an increasing threat to public safety. Poor wages for unskilled jobs due to the huge supply of potential labour • Lack of services, schools and hospitals • Severe traffic congestion and associated high levels of air pollution – growth of 'informal' city transport (bringing benefits and drawbacks) • Continued growth of 'shanty towns' often on unstable land such as steep hillsides where landslides are common or on marshland	
		ii	**Describe the methods the residents and local authorities have used to tackle these problems.** Assess out of 6. Methods used to tackle the problems should be authentic and appropriate to the candidate's chosen city: • Local authority plans to improve basic infrastructure, including provision of water / sewerage, power and roads to established 'shanties' • Provision of hardware / utilities with 'self help' schemes eg Sao Paulo where the local population provide the skill / effort to install these ie the 'basic shell' of housing such as breeze blocks being supplied • Building of high-rise apartment blocks in suburbs to provide high-density housing to replace the extremely high-density living in shanty areas • Charity / Church groups offering support and advice to assist in raising levels of education and reducing levels of crime	6

Diagram Q4: Shanty Town Population by Continent



Question 5 (European Regional Inequalities)

Question			Expected Answer/s	Max Mark
5	a		**Study Table Q5A.** **Turkey and FYR (Former Yugoslav Republic) Macedonia are among the countries which have applied to join the European Union. Suggest reasons why these countries may wish to become members of the European Union.** Assess out of 12. A maximum of 4 marks should be awarded for quoting from the table to show the possible benefits of EU membership, eg the larger market improving trade, helping to increase GDP/capita, decrease unemployment and encourage an increase in the service industries. **Countries may wish to become members of the European Union for the following reasons:** • Removing trade barriers to boost growth and create jobs. • Tackling climate change and promoting energy security. • Improving standards and rights for consumers. • Fighting international crime and illegal immigration. • Bringing peace and stability to Europe by working with its neighbours. • Giving Europe a more powerful voice in the world. • Securing food supplies and essential raw materials. • Improving standards of living in the member states. **Specific EU measures to aid development include:** • European Regional Development Fund (ERDF) which provides a wide range of direct and indirect assistance to encourage firms to move to disadvantaged areas eg loans, grants, infrastructure improvements. • European Investment Bank (EIB) provided loans for businesses setting up in disadvantaged areas. • European Social Fund (ESF) assists with job retraining and relocating • Cohesion Fund – aimed at states whose Gross National Income (GNI) is <90% of EU average.	12

Table Q5A: Socio-economic indicators for selected current and prospective members of the European Union

Country	Year of joining EU	GDP per capita 2010 (PPP*)	Industrial Sector (%) 2010			Unemployment (%) 2010
			Primary	Secondary	Tertiary	
Belgium	1957	37,800	2	25	73	8.5
UK	1973	34,800	2	18	80	7.9
Portugal	1986	23,200	12	20	68	10.7
Bulgaria	2007	13,500	6	30	64	9.2
FYR Macedonia	-	9,700	20	22	58	31.7
Turkey	-	12,300	29	25	46	12.4

PPP*= Purchasing Power Parity

Question			Expected Answer/s	Max Mark
5	b		***"The North-South divide refers to the economic and cultural differences between southern England and the rest of the United Kingdom."*** **Study Map Q5 and Table Q5B.** **To what extent does the data provide evidence of regional inequalities within the UK?** Assess out of 12 The three indicators given all identify a similar pattern identifying regional inequalities within the UK – East Midlands, East England, SE and SW England and London generally fare better than Wales, the West Midland and areas further north. Candidates should use some form of comparative statements covering all three indicators to get full marks. • Population change – Regions with the highest projected increase in population are in the south of England, both for the 5 year and 10 year projections. Much slower population increase in Scotland and NE England. Wales, NW England, Northern Ireland and West Midlands have an intermediate growth rate. • Average House Prices – highest in London and SE England while Scotland, Northern Ireland, the 7 most northern regions in England and Wales have figures well below the UK average. • Gross Disposable Household Income – similar to average house prices, with East Midlands and Scotland in an in-between position but Northern Ireland, NE England and Wales worst off for this indicator.	**12**

Map Q5: UK statistical regions

Table Q5B: Selected indicators of development for UK regions

	Gross disposable household income 2010 (UK average = 100)	Average house prices 2011 X £1,000	Projected population change (%)	
			2009-2014	2009-2019
Scotland	94	146	0.4	0.6
Northern Ireland	85	144	3.1	4.9
Wales	87	146	2.1	4.4
NW England	91	151	2.3	5.0
NE England	85	143	1.1	2.4
West Midlands	92	167	2.5	5.3
Yorks & Humber	91	150	4.5	8.9
East Midlands	94	156	4.8	9.2
East England	107	196	4.5	9.0
SE England	115	273	4.1	9.4
London	120	437	5.5	9.9
SW England	99	223	4.7	8.0
UK average	**100**	**233**	**3.6**	**7.0**

Question			Expected Answer/s	Max Mark
5	**c**		**Describe and explain the physical and human factors that have led to regional inequalities within the UK or any other country of the European Union which has marked differences in economic development between regions.** Assess out of 15 with a maximum of 9 for either physical or human factors. Award up to 4 marks for appropriate and relevant examples. The UK's regional inequalities stem from a combination of the physical differences between the higher and steeper land to the north west of the UK compared with the lower and more gently sloping land to the south and east coupled with the remoteness of the north-west compared to the proximity of the south-east to the 'core' of the EU. Candidates may justifiably stress the positive and negative aspects of different regions. • Physical factors might mention advantages / problems such as relief, rock types, climate and water supply, soil fertility and erosion • Human factors might mention decline in traditional heavy industries, growth areas of new lighter industries and hi-tech industries, out-migration from north and differences in accessibility related to communications and remoteness	**15**

Question			Expected Answer/s	Max Mark
5	**d**		**For your chosen country in part (*c*), discuss the ways in which the National Government has tried to tackle problems in less prosperous regions and comment on the effectiveness of these strategies.** Assess out of 11 giving up to 3 marks for specific named projects. Candidates who fail to comment on effectiveness can score a maximum of 9 marks. UK national government help could include: • Regional development status • Enterprise Zone status • Capital allowances, training grants, assistance with labour costs • Specific assistance to former coal mining/iron and steel areas • Intervention of national government resulting in the relocation of major government employers or state owned firms to disadvantaged areas eg DVLA in Swansea, MOD in Glasgow • Tesco Finance to Glasgow - £5 million Regional Selective Assistance (RSA) grant Comment should be made on the effectiveness of the measures outlined eg the long term benefits or disadvantages of using these incentives.	**11**

Question 6 – (Development and Health)

Question			Expected Answer/s	Max Mark
6	a		**"Number of people per doctor" is an example of a social indicator of development.** **Name fully two other social indicators and two economic indicators which might identify different levels of development.** Assess out of 8. 2 marks should be awarded for each fully named indicator. Social indicators could include: • Average life expectancy at birth in years • Infant mortality rates per 1000 live births • Adult literacy rates (percentage) Economic Indicators could include: • Gross Domestic Product per capita US$ • Average Annual Income per capita US$ • GNP per capita US$ • Percentage of working population in Primary Sector	8
6	b		**Using named examples, suggest reasons for the wide variations in development which exist between Developing Countries.** Assess out of 12, with a maximum of 4 for named examples. Maximum of 6 for generalised responses which fail to make specific points, or refer to differences within a country. Candidates should be able to refer to: • Oil rich countries such as Saudi Arabia; well-off countries like Malaysia which can export primary products such as hardwoods, rubber, palm oil and tin. • Poor Sahelian countries like Mali, Chad and Burkina Faso which are landlocked, lack resources, have poor quality farmland, high levels of disease. • Newly Industrialised Countries eg South Korea, Taiwan have high GNPs due to steel making, shipbuilding, car manufacturing, clothing etc. countries with entrepreneurial skills and low labour costs. • Large countries eg Brazil have variety of opportunities ranging from resources in Amazonia to tourism in South East Brazil around Rio. • Tourist destinations eg Sri Lanka, Thailand, Barbados earn foreign currency and improve living standards and create new job opportunities. • Countries which suffer natural disasters which restrict development and cause massive damage to infrastructure eg drought in Somalia, floods/cyclones in Bangladesh, hurricanes in Caribbean, earthquakes in Haiti and tsunamis in Indonesia. • Mountainous countries eg Tibet which restrict communications and farming. • Areas of political instability which diverts aid and resources away from areas of need eg civil war in Sudan, conflict in Afghanistan, corruption in Zimbabwe.	12

Question			Expected Answer/s	Max Mark
6	c		**Study Map Q6.** **Malaria, cholera and bilharzia/schistosomiasis are water related diseases which remain the biggest causes of death in Developing Countries.** **Select one of the diseases above.**	
		i	**Describe the physical and human factors which put people at risk of contracting the disease.** Assess out of 8. Maximum of 6 if both physical and human factors are not covered. Answers will depend on the disease chosen but for malaria might include: Physical factors: • Hot, wet climates such as those experienced in the tropical rainforests or monsoon areas of the world • Temperatures of between 15C and 40C • Areas of shade in which the mosquito can digest human blood Human factors: • Suitable breeding habitat for the female anopheles mosquito – areas of stagnant water such as reservoirs, ponds, irrigation channels • Nearby settlements provide a 'blood reservoir' • Areas of bad sanitation, poor irrigation or drainage • Exposure of bare skin	**8**

Question			Expected Answer/s	Max Mark
6	**c**	**ii**	**Describe the measures that can be taken to combat the disease and explain the varying effectiveness of these measures.** Assess out of 17 marks with a maximum of 14 if no effectiveness of measures. Repeat comments on effectiveness eg ...is expensive…should only receive credit once. Award up to 5 marks for specific named examples. NB Maximum of 1 mark each should be allocated for examples of insecticides, drugs and herbal medicines. Measures taken to combat malaria may include: • insecticides eg DDT – however this is environmentally harmful – impacts on the food chain and is supposed to be banned as a result. In addition the mosquitoes build up a resistance to chemical insecticides through time and they become less effective • newer insecticides such as Malathion – these are oil-based and so more expensive/difficult for developing countries to afford – also stains walls and has an unpleasant smell – so not popular • mustard seed 'bombing' – larvae become wet and sticky and drag mosquito larvae under water drowning them • egg-white sprayed on water – suffocates larvae by clogging up their breathing tubes (as with mustard seeds – wasteful, costly and fairly impractical) • BTI bacteria grown in coconuts. Fermented coconuts are, after a few days, broken open and thrown into mosquito infested ponds. The larvae eat the bacteria and have their stomach linings destroyed. Cheap, environmentally friendly and 2/3 coconuts will control a typical pond for up to 45 days • larvae eating fish eg Nile Tilapia, Muddy Loach – effective and a useful additional source of protein in people's diets • drainage of swamps – requires much effort – not always practicable in the Tropics.	**17**

Question			Expected Answer/s	Max Mark
6	**c**	**ii**	**(cont)** Treating those suffering from Malaria: • drugs: ○ Chloroquin – easy to use/cheap but mosquitoes are developing a resistance to it ○ Larium – powerful, offers greater protection but can have harmful side effects ○ Malarone – fairly new drug – said to be 98% effective – few side effects but very expensive ○ Vaccine – still being developed/not yet in widespread use (eg Dr Manuel Pattaroya's in Colombia) • education programmes: ○ insect repellent eg Autan ○ cover skin at dusk when mosquitoes are most ravenous ○ sleep under treated mosquito nets – fairly cheap • herbal remedies : Quinghaosu – extracted from plant – used as a traditional cure in China for centuries – now in pill form – easy to take – may be the long awaited breakthrough No one solution has been found. A combination of strategies/control methods, combined with increasing public awareness/education programmes (eg WHO's 'Roll Back Malaria' – a global campaign aimed at halving the number of malaria cases by 2010) will be needed just to keep malaria in check. Some progress may be made thanks to the millions which the Bill and Melinda Gates Foundation has set aside for research into a cure.	

Question			Expected Answer/s	Max Mark
6	c	iii	**Explain the benefits to a Developing Country of controlling the disease.** Assess out of 5 marks. The benefits of controlling the disease on a Developing country might include: • Saving money on health, medicines, drugs, doctors etc. • Reduction in national debt • Healthier workforce and increased productivity • Longer life expectancy and decreased infant mortality • Money available to be spent on education and infrastructure • More tourism/foreign investment attracted to country, leading to more employment, increased prosperity	**5**

Map Q6: Countries affected by Malaria

[END OF MARKING INSTRUCTIONS]