Mark Scheme (Standardisation)
Summer 2008

GCE Geography B (6474/01)

A PEARSON COMPANY

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.

- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.

- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.

- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.

- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.

- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.

- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.

- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question Number	Explain the different weather conditions experienced by Jan, John and Mike.
1(a)	Expects details of weather linked to systems / air masses

JAN – Currently just behind the cold front; the two fronts would have passed yesterday / last night causing belts of rain – heavy and blustery (wind shear; tight isobars) associated with the CF. The temperature has fallen due to moving from the Tm warm sector into the Pm air behind the CF. System moving east.

JOHN – the area is dominated by high pressure, Tc is the most likely. Descending air so cloudless skies and high solar radiation input (27). Haze could be dust descending with the air. The stable high pressure is likely to have been present for weeks – some might refer to this as blocking.

MIKE – the bracing easterly is circulating anti-clockwise around the low (depression), drawing in polar air from the north east; the cold air mass explains the low temperature of 12. The location is some way from the occluded front to the south, but some cloud would be expected as the air flow is maritime. |

Level	Mark	Descriptor
Level 1	1-4	One or two basic ideas on air masses / pressure; descriptive rather than explanatory. Lacks terminology.
Level 2	5-8	Weather at locations explained; possibly 2 in some depth showing understanding of weather conditions, but less strong on 1 location. Some terminology; some explanations partial /inaccurate. *Max 8 if all 3 postcards are not mentioned.*
Level 3	9-12	Weather at the 3 locations explained in depth; with reference to air masses and/or weather systems; balanced and well structured using good terminology.

Question Number	Using examples, explain how the weather associated with the passage of depressions can sometimes cause management problems.
1(b)	Expect details of depressions such as 1987 ('hurricane') or 1990 (Burns Night). The management problem could include: • Forecast accuracy (track, wind speed) – the difficulties of providing accurate information without causing unnecessary disruption. The problems of inaccurate forecasts (1987). • Disruption to infrastructure (fallen trees, power lines) due to strong winds – difficulties for emergency services in terms of access and dealing with incidents; transport disruption and the difficulty of keeping roads/ rail open. • Coastal flooding (53, 90) can be extensive due to low pressure – major hazard requiring a large scale co-ordinated response; areas cut off; spring tides. • Timing – the 90 / 87 day / night contrast may be mentioned. • Very heavy rain can cause flooding (1952) (blizzards in winter – 1993 USA storm of the century) – further disruption to transport services and possibility of people stranded; and add to already high antecedent moisture causing riverine flooding. Max 8 if relevant management problems well explained but related to hurricanes only.

Level	Mark	Descriptor
Level 1	1-4	Descriptive and anecdotal; may list the hazards resulting from one event e.g. 1987.
Level 2	5-8	Some structure in an account which discusses hazards and problems and may start to examine management problems. Includes some reference to specific examples.
Level 3	9-13	Uses a range of specific examples to outline management problems; focus is on difficulty of managing; structured.

(Total 25 marks)

Question Number	Explain the likely physical and human causes of the climate trends shown.
2(a)	Expect some description, as this is implied in identifying the trends. Credit accurate use of the data linked to explanations. • **LONG** – variations in solar radiation resulting from Milankovitch cycles; credit knowledge of the 3 cycles **(PHY)** as an explanation for the long cycle medieval warm period – little ice age- modern warm period. Long term cycles in solar activity have been linked to changes at these time scales, such as the little ice age (maunder minimum) **(PHY)**. • **MEDIUM / SHORT** – likely to focus on global warming and the EGE; credit explanations of the process linked to the warming trends **(HUM)**. Short term variations in solar input such as the 11 year sun spot cycle may be used to explain the apparent warm / cold cycling of the medium term graph **(PHY)**. Volcanic activity has been linked to cooler periods (1991 Mt Pinatubo) as volcanic ash and gases can reduced solar input through the lower atmosphere **(PHY)**. El Nino may feature for specific years. Physical explanations are more numerous, but expect GW / EGE to provide some balance in L2 and L3.

Level	Mark	Descriptor
Level 1	1-4	Unbalanced; GW and little else; processes and terminology uncertain; little reference to timescale.
Level 2	5-8	Less range of possible causes. May focus on one area e.g. GW; physical explanations are more cursory. Some terminology; may neglect the graphs. <mark>Global Warming only <u>or</u> all physical causes max 8.</mark>
Level 3	9-12	Accurate explanation of the trends referring to human and physical likely causes; balanced and structured; uses terminology and explanations are cogent. <mark>Full coverage of all three graphs is not necessary for L3.</mark>

Question Number	Suggest how **both** national policies and local actions might help to lessen the impact of future climate change.
2(b)	Essentially focussing on reducing pollution output, but adaptations are equally valid. There should be a clear link to climate change. Take a catholic view of policy versus action. • **POLICIES** (national) – reducing emissions by changing energy balance (renewables, nuclear); taxing emissions (polluter pays) or polluting vehicles (CO2 from cars/VED); targets to reduce consumption of energy (credit if implementing an international obligation, such as Kyoto); subsidies for fuel efficiency or fuel efficient products. Strategic transport initiatives. Contraction and convergence. • **ACTIONS** (local) – should be smaller scale, and may be personal e.g. recycling, reducing personal carbon footprint via public transport use of local food suppliers; personal consumption decision about car and house size. Public transport initiatives and attempts to create 'green' or carbon neutral cities. Local recycling schemes.

Level	Mark	Descriptor
Level 1	1-4	One or two general ideas, likely to be undifferentiated and lacking detail. Lacking any structure
Level 2	5-8	Some range in a reasonably structured account; may be more unbalanced and the suggestions more generalised. Extended list at the lower end. Some exemplification of policies and/or actions. **Max 8 if national or local only.**
Level 3	9-13	Structured, balance range at both scales; polices and actions are illustrated with specific examples; may provide an overview; evaluative style. Linked to climate change.

(Total 25 marks)

Question Number	Explain the processes that may be causing extinction of species in the **three** groups of hotspots shown.
3(a)	The description has been done for the candidate (Fig 3 – table). The processes are both physical and human.

- **COLD** – high latitude areas are most susceptible to climate change; species here lack the ability to adapt and their permafrost environment may be destroyed (loss of sea ice for migrating polar bears); the areas are threatened by resource exploitation (oil) as more easily accessible resources run out. Species have many adaptations, but lack elasticity.

- **ISLANDS** – endemic species; small total numbers and a limited gene pool; susceptible to alien species introduced by tourism. Sea level rise is a threat in the Maldives and Vanuatu; islands may simply be 'lost'; fringing coral is vulnerable to tourism, over fishing reducing reproductive capacity and coral bleaching. Many are tourist 'hotspots', so development pressures may threaten small niches.

- **FORESTS** – widespread destruction for development (farmland, timber); many species exist in tiny niches and have evolved to be very localised. This makes them fragile. Species such as the orang-utan may be pushed into ever smaller areas / reserves with unviable numbers / genetic diversity. |

Level	Mark	Descriptor
Level 1	1-4	Largely descriptive account of 'destruction'; some reference to places but little reference to ecosystems or processes.
Level 2	5-8	Some structure in a more general account; uses the resource but may not refer to all three environments; some examples used with detail at the top end. The explanations may focus on economic threats rather than ecological processes.
Level 3	9-12	Structured; effective use of the resource; refers to all three environments and processes leading to species loss; likely to be exemplified in some depth. Terminology of biodiversity/ ecology.

Question Number	Evaluate the role of **named** organisations and groups in protecting and managing biodiversity.
3(b)	**NGOs –** pressure groups / charities such as greenpeace, FoE, WWF have a role in highlighting key indicator species which are threatened (sometimes criticised for the 'soft and cuddly' approach); some take a more direct role in managing areas (WWF) and ensuring protecting. St Lucia SMMA and WWF are likely examples. Public campaigns against whaling / ivory / fur have been successful at least partially. **International bodies** – UNESCO / Cites /IWC – involved in setting rules and managing their implementation to protect biodiversity; policing is difficult internationally and agreement often hard to reach (IWC); reliant on the work of national governments and funding. **Governments** – usually the funders and law makers – set national policy and priorities. In the UK NPs and other protected areas may be used as examples; often several agendas clash (conservation – v- development / tourist access. Other possibilities include TNCs, landowners and possibly individuals (accept these)

Level	Mark	Descriptor
Level 1	1-4	Names some groups; brief details of what they do; vague and lacks ecology / biodiversity link.
Level 2	5-8	Narrower range of groups; descriptive details of work rather than roles but with some specifics; expect some evaluation at the top end. Linked to ecosystems / areas. **For one group only Max 8.**
Level 3	9-13	Structured detailed account; uses named examples to outline roles for a range of groups; protection and management included and evaluative in style and content. Linked to biodiversity. Evaluative and structured account of the management of one area involving several groups is acceptable.

(Total 25 marks)

Question Number	Using the data in Figure 4, explain the **gradual**, but **uncertain**, projected rise in UK total population from 2001.
4(a)	Essentially figure 4 shows some components of the population system; answers may focus on a systems approach.

• **GRADUAL** – credit details of how the different graphs interact. The number of births exceeds deaths, giving a positive input, although this narrows towards 2016. The Millennium boosted total births. Fertility remains low and steady, below the replacement level of 2.1, although it climbs slightly to 2016. This suggests population should be static / shrinking. Net migration is positive, which must be the major component in the gradual growth; net migration may be explained as the immigration / emigration balance.

• **UNCERTAIN** – None of the variables are 100% certain, some are more certain then others. Deaths can be predicted (but disease?), but births / fertility are open to change (cultural and economic factors); migration could affect fertility; immigration policy my change, and emigration is variable too (elderly moving to Spain etc, - the trend may or may not continue). Credit problems with Census e.g. 'missing million' from 2001. |

Level	Mark	Descriptor
Level 1	1-4	Lacks clarity on the 'system' idea; comments are separate from each other; one or two ideas on gradual and / or uncertain.
Level 2	5-8	Some structure in a less clear account; likely to explain net migration/ Br/Dr/fertility trends but limited link to total population; less clear on gradual / uncertain. Some demographic terms.
Level 3	9-12	Structured explanation which uses the data carefully; language is that of demography – addresses both the gradual and uncertain ideas in a balanced way. Linked to total population.

Question Number	Using named examples, assess the chances of countries achieving an 'optimum population'.
4(b)	Expect a definition / diagram of optimum population from some. Credit those who question the concept, if this is integrated into a wider discussion. Look for a range of examples, but these could all be over- or under-. • **UNDERPOPULATED** - Singapore and France might feature (difficulties of changing cultural and economic attitudes) as they have both expressed concerns about low numbers; the UK is an obvious example of the problems of using immigration to fill a population gap. • **OVER POPULATED** – China, details of the policies are well known and many will see the attempt as a failure due to gender bias and ageing; in India the fragmentary regional policies might be contrasted with Kerala / Mauritius as examples of more enlightened (and successful?) policies. Accept trans-migration / regional policies as a way of relieving population pressure in some areas and relieving underpopulation in others. **Note** a resources approach is also possible i.e. reducing over-population by increasing the resource base (exploitation, alternative energy sources, importing) or using resources more efficiently (recycling etc.)

Level	Mark	Descriptor
Level 1	1-4	Policies (China) set out with no link to the key idea. May understand optimum population but offers limited support.
Level 2	5-8	Understands optimum population; the examples are less well linked to the initial idea; may begin to list policy detail with little further comment. Begins to assess at the top end. One country well assessed max 8.
Level 3	9-13	An overview of optimum population; range of examples used in a structured account which provides an assessment of success; appreciates the difficulties.

(Total 25 marks)

Question Number	Compare the trends in destinations of **economic** migrants with those of refugees. Suggest reasons for the differences.
5(a)	Look for a thorough comparison, but do not expect every year / area to be mentioned. **COMPARE** • Overall economic migrant numbers rise, especially from 1990 onwards – refugee numbers leapt in the 1980s, but have declined slowly since. • Europe has overtaken Asia as the most popular destination for eco migrants; the most rapid growth has been in Europe and North America. • Europe is not a major destination for refugees: Asia and Africa are; other areas barely feature. **REASONS** • Increasing mobility in the 80s and 90s, linked to globalisation; the opening up former communist areas and (to some degree) migration being encouraged to the EU and USA to fuel growth. • Connected 'core' areas see most eco migration; poorer and / or peripheral have seen less. Economic migrants are prepared to travel long distances. • Refugees are like to move close to home, their source and destination may be the same (Africa, Asia); N America and Oceania are isolated and distant so numbers are low. • The downward refugee trend might suggest earlier / successful intervention to keep the needy where they live.

Level	Mark	Descriptor
Level 1	1-4	Description of some trends but incomplete; reasons lack range and realism. Narrow focus.
Level 2	5-8	At lower end some descriptive comparisons, reasonably thorough and using graphs. At top end will have some explanations for differences.
Level 3	9-12	Genuine comparison ("but", "whereas" etc.) making effective use of the graphs; thorough and structured. Range of explanations linked to real situations.

Question Number	There are many types of **international** migrant. For named **host** countries, explain why some migrants may be valued more than others.
5(b)	Responses may begin by defining refugee, asylum seeker, illegal, economic. These must be international. <mark>Historical examples acceptable.</mark> Value might be considered - it could be economic, cultural, social / demographic. A UK focus is a strong possibility but other examples should be used. • Value could focus on economic migrants where they fill a skills gap (teachers, NHS, plumbers) or do low wage jobs the host country shuns (farm workers, bar staff, hotels). Australia's policy is strongly 'value' based. • Executive / managerial migrants tend not be even seen as 'migrants' as their value is high to TNCs etc. • Cultural value might focus on the contribution to food, diversity of cities and concepts of multiculturalism. • Some discussion of the 'value' of total numbers is possible – the idea of a tipping point. • Value could also related to legality – with legal migrants being seen as more valued than illegal. • The value of refugees could be in doing the 'right thing' be meeting international obligations – some might mention prestige or international influence. <mark>Be flexible with interpretation of place. An account of one country with several named places/areas can achieve L3.</mark>

Level	Mark	Descriptor
Level 1	1-4	Narrow range (e.g. illegal only), anecdotal style; may drift towards sensationalism.
Level 2	5-8	<mark>Some balance and some examples; may be less evidence based; less clarity of types of migrant.</mark>
Level 3	9-13	A balanced explanation; uses a range of examples of migrants <mark>and/or</mark> places. Economic ideas feature, as well as others. <mark>May</mark> include definitions.

(Total 25 marks)

Question Number	Choose **two** of the **groups** of 'players' in the global economy from Figure 6. Explain how each of them can influence the economic prosperity of countries.
6(a)	Note that the graph shows prosperity rising and falling. The focus could be national, regional or both. **If more than 2 groups chosen, credit the best 2.** **Accept any realistic examples.**

	• NGOs Pressure on the other groups e.g. trade reform or implementing fair trade schemes. Basic needs and bottom up development to raise incomes. Improving skills, education and health to assist development	• GOVERNMENT Incentives to encourage location (FTZs, EPZs) Development of infrastructure Regional aid to areas which are restructuring. Possibly advertising and promotion or areas to encourage investment.
	• INTERNATIONAL ORGANISATIONS Provision of development loans and management of large schemes, Debt relief linked to economic reform to encourage growth. Increasing world trade through free trade agreements (banana trade may be argued the other way)	• TNCs Location and the provision of jobs and therefore income growth. The reverse is also possible, when footloose companies relocate. Employment generates skills and also spin offs creating a virtuous cycle (India)

Level	Mark	Descriptor
Level 1	1-4	One or two general ideas on prosperity; unbalanced and lacks real world links.
Level 2	5-8	Some structure to an explanation which uses some examples; may be unbalanced across choices. **Some link to prosperity.** **Max 8 for one 1 group only.**
Level 3	9-12	Structured explanation which uses examples to illustrate prosperity; may consider growth and decline.

Question Number	Assess the impacts of the global shift in **one** named manufacturing **or** service industry.
6(b)	- Tourism, call centres, banking and the car industry are possibilities. - The shift should be defined and then illustrated. - Expect details of the winner and loser in the shift, for instance the movement of call centres to India leading to UK job losses, or the drift in car production from EU core areas towards the new eastern member states. - The impacts may be social, economic, environmental, and can be positive and negative. There may be economic costs to the UK of losing jobs, but possibly environmental benefits in the shift of pollution abroad.

Level	Mark	Descriptor
Level 1	1-4	Basic statement of the shift and a few unstructured impacts or some general details of named TNC or country. Unbalanced.
Level 2	5-8	Some structure in a descriptive account with less certain detail. The impacts may be less balanced. Named TNC with some details of shifting production Max 8. Named country / one location with some details of shifting production Max 8.
Level 3	9-13	Structured, exemplified account which contains detail of the chosen industry and locations (shift). Assessment of impacts, possibly leading to an overview.

(Total 25 marks)

Question Number	What are the possible consequences for **people** and the **environment** of the pattern of wealth change shown in Figure 7?
7(a)	Some description is to be expected. Essentially core areas have become much wealthier, as have RICs and NICs (China, Korea and India stand out). Much of Africa has seen no progress – the 'gap' has widened markedly. Note that Russia has all but disappeared – some candidates may spot and comment on this (collapse of communist economy – although most recent data suggest strong growth) This implies continuing poverty for Africa, and setbacks in South America and parts of Asia - extensions might include ideas on health and education, as improvement is unlikely; basic needs in some areas are not being met. In MEDCs prosperity equals wealth and consumerism – but possibly stress and obesity. Environmentally it might be argued that we reap the consequences of a throw away society, or can spend more money improving our environment. China and India may be seen as increasingly polluted due to industrialisation. Some may argue environmental degradation in Africa is likely to have increased.

Level	Mark	Descriptor
Level 1	1-5	One or two basic ideas; narrow range of areas and extreme problems. May not fully grasp the map.
Level 2	6-10	Some discussion of problems but only for some countries/areas. Less well balanced across people and environment.
Level 3	11-15	Structured discussion which ranges across the map; balanced across environment and people with a range of consequences; understanding clear.

Question Number	Assess **two** contrasting ways of increasing wealth in the world's poorest countries.
7(b)	Responses need to focus on the worlds poorest countries / people; be flexible (RICs/ NICs are acceptable if the focus is on the poor). Schemes and examples should have a wealth focus for L3 especially, not simply 'development'. Very good candidates will draw out the contrasts. **If more than two ways, credit the best two.** There is a huge range of possibilities, accept any reasonable ideas. Some popular ones are likely to be: • **Aid –** can be used to increase wealth; top down schemes may do so indirectly, which is often their major criticism (failure to trickle down); bottom up may increase income through small scale production initiatives although these often have a small footprint. Investment / FDI has similar costs and benefits. • **Trade** - free trade works, but only in certain areas and Africa tends to be excluded - the soc / env negatives are criticisms; fair trade is possibly better but its reach is smaller and it is reliant on consumers making ethical choice - they may not always do this. Trade reform may not benefit the most needy. • **Debt reduction** - in theory it should allow increased spending on education etc. which feeds through into economic growth; in practice SAPs and similar policies are criticised and extra money may not be well spent.

Level	Mark	Descriptor
Level 1	1-5	Similar / weak strategies - more vague ideas; little real world support. Lacks structure and focus on wealth.
Level 2	6-10	May be less contrasting, more general and less well structured,. Assessment is implied. Some structure. **Max 9 for one way done very well.**
Level 3	11-15	Contrast clear and linked to wealth; examples are used to illustrate two contrasting ways with clear assessment.

(Total 30 marks)

Question Number	To what extent do you think this order of priorities is justified?
8(a)	Responses should be discursive – there is no 'right answer', but expect argument to be supported. A broad discussion of the whole resource with some justification could score top L2. Alternatively a more detailed discussion across a narrower range could also be top L2. L3 is possible without changing the order but would need strong justification. Credit challenging arguments. Some possibilities are: • Tackling climate change – many may argue that it should be higher; leaving it could mean good work on other priorities is simply undone later (water, nutrition). Some might suggest it is essentially unsolvable and unproved, and $50 billion would not solve it, and agree. • Humanitarian arguments for meeting basic needs of health and nutrition i.e. a moral duty to help the poorest. People can't partake in free trade if they are unhealthy. • HIV /Aids could be seen as 'minor' in terms of numbers, versus the billion or so on less than $1 per day, or crucial as it is a time-bomb. • Free trade may be criticised as unworkable / neo-colonial; farm technology may be seen as inappropriate. Credit candidates who take the "…but fair trade might work" tack. …there are numerous others; be flexible

Level	Mark	Descriptor
Level 1	1-5	'I agree/disagree' and little else, or a few general ideas with little or no depth.
Level 2	6-10	Some discussion but less certain; there is structure but the ideas are more general. Does move toward a conclusion. May be a partial consideration of the Resource.
Level 3	11-15	A genuine discussion leading to clear priorities / a new order. Clarity of thought and some justification, possibly using examples. Range and structure both present.

Question Number	Choose **two** global concerns from Figure 8. Explain why your chosen concerns are proving difficult to solve.
8(b)	This is a question about the scale and depth of major international issues / global concerns. <mark>Candidates should choose two concerns. If students choose two boxes (i.e. 3 or 4 concerns) do not penalise.</mark> Credit a range of points that mentions issues such as: - Some problems are **international in nature** – climate, trade, possibly even water – getting agreement on the problem (GW) is hard, as is agreement on the solution (Kyoto, Doha etc.). Some might suggest the agreements often only go half-way. - Some agreements are easily reached, but solutions may be less obvious and **not well-funded** (MDG, Debt) – the on the ground implementation may not live up to the rhetoric (G8?). Where does the cash come from? **Scale** – the billion on so in poverty, the 700 million who are illiterate; the millions who lack clean water – the sheer scale is daunting, as is the cost. **Conflicting ideas** – i.e. top-down or bottom-up, free or fair trade, GM-v-GR. **Self-interest** – debt relief costs money, free trade might produce winners and losers. The costs of developing drugs for HIV than making then available at low cost. **Ethical barriers** (GM) religious and cultural barriers and taboos (Aids / HIV; possibly wider health issues). **Set backs** - one step forward, two steps back resulting from conflict, major hazards etc.

Level	Mark	Descriptor
Level 1	1-5	Likely to outline the problems / solutions; narrow (money) and basic ideas. Unstructured.
Level 2	6-10	Some structure in a less certain account; <mark>may be partially difficulties but begin to drift into merely describing solutions.</mark> Less well supported but sound. <mark>Max 9 for an account of solutions, rather than an explanation of why solutions are hard to come by.</mark> <mark>Max 9 if one concern only.</mark>
Level 3	11-15	Structured account which focuses on the difficulties; concerns supported by real world discussion / examples. Clear understanding.

(Total 30 marks)

Question Number	What are the possible implications for the environment of such rises in resource consumption?
9(a)	Sustainability may appear; the focus is on *environment* however. Essentially resource use, which has doubled since 1970, could be unsustainable, expect students to recognise and comment on the general trend but also to focus on the individual resources: • **FISH** – decline / collapse in some fisheries (North Sea cod) due to overfishing; conversion of mangroves (India, Thailand) to shrimp farms to feed the demand; depletion of the coral ecosystem by destructive fishing methods. A degraded marine environment. • **WOOD** – deforestation (loss of species, flooding, soil erosion) – expect details of named examples in Brazil, Indonesia and others; loss of valuable biodiversity and genetic material. • **OIL** – possibly global warming and other forms of atmospheric pollution; China's soaring demand might be mentioned linked to acid rain; credit human health impacts. Credit knowledge of the current 'oil crisis' • **MEAT** – demand for grazing land and conversion of natural grasslands or forests. • **WATER** – increasing shortages; depletion of ground water and river supplies; construction of dams which flood areas of forest. All 5 resources do not have to be covered for L3, but expect some range.

Level	Mark	Descriptor
Level 1	1-5	One or two general ideas on implications of a sensationalist nature; lacks structure.
Level 2	6-10	Some structure in an account with some understanding of implications; some supporting evidence may be used; may have less focus on the environment.
Level 3	11-15	Structured account; covers a range of resources and the focus is on environment impacts. Good range of implications identified and/or supporting evidence to back up assertions.

Question Number	Evaluate a range of strategies that might make resource consumption more sustainable.
9(b)	Essentially about reducing resource consumption / ecological footprint. Sustainability is likely to be defined, possible in diagram form. Answers might focus on ideas of futurity.

A wide range of possible strategies may appear such as:

- **Recycling** – it may reduce overall consumption, but has been criticised for being energy heavy and schemes are costly to implement; relies on public will to some degree.

- **Alternatives** – most obviously energy, so expect details of renewable options – these can have long lead in times and some are still high cost.

- **Reducing consumption** directly, through efficiency – water meters, fuel efficient cars, home appliances, light bulbs; possible high costs to consumers and often not what people want (cars); some might argue in this case taxes and incentives need to be used.

- **Management** – for instance of fish stocks to identify sustainable yield and harvest accordingly.

Credit realistic suggestions, especially when supported by real world examples and case studies. |

Level	Mark	Descriptor
Level 1	1-5	Descriptive, unstructured account of a few ideas; lacking real world support and link to sustainability – may just be 'use less of…'
Level 2	6-10	Some linkage to sustainability and some use of examples and real world ideas; may be less evaluative and move towards describing examples.
Level 3	11-15	Sustainability is explored; structured evaluation of a range of strategies with real world support.

(Total 30 marks)