GCE

Geography A

Mark Schemes for the Units

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Advanced GCE Geography A (7832)

Advanced Subsidiary GCE Geography A (3832)

MARK SCHEMES FOR THE UNITS

2683 Options in Physical and Human Geography

Group A Options

Coastal Environments

1   (a)   **Describe the role lithology (rock type) and structure can play in the development of coastlines in plan form.**   **[20]**

         (b)   **Explain how sea level change influences the development of coastal landforms.**   **[25]**

(a)

	The term lithology is explicitly used in the Specification where it is linked directly with coastal morphology. The dictionary definitions have lithology as referring to the composition of rock, its hardness and relative susceptibility to weathering and erosion. Geological structure includes bedding planes, joints, faults and folds. The focus on plan is clear.
AO1+ AO2	• bays and headlands - discordant • uninterrupted sweeps of coastline - concordant • smaller scale features such as geos and other indentations – mention of this scale point is a likely indicator of a Level 3 response • responses that focus on cross-sections will not go beyond Level 1 in AO2
AO3	• responses that focus on cross-sections will not go beyond Level 1 • responses that include comments about the scale of plan features are likely to be Level 3
AO4	• see generic mark scheme

(b)

	The results of sea level change, i.e. landforms, is a major heading in the Spec. The question is clear that landforms resulting from both rising and falling levels are to be considered.
AO1+ AO2	• rising – shingle accumulations eg bars, tombolos driven onshore by post-glacial sea rise; drowned valleys – rias/fjords/fiards – latter a possible level 3 indicator; slope-over-wall cliff profiles; coral atolls eroded; Dalmatian style plan; destruction of landforms eg sand dunes; salt marsh • falling – fossil shore platforms, raised beaches and abandoned cliff lines
AO3	• Level 1 max. if only rising/falling • Quality of link between sea level change and landform will help advise Level; Level 1 max if no link
AO4	• see generic mark scheme

2 (a) **Describe ways in which sediment is transported and deposited in the coastal zone.** **[20]**

(b) **Explain the difficulties faced by management schemes/strategies attempting to deal with human activities in the coastal zone.** **[25]**

(a)

Sediment is an important component in the real world coastal systems that the candidates will encounter. Their knowledge and understanding of how sediment is transported and deposited will determine the AO1 + 2 marks. There need not be an equal treatment of both transport and deposition but the omission of one will leave the response at Level 1 in AO3. The processes are the focus here not landforms.	
AO1+ AO2	• smaller calibre material entrained more readily than larger – a point that might indicate a level 3 response in AO2 • contrast amongst bedload/suspended/solution load – likely to indicate a level 3 response in AOs 1, 2 + 3. • transport into coastal zone by rivers • transport along a coast – especially along a straight coastline. Responses indicating that LSD is not the regular process many diagrams indicate might represent a Level 3 response in AO2 • transport on and off shore; references to wave type, rip currents and changing sea level appropriate; wind transport • deposition related to any situation when energy of the moving water drops below that needed to maintain the sediment's movement. There are a number of natural sediment traps in coastal locations eg bay-head beaches and deltas • tidal flats; mud flats, salt marsh, mangroves. Process of flocculation key here • role of vegetation – salt marsh, mangroves, sand dunes • human activity
AO3	• there need not be an equal treatment of transport and deposition but omission of one leaves the response at Level 1
AO4	• see generic mark scheme

(b)

The Specification states that sources of conflict and resultant management strategies/schemes are to include a contemporary case study. This should provide a secure basis for a response here. The link between impacts and management will advise the level to award in AO3. Depending on that case study will be the range and types of difficulty and so we must be open to a diversity of answers here.	
AO1+ AO2	• physical difficulties eg dynamic nature of coastal system; hard engineering difficulties • human difficulties eg coastal system such as a sediment cell crossing several administrative boundaries; management schemes • financial cost • land use zoning; protection of some areas eg National Trust land
AO3	• link between the type(s) of scheme + the human activity is a key element of assessment. • no link, i.e. a list of schemes will be bottom of Level 2 • once response starts to make the link, top of Level 2 is likely
AO4	• see generic mark scheme

Fluvial Environments

3   **(a)**   **Describe changes in a river's width, depth and gradient from source to mouth.**
                                                                                                [20]

       (b)   **Explain variations in the load carried by a river.**   **[25]**

(a)

Channel shape is a major heading in this Option and is a topic that candidates should know well in the context of downstream changes. It would be very encouraging to read material based on fieldwork in responses.	
AO1+ AO2	• generally depth increases downstream • generally width increases downstream; a possible indication of a Level 3 response is the acknowledgement that width usually increases more rapidly than depth • gradient decreases downstream • comments about man's interference in these changes might indicate a Level 3 response
AO3	• not source to mouth is Level 1 • only width or depth or gradient is Level 1
AO4	• see generic mark scheme

(b)

The emphasis here is on the entrainment and transport of different types of sediment. The question is clear in its emphasis on energy and so responses should have this factor as their key focus.	
AO1+ AO2	• general appreciation of Hjulström curve required for Level 2+ • detailed appreciation of Hjulström curve required for Level 3 • credit discussion about relevance of Hjulström curve at Level 3 • comments about nature of stream-bed (loose or tight packed) likely to indicate a Level 3 response • accurate use of term competence might indicate a Level 2 + response
AO3	• Level 1 max if different sizes not addressed • top of Level 2+ likely when contrast in energy required for entrainment and transport recognised • different types of transport required for Level 2+ eg traction for larger sediment; saltation for medium calibre sediment; solution for dissolved minerals; flotation for small, light sediment
AO4	• see generic mark scheme

4 **(a)** **Describe variations in water flow in channels of different cross-section and plan.** **[20]**

(b) **Explain how floods result from the interaction of several factors.** **[25]**

(a)

The flow of water in stream channels can be either laminar or turbulent. Comments about different velocities of flow are also relevant here. References to field course material might be valuable and can be reflected in any of the AOs as appropriate.		
AO1+ AO2	•	without laminar or turbulent Level 2 maximum
	•	laminar – layers of water slipping past each other. Often associated with approximately semi-circular cross-sectional channels
	•	turbulent – increasing mixing of water with flow in the form of eddies + vortices. Often associated with shallow channels with many obstructions along the channel as in upland areas.
	•	helical – spiralling core of maximum velocity associated with cross-section around a meander i.e. asymmetrical
	•	a Level 3 indicator, especially in AO2, might be mention of variations in flow pattern under different discharge conditions eg high + low
	•	flow over pools and riffles for plan view – possible Level 2+
AO3	•	without laminar or turbulent Level 2 maximum
	•	the link between water flow and channel type needed for Level 3
AO4	•	see generic mark scheme

(b)

Floods are a major sub-heading in this Option and within that causes are explicitly stated.		
AO1+ AO2	•	inputs – high-intensity + prolonged rainfall; rapid snowmelt
	•	stores + processes – antecedent conditions filling stores; role of geology; basin shape + size; drainage density; role of slope angles within basin; deforestation – accelerates water movement + lowers output; land drainage accelerates water movement; changing agricultural land-use eg pastoral to arable can accelerate water flow; urbanisation can accelerate water flow;
	•	outputs – drainage density; deforestation can increase sediment yield to channels thereby reducing channel capacity
AO3	•	Level 1 max if no mention of natural causes
	•	Bottom of Level 2 if interaction not explored
	•	Level 3 likely when interaction is a strong theme
AO4	•	see generic mark scheme

Glacial and Periglacial Environments

5   (a)   **Describe variations in the pattern of ice cover in the British Isles during the Pleistocene.**   **[20]**

(b)   **Explain why glacier movement varies.**   **[25]**

(a)

The focus here is on the changing extent of ice sheets and given the variability of terminology of the various phases we must not be inflexible in our expectations.	
AO1+ AO2	• Level 1 is the max. if the response is stuck with the idea of a single 'Ice Age' • Level 2 for those that suggest the extent of ice advance during each glacial was different • Level 3 is likely for those responses that suggest that the timing and number of cycles varies from region to region • Top of Level 2 can be given even if the nomenclature is not detailed
AO3	• Level 1 for those not dealing with advances and retreats • Level 3 as soon as there is a clear attempt to describe the varying extent of ice cover
AO4	• see generic mark scheme

(b)

Types and rates of movement are linked with cold and warm based glaciers in the Specification and are often included when dealing with the ice mass as a system.	
AO1+ AO2	• basal sliding – accounts for up to 90% of movement in warm based glaciers – slippage of bottom of glacier over thin layer of water just a few mm thick. Reduces frictional drag • regelation creep – warm based – movement over minor irregularities in surface under ice. Higher pressures on up-glacier side of obstacle lead to melting and water migrates to lee side of obstacle where it refreezes • bed deformation – relate to widespread movement of ice masses, usually warm based, over unconsolidated sediment, saturated with water due to glacier bed being at pressure melting point - a likely Level 3 indicator • internal deformation – both warm and cold based. Slippage within and between ice crystals, at its maximum at base where both stresses and, in the case of cold ice, temperatures are at their highest • glacial surges – warm based but can occur in cold. Initiated when ice in upper ablation zone becomes unstable, seems to be associated with substantial accumulation of basal water, and moves rapidly down-glacier, c. 5 metres/hour. Mention of this type of movement likely to indicate a Level 3 response • without basal sliding and internal deformation Level 2 is the max.
AO3	• if a response describes types of movement without making it clear to which ice mass, warm/cold it is referring, then bottom of Level 2 is the max. • given that cold based ice masses move less than warm we should not expect an equal treatment of the two types of ice mass • comments about variations in both plan and cross-section appropriate
AO4	• see generic mark scheme

6   **(a)**   **Describe the landforms and landscapes resulting from deposition directly by ice.**   **[20]**

(b)   **Explain the role of glacial erosion in the formation and development of upland glaciated landforms and landscapes.**   **[25]**

(a)

Glacial deposition is a key topic within this Option with both landforms and landscapes studied.	
AO1+ AO2	• moraines of various types eg terminal; recessional; push; lateral; medial; rogen • till plains • drumlins • sensible assessments of scale are likely to indicate Level 2/3 responses
AO3	• no need for an equal treatment between landforms and landscapes but the omission of one leaves response at Level 2 • comments about glacio-fluvial deposition are irrelevant
AO4	• see generic mark scheme

(b)

An appreciation of the role of erosion is a key element in the Option. This particular question limits the discussion to upland regions.	
AO1+ AO2	• plucking or joint block removal eg corrie headwall; glacial trough • abrasion eg corrie floor • sub-glacial glacio-fluvial • glacial troughs; corries; roches moutonnées; arêtes; pyramidal peaks; striations • comments about contrasting glaciated landscapes in relation to erosion likely to indicate Level 3 eg mid-Wales c.f. north Wales. Mostly due to confined ice activity in later periods of Pleistocene in north Wales.
AO3	• focus is on process; without this i.e. listing of upland features is bottom of Level 2 • no need for an equal treatment between landforms and landscapes but the omission of one leaves response at Level 2
AO4	• see generic mark scheme

Hot arid and Semi-arid environments

7   **(a)**   **Describe the main characteristics of desert climates.**   **[20]**

       (b)   **Explain how human activity can use and misuse water resources in hot arid**
                  and semi-arid environments.   **[25]**

(a)

Fundamental to a study of hot arid and semi-arid environments is a knowledge and understanding of desert climates.	
AO1+ AO2	• arid – between 250 and 100mm and semi-arid between 500mm and 250mm. • various schemes devised to extend description to include some idea of water balance eg Thornthwaite's aridity index • evapo-transpiration rates very high with PE rates very high; low absolute humidity 15-30% characteristic for inland locations • temperature range – deserts have high temperature ranges both diurnal and annual, probably a point representative of top of Level 2 in AOs 1+2. • precipitation – with decreasing annual total comes increasing variability. Some response might mention the variability index, often over 30% and can reach 60%. (Mean deviation from mean/mean X 100 = variability %) • extreme storm events • winds – many desert locations subject to strong local and seasonal winds eg harmattan; sirocco
AO3	• unlikely that a response will rise beyond Level 1 if it describes aridity simply in terms of low precipitation and does not go on to describe the importance of evaporation
AO4	• see generic mark scheme

(b)

Use and misuse of water is explicitly stated in the Specification.	
AO1+ AO2	• inputs – comments about regional and local deforestation disrupting flows of water. Aforestation schemes to restore the balance. • stores – surface water eg dams of various scales; stone walls; exploiting ground water • processes – types of irrigation eg spray has high loss from evaporation but drip/trickle reduces such loss • outputs – most human activity reduces output eg Colorado river but in some areas measures now being taken to restore some of the flow
AO3	• a purely descriptive response will not go beyond bottom of Level 2 • no need for an equal treatment between use and misuse but the omission of one leaves response at Level 2. • a response offering significant material on 'use' likely to be at Level 3 • inclusion of both ground and surface water a likely top of Level 2+ indicator
AO4	• see generic mark scheme

8 **(a)** **Describe changes in the location and extent of hot desert environments in the past.** **[20]**

(b) **Explain the role of flowing water in the formation and development of distinctive desert landforms.** **[25]**

(a)

The Specification makes explicit reference to 'past climatic change, Pleistocene pluvials, post glacial changes'. Longer term fluctuations and changes in climate have taken place in most desert areas.	
AO1+ AO2	• most deserts show evidence of both pluvials and interpluvials – periods of greater aridity • the cores of the current deserts are likely to have been the same for many thousands of years • in general increased aridity in the tropics seems to be associated with glacials in the mid and high latitudes • Sahara – probably the best studied desert – Lake Chad has been much greater in extent in the past and the northern margins have been wetter in the period of the Roman empire.
AO3	• a response might just look at one desert and describe its changing extent, this can reach Level 3 given sufficient detail but precise details of timings are not a pre-requisite. • Need not be an equal treatment of both location and extent but omission • of one restricts response to Level 2 • Level 3 for responses making a genuine attempt to deal with both location and extent over time.
AO4	• see generic mark scheme

(b)

The role of water c.f. wind has been reappraised in our understanding of arid and semi arid environments. This question focuses explicitly on water's role in the erosion and transportation of sediment. It is now recognised that although short-lived, intense and localised flowing water can carry out significant geomorphic work in these environments.	
AO1+ AO2	• role of water when it arrives on land surface depends on nature of that surface. Unconsolidated materials eg active dunes + sand sheets are easily erodible, susceptible to sheet-wash + gullying. Also highly permeable + infiltration rapidly reduces surface flow. These points likely to indicate a Level 3 response • canyons + arroyos + wadis • washes – channels and valleys in low-relief landscape; playas; pediments; alluvial fans • dormant/relict dunes + sheets with surface crusts initially more resistant. Once crust is broken erosion of underlying material is rapid. This point a likely Level 3 indicator.
AO3	• although there need not be an equal treatment of both erosion and transport, the omission of one will leave the response at bottom of Level 2 max.
AO4	• see generic mark scheme

Applied Climatology

9 **(a)** **Describe the micro-climatic modifications brought about by buildings.** **[20]**

(b) **Explain how human activities exploit the effects of shelter belts and wind-breaks.** **[25]**

(a)

The modification of the climate adjacent to buildings is part of the Urban climate section in this Option. It is separate, however, from the heading dealing with the energy budgets of urban areas in their entirety.	
AO1+ AO2	• urban heat islands • temperature – buildings cast shade • sunlight – shade • wind – higher wind speeds between buildings, especially high-rise; shopping centres • wind – smaller scale eddies and turbulence are also found • with increasing height of building the frictional effect reduces and so wind speeds are higher
AO3	• Level 1 max for those responses dealing only with the larger scale issues of urban energy budgets eg urban heat islands
AO4	• see generic mark scheme

(b)

Most shelter-belts/wind breaks are deliberately generated as they are designed to have a beneficial effect on human activities, most notably agriculture.	
AO1+ AO2	• shelter for cattle – sometimes these take the form of a tunnel of vegetation in which livestock can shelter eg upland areas • wind breaks to reduce wind speed in areas of low relief where arable enterprises are important. At certain times of the year the soil will not have a well developed cover of vegetation and so be susceptible to soil erosion by wind eg Dutch polders, Fens • shelter for isolated buildings/small clusters of buildings eg farmsteads on Polders • vegetation belts to trap snow for increased soil moisture in summer eg Canadian Prairies
AO3	• Level 2/3 for those who deal with shelter belts/wind breaks in the context of human activity. • Level 1 for those who deal with these features in theoretical terms
AO4	• see generic mark scheme

10   **(a)**   **Describe ways in which human activity is affected by the frequency and severity of frost and fog.**   **[20]**

       (b)   **Explain the relationship between topography and the frequency of frost and fog.**   **[25]**

(a)

The key assessment here is the degree to which human activity and frequency and severity of frost and fog are linked.	
AO1+ AO2	• settlement – aspect, in particular patterns within upland valleys • settlement – altitude, in particular patterns within upland areas • transport – frost and fog hollows eg M25, congestion and accidents for example; disruption of air and sea traffic • agriculture – frost hollows and orchards • agriculture – frost and aspect eg viticulture, market gardening • leisure activities – cancellation of sports events
AO3	• descriptions of frost + fog without reference to human activity will be Level 1 • with only frost or fog related to human activity Level 2
AO4	• see generic mark scheme

(b)

The context of the question is clear with the focus on topography related to the occurrence of frost and fog.	
AO1+ AO2	• general decrease in temperature with increase in altitude (c. 0.6^{o}c/100 metres) leading to cooler air and so a declining ability to hold water as vapour • contrast in solar input depending on aspect leading to contrasts in fog and frost frequency. Make sure candidate has the distinction correct between north/south facing depending on the hemisphere being discussed. • temperature inversions related to basin locations
AO3	• need not be an equal treatment of frost and fog, but the omission of one leaves the response at bottom of Level 2 • no reference to topography leaves the response at Level 1
AO4	• see generic mark scheme

Group B Options

Agriculture and Food

11   **(a)**   **Describe the influence of relief on agricultural systems.**   **[20]**

       (b)   **Explain the relationship between different types of farming and ecosystems.**
                                                                        [25]

(a)

The focus here is on the role of the physical environment. The key feature for assessment is the link between relief and agricultural systems.	
AO1+ AO2	• altitude – mostly its relationship with climate. In lower latitudes then increased altitude allows a wider range of agricultural systems c.f. higher latitudes where increased altitude tends to make agriculture marginal • slope – impact on ability to use machinery • aspect – restricts or encourages certain agricultural systems depending on north/south facing and which hemisphere
AO3	• an equal treatment of all three elements (altitude; slope; aspect) is not needed for Level 3 but the omission of one leaves the response at Level 2 max, the omission of two limits the response to bottom of Level 2 • inclusion of material indicating the positive influence of relief, eg in the tropics, is a likely indicator of Level 3
AO4	• see generic mark scheme

(b)

This sub-part has, as its theme, the relationship between the nature of the farming enterprise and the ecosystem. The contrast between types of farms is the important aspect. Candidates who offer good material on particular farming types eg cereals; plantations, are likely to be Level 3 in AO1 at least.	
AO1+ AO2	• monocultures tend to exhaust the soil of the same nutrients and so impact the ecosystem more severely than mixed farms • monocultures restrict the variety of niches that natural populations can occupy eg removal of hedgerows in specialist arable areas • specialist enterprises tend to rely on large inputs of agro-chemicals such as pesticides and herbicides that can impact on the natural ecosystem • specialist arable often relies on mechanisation that can in turn lead to compaction of soil and so increase run-off • specialist enterprises are more likely to use irrigation that can deplete ground/surface water and/or cause salinisation
AO3	• for a response to reach Level 3 it will need to be explicit about the changes to ecosystems that various enterprises bring about. It is possible that a single case study offers all the opportunities needed to reach Level 3 but equally, candidates could offer a breadth of exemplar material. • an equal treatment of all elements of the ecosystem (energy + nutrient flows; productivity; diversity + stability; sustainability) is not needed for Level 3, but at least two elements are needed for Level 2+
AO4	• see generic mark scheme

12   (a)   Describe the pattern of food shortages and famines in LEDCs.   [20]

(b)   Explain how food shortages and famines result from the interaction of physical and human factors.   [25]

(a)

Within the heading of food supplies, the spatial distribution of food shortages and famines is explicitly mentioned.		
AO1+ AO2	•	famine – relatively sudden event involving mass mortalities from starvation within a short period
	•	food shortage – endemic nutritional deprivation on a persistent basis
	•	LEDC clearly divided between Asia + Latin America and Africa – in latter there were some regions where food output per person actually fell
	•	number of people suffering food shortage generally fallen in Latin America and Caribbean and most of Asia but risen in sub-Saharan Africa
	•	famine – increasingly seen as a decline in the access to food rather than a decline in the available food supply – a likely Level 3 indicator. Either way, famines have a spatial pattern with sub-Saharan Africa often figuring. The more convincing responses are likely to identify locations throughout the LEDCs where famine has struck
	•	short term problems caused by natural hazards eg tropical storms or earthquakes
AO3	•	Level 3 reserved for response distinguishing between food shortages + famines
AO4	•	see generic mark scheme

(b)

Causes of food shortages and famines are stated in the Spec. and the question makes it clear that both physical and human factors should be discussed. Causes of famine and food shortages have often been linked to natural disasters, population growth and war. Recent analyses focussed on access to and control over food resources.		
AO1+ AO2	•	physical – often associated with natural disasters eg climate; flooding; tropical storm
	•	human – rapid population growth and mass poverty often linked with mass starvation; food security and entitlement are key ideas and likely top of Level 2+ indicator; role of government/political factors eg China/N. Korea/Zimbabwe; limited infrastructure restricting distribution; use of land for export crops and or industrial crops eg pineapples/cotton rather than domestic food; land tenure
	•	some examples link physical with human eg Dust Bowl of USA/Sahel
AO3	•	genuine attempts to explore interaction lift the response into Levels 2+3
	•	bottom of Level 2 if only either physical/human are included
	•	distinction between food shortage/famine a likely top of Level 2+ indicator
	•	historical examples relevant eg wars ; Irish potato famine
AO4	•	see generic mark scheme

Manufacturing Industry: Location, Change and Environmental Impact

13   **(a)**   **Describe the factors influencing the urban-rural shift of manufacturing in MEDCs.**   **[20]**

   (b)   **Explain why different sized manufacturing companies often have contrasting locational patterns.**   **[25]**

(a)

This topic is also explicitly mentioned under the major sub-heading of industrial location factors and is a key element of the changing locations of manufacturing industry.	
AO1+ AO2	• not just the result of firms migrating urban to rural but closure of urban based manufacturing and the growth of firms in small towns and rural areas – when made well this point likely to be a Level 3 indicator • constrained location theory – physical limits to growth in urban areas eg shortages of land for on-site expansion; shortages of land for industrial development; relatively high cost of redeveloping brown-field sites; relatively high cost of land in urban areas; factories built for earlier styles of production not suited for modern industry eg multi-storey factories built in 19th century • residential preferences of workforce in particular high-tech. can be in rural locations • diminishing relative accessibility of large urban areas especially with regard to historic infra-structure eg canals/railways/some docks c.f. improved relative accessibility of some smaller towns + rural areas eg north Oxfordshire + south Warwickshire – Banbury due to M40 • points about loss of manufacturing from inner areas to rural-urban fringe/rural appropriate • comments about shift of manufacturing to NICs + LEDCs relevant
AO3	• without a link between decreasing advantages of urban areas and the increasing advantages of rural, Level 2 is the maximum • a response containing only negative points concerning urban locations/positive concerning non-urban top of Level 1 max.
AO4	• see generic mark scheme

(b)

There has been an increasing appreciation of the role that the scale of organisation of firms has upon location.	
AO1+ AO2	• generally with increasing scale firms become multi-plant, multi-locational and trans-national • TNCs have global markets or at least continental markets and tend to have manufacturing plants in several countries. Often adopt decentralised organisation with control devolved to regional HQ. Can extend to regional R&D eg Ford, although some TNCs parent HQ retain this function • globalisation has led to some TNCs to shift their manufacturing from MEDCs to LEDCs + NICs • some products are more open to globalisation influences than others eg electronics c.f. steel – a likely Level 3 indicator • smaller enterprises tend to concentrate all functions on one site • medium enterprises might have HQ and R&D on same site with a couple of manufacturing plants elsewhere – a likely Level 3 indicator
AO3	• concentration on just the larger scale enterprises is bottom of Level 2 • MEDC, NIC + LEDC contrast a likely Level 3 indicator
AO4	• see generic mark scheme

14   **(a)**   **Describe ways in which LEDCs and NICs industrialise.**   **[20]**

      (b)   **Explain why the consequences of manufacturing decline vary from place to place.**   **[25]**

(a)

Industrialisation in the particular context of NICs is explicitly stated in the Specification. Import substitution, export-led industrialisation, and movement offshore in NICS are three stated phases in the process of industrialisation.	
AO1+ AO2	• import substitution – domestic industries producing goods previously imported. Reduce need for 'hard' currency to buy imports. Begins multiplier process • export-led industrialisation – attracting foreign export-based firms using the country as a manufacturing base. This uses foreign capital as domestic capital inadequate for this next stage of development. Also developing own exporting industries – earning foreign 'hard' currency. • movement offshore – as industrialisation progresses costs can rise leading to some firms moving out of the NIC into new cheaper labour locations eg Taiwan to China as domestic wage levels + skills improve
AO3	• Level 1 for just one phase; Level 2 for two and Level 3 for three • as there are no hard and fast definitions of precisely what is meant by an NIC, we must be open to a variety of examples. Conventionally the Asian tigers, South Korea/Taiwan/Singapore/Malaysia/Hong Kong were so described as could be Mexico/Brazil. China and India are interesting examples and can be included here. Level 3 is likely for a response that distinguishes between Pearl River Delta and other regions in China for example.
AO4	• see generic mark scheme

(b)

Unemployment and the threat to communities is a sub-heading within the section of the Specification looking at the economic, social and cultural consequences of manufacturing industry decline. This question asks candidates to explain spatial variations in the effects of manufacturing unemployment.	
AO1+ AO2	• spatial concentration of some industries means that when they suffer decline, impact of unemployment particularly severe eg steel closures/ship building/textiles. Associated with scale of industry as some sectors have smaller scale producers in a wide variety of locations • some industrial regions are more diverse than others • some industries require very specialised labour so that if they decline, transfer of skills can be difficult and so unemployment is higher – a likely Level 3 indicator • impact on physical environment eg land contamination; derelict buildings
AO3	• Bottom of Level 2 max if no references to 'place to place' variations
AO4	• see generic mark scheme

Service Activities: Location, Change and Environmental Impact

15   (a)   Describe behavioural approaches to understanding the location of service activities.   [20]

**   (b)   Explain changing patterns of retail organisation over the past 40 years.   [25]**

(a)

Behavioural approaches are exemplified in the Specification as decision making and perception studies but anything that falls within the behavioural framework is valid.	
AO1+ AO2	• decision making has become a significant element in many aspects of human geography including services • key element is that decision making of the service providers is hardly ever optimal in the sense of optimising profits or minimising resources used • similarly customer behaviour hardly ever matches that undertaken by rational, economic man of neo-classical economic theory – satisficing behaviour; reference could be made to Pred's behavioural matrix – this might be a Level 3 indicator. References to cultural aspects of behaviour are also likely to indicate a Level 3 response. • studies based on probability patterns are relevant here eg Huff's model
AO3	• Classic central place theory does include assumptions about behaviour of both suppliers and customers but a response based solely on this will not go beyond bottom of Level 2
AO4	• see generic mark scheme

(b)

Explanations are likely to include generic factors but we must also be open to points that might be specific to a particular example.	
AO1+ AO2	• role of economies of scale both internal and external; the effective use of the latter eg the benefits of a retail park location might indicate a Level 3 response in AO2 • changes in consumer behaviour eg impact of increasing levels of car ownership; ability to purchase and store larger quantities of food; rising levels of disposable income for some groups • population migrations • improvements in road transport – a point that affects both retail companies and consumers • shopping as a 'leisure activity' • impact of IT on retailing eg shopping online
AO3	• if the response is based solely on either retailers or customers perspectives then bottom of Level 2 is the maximum
AO4	• see generic mark scheme

16 (a) Describe urban planning responses that seek to maintain the status and quality of retailing in the CBD. **[20]**

(b) Explain why CBDs are dominated by high order service activities. **[25]**

(a)

Patterns and processes within the CBD are a major component in this Option. As the heading to this Option states, Change and Environmental Impact are key aspects to a study of Service Activities.	
AO1+ AO2	• construction of under-cover centres, often joint between local authorities and private interests • improved access, road and rail, including parking and park and ride schemes • pedestrianisation • environmental improvements eg cleaning old buildings; landscaping • restricting development of out of town retailing
AO3	• level 1 maximum if offices are the main focus • both status and quality needed for Level 3
AO4	• see generic mark scheme

(b)

This sub-part stays in the spatial context of the CBD but invites consideration of the reasons why high order service activities, offices and retail, dominate this location.	
AO1+ AO2	• central place theory in terms of threshold, range and hierarchy • bid rent theory • a historical perspective and subsequent inertia is helpful here; a likely Level 3 indicator • role of transport routes focussing on centre; comments about 'chicken and egg' here are likely to indicate Level 3 in AO2 • high pedestrian levels attract comparison retailing; also a 'chicken and egg' comment
AO3	• the spatial focus is clear here so a response dominated by decline or the rise of out-of-town service locations will not exceed Level 1 • top of Level 2 if only retail or offices is the focus • if no mention of land value/cost then top of level 1 is the maximum
AO4	• see generic mark scheme

Tourism and Recreation and their Environmental Impacts

17   **(a)**   **Describe the characteristics of the following types of tourist development: resort; enclave; zone.**   **[20]**

        (b)   **Explain why governments encourage tourism and recreation.**   **[25]**

(a)

The types of tourist development identified here are explicitly stated in the Specification.	
AO1+ AO2	• enclave – concentrated areas of tourist development. Largely confined to LEDCs. Foreign owned with capital for investment in facilities from MEDCs. Little if any interaction between tourists and local area and people – often beach based closed to local people. Often represent the early phase of tourist developments. eg Gambia in 1970s. Include cruise ships and some isolated ski 'resorts' • resort – oldest types of tourist development. First were inland spas and seaside resorts. Most are concentrated around a natural resource eg beach. Have developed in a diversity of ways including decline. More popular resorts today have mixture of domestic and foreign investment and a variety of scales of facilities. Some resorts develop specialist functions eg Las Vegas; Disneyland. Numerous examples. • zone – found in regions with a mature tourism industry – in coastal areas zones have a linear extent following the coastline eg Costa del Sol. Domestic and foreign investment. Also zoning of tourist activities eg Green Island, Great Barrier Reef, Arches NP
AO3	• Level 1 for just one type of tourist development; Level 2 for two and Level 3 for all three
AO4	• see generic mark scheme

(b)

The influence of government on tourism and recreation is a major sub-heading within this Option. In particular, government sponsorship is highlighted as is the role tourism and recreation can play as part of national and regional development strategies. There is no prescription as to LEDC/MEDC so there is a wealth of exemplar material for candidates to draw upon.	
AO1+ AO2	• social/cultural – support indigenous culture resulting from tourist interest; widen outlook of communities eg raise the role and status of women; encourage education as employment in tourism/recreation available; political aims eg right to roam • economic – wealth creation for communities with few alternatives; helps justify + fund infrastructure projects; helps diversify local + regional economies • environmental – raises awareness of and economic support for conservation • political – raise profile of country and thereby possible inward investment
AO3	• simple listing of government projects will not rise above bottom of Level 2 • Level 2+ for those responses clearly trying to link government with tourism + recreation projects
AO4	• see generic mark scheme

18 **(a)** **Describe the effects of political changes and crises on international tourism.**
[20]

(b) **Explain how changes in infrastructure since the 18th century have affected patterns of international tourism.** **[25]**

(a)

	Political changes and crises are explicitly mentioned in the Specification and should be familiar to candidates. The question is deliberately kept wide so as to allow for a breadth of relevant material as regards changes and crises. The context is, however, clear, international tourism.
AO1+ AO2	• positive - tax regimes • positive - environmental improvements eg water quality; beaches • positive - currency value • positive - government sponsored advertising • positive - eg regime change opening up the country eg Czech Republic • negative - tension within a country eg Nepal after assassination of some of their royal family; China after Tiananmen Square incident • negative - tension between countries eg Croatia and Bosnia-Herzegovina affecting Adriatic coast • negative - tension arising from international terrorism eg Bali
AO3	• the focus needs to be international tourism to reach Levels 2+3 • a simple list of political events/crises unrelated to international tourism is a likely indicator of a Level 1 response
AO4	• see generic mark scheme

(b)

	This sub-part invites candidates to consider the links between changes in infrastructure and patterns of international tourism. Two key aspects for assessment are the quality of the links and how well patterns are picked up on.
AO1+ AO2	• infrastructure – give a broad interpretation • first quarter of 20th century saw growth in international tourism as wealthy able to use boats/trains/planes to move more easily within Europe for example – a possible Level 3 indicator • post-war period saw explosion in tourism travel – airport infrastructure and over past 20 years or so, opening up of airports at tourist destinations in LEDCs. • distinction between large scale movements to Mediterranean resorts and smaller scale movements to places such as Kenya/Andes/Vietnam a possible Level 3 indicator • improvements in utility infrastructure eg water supply, sewage • improvements in medical infrastructure • role of inter-net in promoting + booking holidays
AO3	• Level 1 max if the links are not made between infrastructure and patterns of international tourism • bottom of Level 2 max if patterns are ignored
AO4	• see generic mark scheme

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GENERIC ASSESSMENT CRITERIA

1   Knowledge of content (0-8 marks)

Level 4	Candidates have detailed knowledge of appropriate themes, processes and specific environments and places. They have detailed knowledge of relevant concepts, principles and theories, and of a wide range of geographical terms. They have detailed knowledge of the connections between different aspects of geography represented in the specification.	**7-8 marks**
Level 3	Candidates have clear knowledge of appropriate themes, processes and specific environments and places. They have clear knowledge of relevant concepts, principles and theories, and of a range of geographical terms. They have clear knowledge of the connections between different aspects of geography represented in the specification. There must be evidence of synoptic connections with other parts of the specification to achieve more than level 2.	**5-6 marks**
Level 2	Candidates have sound knowledge of some appropriate themes, processes and specific environments and places. They have sound knowledge of some relevant concepts, principles and theories, and of some geographical terms. They have sound knowledge of some connections between different aspects of geography represented in the specification.	**3-4 marks**
Level 1	Candidates have basic knowledge of some appropriate themes, processes and environments and places. They have basic knowledge of some relevant concepts, principles, theories, and geographical terms. They have basic knowledge of some connections between different aspects of geography represented in the specification.	**0-2 marks**

2   Critical understanding of content (0-22 marks)

Level 4	Candidates have detailed critical understanding of the content of the specification and have detailed critical understanding of the connections between the different aspects of geography represented in the specification.	**18-22 marks**
Level 3	Candidates have clear critical understanding of the content of the specification and have clear critical understanding of the connections between the different aspects of geography represented in the specification. There must be evidence of synoptic connections with other parts of the specification to achieve more than level 2.	**12-17 marks**
Level 2	Candidates have sound critical understanding of some of the content of the specification and have sound critical understanding of some of the connections between the different aspects of geography represented in the specification.	**6-11 marks**
Level 1	Candidates have basic critical understanding of some the content of the specification and have basic critical understanding of some connections between the different aspects of geography represented in the specification.	**0-5 marks**

3 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)*

Level 4	Candidates apply their knowledge and critical understanding of the specification content and connections to different aspects of geography represented in the specification, relevantly and where appropriate at a range of scales. They evaluate arguments, ideas, concepts and theories in detail.	**18-22 marks**
Level 3	Candidates apply most of their knowledge and critical understanding of the specification content and connections to different aspects of geography represented in the specification, relevantly and where appropriate at a range of scales. They evaluate arguments, ideas, concepts and theories clearly. There must be evidence of synoptic connections with other parts of the specification to achieve more than level 2.	**12-17 marks**
Level 2	Candidates apply some of their knowledge and critical understanding of the specification content and connections to different aspects of geography represented in the specification, relevantly. They attempt a basic evaluation.	**6-11 marks**
Level 1	Candidates explain contexts using basic ideas and concepts.	**0-5 marks**

* Maximum 11 marks for application and 11 marks for evaluation

4 Communication (0-8 marks)

Level 4	Candidates use an appropriate range of communication skills fluently and in different formats; present information within a logical and coherent structure; where appropriate, synthesise information from a variety of sources; use spelling, punctuation and grammar with a high level of accuracy; and employ geographical terminology with confidence.	**7-8 marks**
Level 3	Candidates use an appropriate range of communication skills clearly in different formats; present information within an effective structure; use spelling, punctuation and grammar with accuracy; and use a range of geographical terms.	**5-6 marks**
Level 2	Candidates use a limited range of methods to communicate knowledge and understanding; make some effort to structure their work; and use spelling, punctuation and grammar with some accuracy; and have a basic knowledge of geographical terminology.	**3-4 marks**
Level 1	Candidates use a limited range of methods to communicate knowledge and understanding; make only a basic attempt to structure their work; use spelling, punctuation and grammar with variable accuracy, and have only sparse knowledge of geographical terminology.	**0-2 marks**

Option 1: Geographical Aspects of the European Union

1   To what extent does location in the geographical core of the EU result in economic
     advantage?   [60]

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed knowledge of the geographical core of the EU and its
resulting economic advantages (accessibility, labour supply, market, linkages,
infrastructure etc). At this level a clear knowledge of the processes of cumulative causation
or similar models/concepts can be expected.

Level 3 (5-6 marks)
Candidates will have a clear knowledge of the geographical core of the EU and its
resulting economic advantages. Some knowledge of the processes of cumulative
causation or similar models/concepts can be expected.

Level 2 (3-4 marks)
Candidates will have a sound knowledge of the geographical core of the EU and some of
its resulting economic advantages. Vague knowledge of the processes of cumulative
causation or similar models/concepts can be expected.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of the geographical core of the EU and
some of its resulting economic advantages.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of how and why location in the core
results in economic advantages and why location in the periphery has disadvantages. A
clear cause-effect will be demonstrated between location and relative advantage. There
should also be a clear appreciation that such a core location can also have economic
disadvantages (high labour costs, high rents/rates, congestion, competition etc).

Level 3 (12-17 marks)
Candidates will demonstrate a clear understanding of how and why location in the core
results in economic advantages and why location in the periphery has disadvantages.
Some cause-effect will be demonstrated between location and relative advantage. There
should also be some appreciation that such a core location can also have economic
disadvantages.

Level 2 (6-11 marks)
Candidates will demonstrate a sound understanding of how and why location in the core
results in economic advantages. Some limited cause-effect will be demonstrated between
location and relative advantage.

Level 1 (0-5 marks)
Candidates will demonstrate a limited or vague understanding of how and why location in
the core results in economic advantages.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and understanding of location and the resulting relative economic advantages to evaluate the validity of the statement. Contrasts can be expected such as poverty in the core area such as London or Paris and wealth in remote but scenic or mineral-rich areas such as the more accessible Greek islands. Some appreciation that this is not a straightforward evaluation and it will vary with scale, location (within an area/region), over time (idea of spread replacing backwash) and may vary with individual groups/aspects (i.e. whose economic advantage) can be expected at this level. Some may contrast economic with social or environmental advantage.

Level 3 (12-17 marks)
Candidates apply their knowledge and understanding of location and the resulting relative economic advantages to evaluate the validity of the statement. Contrasts can be expected and some appreciation that this is not a straightforward evaluation and it will vary with location and over time.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and understanding of location and the resulting relative economic advantages to evaluate the validity of the statement. Some appreciation that this is not a straightforward evaluation and it will vary with location and over time may be offered.

Level 1 (0-5 marks)
Candidates apply limited or vague knowledge and understanding of location and the resulting relative economic advantages to produce a limited or vague evaluation.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

2 **To what extent has the Common Agricultural Policy had a greater impact on rural environments than on rural communities?** **[60]**

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed knowledge of the EU's Common Agriculture Policy and its impact on a variety of well exemplified rural environments and communities. A range of contrasting physical, economic and social impacts will be known.

Level 3 (5-6 marks)
Candidates will have clear knowledge of the EU's Common Agriculture Policy and its impact on well exemplified rural environments and communities. A range of physical, economic and social impacts will be known.

Level 2 (3-4 marks)
Candidates will have sound knowledge of the EU's Common Agriculture Policy and its impact on exemplified rural environments and communities. A range of physical and human impacts will be known.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of the EU's Common Agriculture Policy. An impact may be cited.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of how and why the CAP impacts positively and negatively (via price management, producer aids, supply controls and structural and environmental payments) on the physical environment e.g. monoculture, destruction of habitat, introduction of new species such as linseed, increased use of chemicals etc and on rural communities such as preservation of farming communities, employment, diversification etc. A clear cause-effect will be demonstrated between CAP and impact.

Level 3 (12-17 marks)
Candidates will demonstrate a clear understanding of how and why the CAP impacts on the physical environment and on rural communities in both positive and negative ways. A cause-effect will be demonstrated between CAP and impact.

Level 2 (6-11 marks)
Candidates will demonstrate a sound understanding of how the CAP impacts on the physical environment and on rural communities in both positive and negative ways. A weak cause-effect link will be demonstrated between CAP and impact.

Level 1 (0-5 marks)
Candidates will demonstrate a limited or vague understanding of how the CAP impacts on the physical environment and on rural communities. A limited, if any, cause-effect link will be demonstrated between CAP and impact.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and understanding of the CAP's impacts to evaluate whether the impact (negative or positive) is greater for the physical environment or the human community. Some appreciation that this will vary with scale, location e.g. upland area v fertile lowland, level of technology/development e.g. Greece v UK and may vary with individual communities/farmers can be expected at this level. There will be a clear evaluation of the extent.

Level 3 (12-17 marks)
Candidates apply their knowledge and understanding of the CAP's impacts to evaluate whether the impact (negative or positive) is greater for the physical environment or the human community. Some appreciation that this will vary with location e.g. upland area v fertile lowland or level of technology/development e.g. Greece v UK can be expected at this level. There will be a sound evaluation of the extent.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and understanding of the CAP's impacts to evaluate whether the impact is greater for the physical environment or the human community. There will be a basic evaluation of the extent.

Level 1 (0-5 marks)
Candidates apply limited or vague knowledge and understanding of the CAP's impact on rural areas probably to stress the negative effects on the environment. There is limited, if any, overall evaluation.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

3 **For <u>either</u> a former mining area <u>or</u> a declining manufacturing region in the EU, evaluate the effectiveness of the strategies used to regenerate the area.** **[60]**

The stress is on a single area case study – if more than one area is discussed it is self-penalising. The terms 'area' and 'region' are open to wide interpretation.

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed knowledge of one area of regeneration such as South Yorkshire (former mining area) or Ruhr (former mining or declining manufacturing area) together with a range of the strategies (such as those under the European Regional Development Fund and European Social Fund Objective 1 programme), and their relative success, used to regenerate the area.

Level 3 (5-6 marks)
Candidates will have a clear knowledge of one former mining area or a declining manufacturing area together with a range of the strategies, and their relative success, used to regenerate the area.

Level 2 (3-4 marks)
Candidates will have a sound knowledge of one former mining area or a declining manufacturing area together with some of the strategies used to regenerate the area.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of one former mining area or a declining manufacturing area together with some vague knowledge of the strategies used to regenerate the area.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of how and why these strategies (such as the EU's Objective 1 programme, national strategies, local strategies) act to regenerate an area, possibly supported with models or concepts e.g. multiplier, and why such efforts are needed. A clear cause-effect will be demonstrated between strategy and impact. A clear understanding of what regeneration means is expected.

Level 3 (12-17 marks)
Candidates will demonstrate a clear understanding of how and why these strategies act to regenerate an area and why such efforts are needed. Some cause-effect will be demonstrated between strategy and impact. Some understanding of what regeneration means is expected.

Level 2 (6-11 marks)
Candidates will demonstrate a sound understanding of how and why these strategies act to regenerate an area and why such efforts are needed. Some limited cause-effect will be demonstrated between strategy and impact.

Level 1 (0-5 marks)
Candidates will demonstrate a limited or vague understanding of how and why these strategies act to regenerate an area. Some vague, if any, cause-effect will be demonstrated between strategy and impact.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and understanding of the strategies' impacts to evaluate whether the impact (negative or positive) on regenerating the area is effective. Some appreciation that this will vary with scale, location (within an area/region), and may vary with individual communities/aspects can be expected at this level. There will be a clear evaluation of the comparative effectiveness of the strategies.

Level 3 (12-17 marks)
Candidates apply their knowledge and understanding of the strategies' impacts to evaluate whether the impact (negative or positive) on regenerating the area is effective. Some appreciation that this may vary with individual communities/aspects can be expected at this level. There will be a clear evaluation of the comparative effectiveness of the strategies.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and understanding of the strategies' impacts to evaluate whether the impact (negative or positive) on regenerating the area is effective. There will be a limited evaluation of the comparative effectiveness of the strategies.

Level 1 (0-5 marks)
Candidates apply limited or vague knowledge and understanding of the strategies' impacts to produce a limited evaluation of the impact on regenerating the area.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

Option 2: Managing Urban Environments

4 **'The rapid growth of large cities in LEDCs causes more harm than good.' Discuss the validity of this statement.** **[60]**

This may refer to either the process of urbanisation or the end product – large cities.

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed knowledge of examples of the urbanisation process and the resulting problems - harm (physical, economic, social and political) and benefits - good (physical, economic, social and political) based on one or more large cities in the LEDC. Knowledge of appropriate models and concepts such as core-periphery model, multiplier etc can be expected.

Level 3 (5-6 marks)
Candidates will have clear knowledge of examples of the urbanisation process and the resulting problems - harm (environmental and human) and benefits - good (largely human) based on one or more large cities in the LEDC. Knowledge of appropriate models and concepts such as core-periphery model, multiplier etc may be expected.

Level 2 (3-4 marks)
Candidates will have sound knowledge of examples of the urbanisation process and the resulting problems - harm (environmental) and benefits - good (human) based on one or more large cities in the LEDC.

Level 1 (0-2 marks)
Candidates will have only limited or vague knowledge of the urbanisation process and resulting impacts. Knowledge of appropriate examples may be vague or missing.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of the causal links between the rapidity of urban growth (and its size) and the resulting impacts – positive and negative - on the physical (sprawl, water supplies, pollution, micro-climate etc) and human (employment, housing, transport, services, health etc) environments for both the cities and the non-city areas.

Level 3 (12-17 marks)
Candidates will demonstrate a clear understanding of the causal links between the rapidity of urban growth (and its size) and the resulting impacts on the physical and human environments for both the cities and the non-city areas.

Level 2 (6-11 marks)
Candidates will demonstrate a sound understanding of the causal links between the rapidity of urban growth (and its size) and some of the resulting impacts on the physical and human environments for the cities or city.

Level 1 (0-5 marks)
Candidates will demonstrate limited or little understanding of the causal links between urban growth and its impacts.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and critical understanding of why large cities have rapid growth and in turn why/how this impacts on a variety of physical and human aspects, of both the city and the surrounding rural area, to evaluate the statement. At this level, a cost-benefit analysis would be appropriate but also an appreciation that the impact will vary with scale, location e.g. rural v urban, over time (there is a cycle effect) and will vary between groups e.g. rich v poor.

Level 3 (12-17 marks)
Candidates apply their knowledge and critical understanding of why large cities have rapid growth and in turn why/how this impacts on a variety of physical and human aspects, of both the city and the surrounding rural area, to evaluate the statement. At this level, there may be an appreciation that this may vary over time and between groups.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and critical understanding of why rapid growth impacts on physical and human aspects, of the city to offer a limited evaluation of the statement.

Level 1 (0-5 marks)
Candidates apply limited or vague knowledge and understanding of why rapid growth impacts on cities to offer a vague, if any, evaluation of the statement.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

5   To what extent has the control of urban sprawl in MEDCs been successful?   [60]

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed knowledge of a range of examples of direct attempts made at controlling urban sprawl such as green belts/wedges, brownfield development, New Towns, urban regeneration/redevelopment etc and indirect attempts such as transport planning, office location etc. Detailed examples are expected from one or more urban areas demonstrating knowledge of their relative success.

Level 3 (5-6 marks)
Candidates will have clear knowledge of a range of examples of direct attempts made at controlling urban sprawl such as green belts/wedges, brownfield development, New Towns, urban regeneration/redevelopment etc with examples from one or more urban areas demonstrating knowledge of their relative success.

Level 2 (3-4 marks)
Candidates will have sound knowledge of examples of direct attempts made at controlling urban sprawl such as green belts/wedges, brownfield development, New Towns, urban regeneration/redevelopment etc with examples from one or more urban areas.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of examples of attempts made to control urban sprawl and knowledge of urban areas is insecure.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of the cause-effect relationship between the pressures leading to sprawl such as: increased personal mobility, diseconomies/disadvantages of inner urban areas, increased incomes/wealth, changes in the type and location of employment, social changes etc, and the physical, economic, social and political reasons why it needs to be controlled.

Level 3 (12-17 marks)
Candidates will demonstrate clear understanding of the cause-effect relationship between the social and economic pressures leading to sprawl, and the environmental and economic reasons why it needs to be controlled.

Level 2 (6-11 marks)
Candidates will demonstrate sound understanding of the cause-effect relationship between the pressures leading to sprawl, and a variety of the reasons why it needs to be controlled.

Level 1 (0-5 marks)
Candidates will demonstrate a limited or vague understanding of the cause-effect relationship between the pressures leading to sprawl, and the reasons why it needs to be controlled.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and critical understanding of the causes of sprawl and the reasons for controlling it to evaluate the comparative success of the attempts. At this level, discussion is expected of why the attempts vary in their success – possibly due to contrasting economic, social and political factors. An appreciation that the relative success may vary over location, scale or time is expected.

Level 3 (12-17 marks)
Candidates apply their clear knowledge and critical understanding of the causes of sprawl and the reasons for controlling it to evaluate the comparative success of the attempts. At this level, discussion is expected of why the attempts may vary in their success – possibly due to contrasting economic and human factors.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and critical understanding of the causes of sprawl and the reasons for controlling it to evaluate the comparative success of the attempts. Most will probably see it as failing as a strategy.

Level 1 (0-5 marks)
Candidates apply only limited or vague knowledge and critical understanding of urban sprawl and its control with only a limited, if any, attempt at an evaluation of the statement.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

6 **'Despite government policies, spatial inequalities within urban areas remain as wide as ever.' How far do you agree with this statement?** **[60]**

'Government policies' are open to a wide range of interpretations – they could include foreign policy, trade policy, taxation etc but they should be linked to spatial inequalities. Government can include local.

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will demonstrate a detailed and well exemplified knowledge of the spatial inequalities within urban areas (a single case study could be effective), their causes and the types of policies governments use to reduce such inequalities. At this level candidates may know the direct (e.g. taxation) and indirect policies (e.g. education and training).

Level 3 (5-6 marks)
Candidates will demonstrate a clear and soundly exemplified knowledge of the spatial inequalities within urban areas, their causes and the types of policies governments use to reduce such inequalities.

Level 2 (3-4 marks)
Candidates will demonstrate a sound and exemplified knowledge of the spatial inequalities within urban areas and some of the types of policies governments use to reduce such inequalities.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of the spatial inequalities within urban areas and the policies governments use to reduce such inequalities.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of how such government policies seek to reduce inequalities and why they might vary in their success – usually related to the initial causes of the inequalities. At this level, there should be some understanding of why governments want to reduce inequalities.

Level 3 (12-17 marks)
Candidates will demonstrate a clear understanding of how such government policies seek to reduce inequalities and why they might vary in their success. At this level, there may be some understanding of why governments want to reduce inequalities.

Level 2 (6-11 marks)
Candidates will demonstrate a sound understanding of how such government policies seek to reduce inequalities and some of the reasons why they might vary in their success.

Level 1 (0-5 marks)
Candidates will demonstrate limited or vague understanding of how government policies reduce inequalities with very limited grasp of the cause-effect factors involved.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and critical understanding of the role of various types of government policy to evaluate and assess (with reasons) whether they have reduced, increased or had little impact on inequalities in urban areas. At this level, some appreciation of scale e.g. large cities v market towns, location e.g. LEDC v MEDC and variations over time (has there always been inequalities?) can be expected. A clear evaluation of the statement is expected.

Level 3 (12-17 marks)
Candidates apply their knowledge and critical understanding of the role of various types of government policy to evaluate and assess (with reasons) whether they have reduced, increased or had little impact on inequalities in urban areas. At this level, some appreciation of scale and location can be expected. An evaluation of the statement is expected.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and critical understanding of the role of various types of government policy to offer a limited evaluation of whether they have impacted on inequalities in urban areas. At this level, some appreciation of location can be expected.

Level 1 (0-5 marks)
Candidates apply limited or vague knowledge and critical understanding of the role of various types of government policy and offer little, if any, evaluation of the statement.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

Option 3: Managing Rural Environments

7   'The management of remote rural areas presents a greater challenge than managing
       less remote rural areas.' How far do you agree with this statement?   [60]

‘Management’ is open to a variety of interpretations from regional planning or National
Park policy down to individual landowners. This topic is tied to National Parks or settlement
in the spec. so candidates may restrict their answers to aspects of National Parks.

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed knowledge of remote and less remote rural areas and the
scale and range of the types of challenges (changing population numbers/types, changing
infrastructure, environmental issues, accessibility etc) various aspects of management
(environmental, economic and social) face in such areas. Higher level responses may link
these concepts via a suitable model such as core-periphery.

Level 3 (5-6 marks)
Candidates will have a clear knowledge of remote and less remote rural areas and the
range of the types of challenges various aspects of management face in such areas. Some
may offer a suitable model.

Level 2 (3-4 marks)
Candidates will have a sound knowledge of remote and less remote rural areas and the
types of challenges management faces in such areas.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of rural areas and their challenges to
management.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of how and why rural areas have to be
managed (and by whom) and how the level of challenge this poses will vary with its
remoteness (geographical or economic or social!) and/or other factors e.g. the physical
geography.

Level 3 (12-17 marks)
Candidates will demonstrate a clear understanding of how and why rural areas have to be
managed (and by whom) and how the level of challenge this poses will vary with its
remoteness and/or other factors.

Level 2 (6-11 marks)
Candidates will demonstrate a sound understanding of why rural areas have to be
managed and how the level of challenge this poses will vary with its remoteness.

Level 1 (0-5 marks)
Candidates will demonstrate limited or vague understanding of why rural areas have to be
managed.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and critical understanding of the management challenges to evaluate whether the remoteness of an area makes them more difficult to manage. Some challenges are common to both e.g. declining thresholds but some are greater for more accessible areas e.g. house building. There should be some appreciation of the way the level of challenge to managing may vary with scale (level of remoteness), location (upland v lowland) and over time or how they may impact on different aspects/types of management e.g. environmental v social.

Level 3 (12-17 marks)
Candidates apply their knowledge and critical understanding of the management challenges to evaluate whether the remoteness of an area makes them more difficult to manage. There should be some appreciation of the way the level of challenge to managing may vary with the level of remoteness scale and they may impact on different aspects/types of management.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and critical understanding of the management challenges to offer a limited evaluation of whether the remoteness of an area makes them more difficult to manage.

Level 1 (0-5 marks)
Candidates have limited or vague application of knowledge and critical understanding of the management challenges and so offer little, if any, evaluation.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

8   **'The growth of second home ownership is a major threat to rural communities.'**
      Consider the validity of this statement.   **[60]**

'Second homes' is open to a number of interpretations.

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed knowledge of well exemplified rural communities suffering increasing growth in second home ownership such as remote upland areas and those on good transport routes. At this level, a contrasting pair of detailed examples or case studies might be appropriate. They may show knowledge of appropriate concepts or models such as core-periphery model, multiplier effect, push v pull forces etc but this is not essential.

Level 3 (5-6 marks)
Candidates will have clear knowledge of exemplified rural communities suffering growth in second home ownership. They may show some limited knowledge of appropriate concepts or models such as core-periphery model, multiplier effect etc.

Level 2 (3-4 marks)
Candidates will have sound knowledge of a limited range of examples of rural communities suffering growth in second home ownership.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of a few examples (possibly a single case study) of rural areas undergoing growth in second home ownership.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of the cause-effect of why some rural communities are undergoing a growth in second home ownership – the role of a range of physical, economic, social and political factors will be understood. At this level, some understanding of the relative threat to rural communities can be expected.

Level 3 (12-17 marks)
Candidates will demonstrate clear understanding of the cause-effect of why some rural communities are undergoing a growth in second home ownership – the role of a range of physical and human factors will be understood. At this level, some limited understanding of the relative threat to rural communities can be expected.

Level 2 (6-11 marks)
Candidates will demonstrate sound understanding of the cause-effect of why some rural communities are undergoing a growth in second home ownership – a range of physical and human factors may be explored. Limited appreciation of the threat to rural communities is shown.

Level 1 (0-5 marks)
Candidates will demonstrate limited or vague understanding of the cause-effect of why some rural areas are undergoing a growth in second home ownership

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their knowledge and critical understanding of the causes of changes in rural communities to evaluate whether second home ownership is a major threat (or, it might be a benefit). At this level, some appreciation of how this may differ with scale, location (e.g. with distance from urban areas) and variations over time can be expected together with the nature of the population or groups in the rural community involved e.g. rural poor v wealthy retired. At this level, some clear attempt to evaluate the relative importance of the variety underlying threats to the rural community is needed.

Level 3 (12-17 marks)
Candidates apply their knowledge and critical understanding of the causes of changes in rural communities to evaluate whether second home ownership is a major threat. Some appreciation of how this may differ over time or with location can be expected with some limited attempt to evaluate the relative importance of some of the underlying threats is needed.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and critical understanding of the impact of second home ownership to discuss the threat to rural communities. There will be some limited attempt to evaluate the relative importance of the underlying threats.

Level 1 (0-5 marks)
Candidates are limited and vague in the application of their knowledge and understanding to discuss the impact of second home ownership. There will no attempt to evaluate the relative importance of the underlying threats.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

9   **To what extent should the rural environment be allowed to change in national parks and other protected landscapes?**   **[60]**

A fundamental issue of preservation v conservation.
Rural environments may include both natural and human aspects.

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed knowledge of the main types of protected landscapes (AONBs, country parks, heritage coasts, national forests etc) and the economic and social pressures leading to change e.g. afforestation, recreation, resource development, modern farming etc. These will be well exemplified probably based on one or more case studies.

Level 3 (5-6 marks)
Candidates will have a clear knowledge of the main types of protected landscapes and the main economic and social pressures leading to change. These will be exemplified probably based on one or more case studies.

Level 2 (3-4 marks)
Candidates will have a sound knowledge of the main types of protected landscapes and some of the economic and social pressures leading to change. Exemplification may be limited.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of the types of protected landscapes.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of the cause-effect relationship between the nature of inherent change in rural environments and the role of (or need for) protection and why there is a tension between change and protection. An understanding of the environmental, economic and/or political pressures that underlie this debate should be demonstrated.

Level 3 (12-17 marks)
Candidates will demonstrate clear understanding of the cause-effect relationship between the nature of inherent change in rural environments and the role of (or need for) protection and why there is a tension between change and protection. Some understanding of the environmental, economic and/or political pressures that underlie this debate should be demonstrated.

Level 2 (6-11 marks)
Candidates will demonstrate sound understanding of the cause-effect relationship between change in rural environments and the role of protection and why there might be a tension between change and protection.

Level 1 (0-5 marks)
Candidates will demonstrate limited or vague understanding of the need to protect rural environments.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and critical understanding of the impact of protecting landscapes to evaluate whether change should be allowed, managed or discouraged. Higher level answers will look at the innate conflict between protection and change and suggest some compromise. At this level some appreciation of the role of scale, location e.g. New Forest v highlands of Scotland and variations over time can be expected together with it varying with the nature of the area e.g. soil fertility, relief etc, its local population size/type e.g. area near to large population clusters, etc.

Level 3 (12-17 marks)
Candidates apply their knowledge and critical understanding of the impact of protecting landscapes to evaluate whether change should be allowed, managed or discouraged. Some appreciation of the role of location can be expected together with it varying with the nature of the area including its local population.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and critical understanding of the impact of protecting landscapes to give a limited evaluation of whether change should be allowed, managed or discouraged.

Level 1 (0-5 marks)
Candidates apply only limited or vague knowledge and critical understanding of the impact of protecting landscapes to offer very limited, if any, evaluation of the viewpoint.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

Option 4: Hazardous Environments

10 **To what extent are the impacts of a natural hazard influenced by human rather than physical factors?** **[60]**

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed and well exemplified knowledge of the impact of natural hazards and the physical (relief, geology, drainage, type/scale of hazard etc) and human (population size, economic, social, political etc) factors that influence the level of impact. Also knowledge of short term v long term hazards can be expected at this level.

Level 3 (5-6 marks)
Candidates will have clear and exemplified knowledge of the impact of natural hazards and the physical and human factors that influence the level of impact. Some knowledge of short term v long term hazards can be expected at this level.

Level 2 (3-4 marks)
Candidates will have a sound knowledge of the impact of natural hazards and the physical and human factors that influence the level of impact. Exemplification may be limited in detail.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of the impact of natural hazards and the physical and human factors that influence the level of impact.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate a detailed understanding of the cause-effect of the role (and inter-relationship) of a range of physical and human factors on the impact of a variety of natural hazards. An understanding of the scale and type of impact is also expected.

Level 3 (12-17 marks)
Candidates will demonstrate a clear understanding of the cause-effect of the role (and inter-relationship) of a range of physical and human factors on the impact of a variety of natural hazards. Some understanding of the scale and type of impact is also expected.

Level 2 (6-11 marks)
Candidates will demonstrate a sound understanding of the cause-effect of the role (and inter-relationship) of a range of physical and human factors on the impact of a variety of natural hazards. There will be limited understanding of the scale and type of impact.

Level 1 (0-5 marks)
Candidates will demonstrate limited or vague understanding of the cause-effect of physical and human factors on the impact of a variety of natural hazards.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and critical understanding to evaluate whether human factors (e.g. level of development, technology, wealth, population density etc) are more significant in determining the level of impact than purely physical factors. Some appreciation that this may vary with scale, location e.g. LEDC v MEDC and vary over time (more mitigation now so human more significant) or the scale and frequency of the hazards can be expected. A clear conclusion to the evaluation is expected.

Level 3 (12-17 marks)
Candidates apply their clear knowledge and critical understanding to evaluate whether human factors (e.g. level of development, technology, wealth, population density etc) are more significant in determining the level of impact than purely physical factors. An appreciation that this may vary with location e.g. LEDC v MEDC or the scale and frequency of the hazards can be expected. A conclusion to the evaluation is expected.

Level 2 (6-11 marks)
Candidates apply their knowledge and critical understanding to evaluate whether human factors are more significant in determining the level of impact than purely physical factors. An appreciation that this may vary with location e.g. LEDC v MEDC can be expected.

Level 1 (0-5 marks)
Candidates apply only limited or vague knowledge and critical understanding and offer little or vague evaluation of whether human factors are more significant in determining the level of impact than purely physical factors.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

11.   **'The impact of hurricanes and tropical storms reflects an area's level of
      development more than the severity of the event.' Evaluate this viewpoint.   [60]**

'Impact' may reflect the features of the storms or/and the types of damage etc.

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed and well exemplified knowledge of the main types of primary
and secondary impacts such as wind speeds, heavy rainfall, storm surges, landslides,
flooding, disease, dam failures etc. Detailed knowledge is also expected of examples of
hurricane prone areas at differing levels of development.

Level 3 (5-6 marks)
Candidates will have clear knowledge of the main types of primary and secondary impacts.
This will be supported by clear exemplification. Knowledge is also expected of examples of
hurricane prone areas at differing levels of development.

Level 2 (3-4 marks)
Candidates will have sound knowledge of the main types of impacts. This will be supported
by some exemplification. They will also demonstrate a limited knowledge of examples of
hurricane prone areas at differing levels of development.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of impacts and show very limited
knowledge, if any, of appropriate examples of hurricane prone areas or their levels of
development.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate detailed understanding of the inter-relationship of the primary
and secondary impacts of hurricanes on areas at differing levels of development and with
the nature (size, severity, life cycle, distance decay) of the hurricane. Cause and effect will
be well understood.

Level 3 (12-17 marks)
Candidates will demonstrate clear understanding of the inter-relationship of the distance
decay of the hurricane mechanism and the primary and secondary impacts. There will be a
clear understanding that the impact may vary with the level of development. Cause and
effect will be clearly understood.

Level 2 (6-11 marks)
Candidates will demonstrate sound understanding of some of the links between the
distance the hurricane travels and its impacts. There will be an understanding that the
impact may vary with the level of development. Cause and effect will be understood in a
limited way.

Level 1 (0-5 marks)
Candidates will demonstrate limited or vague understanding of the link between the
impacts of a hurricane and the level of development of the area.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4 (18-22 marks)
Candidates apply their detailed knowledge and critical understanding to evaluate and assess the extent to which primary and secondary impacts of hurricanes, or combinations of them, vary with the level of development of the area over which they pass or with the severity of the hurricane. Some appreciation that this is not a simple either/or but it may vary with scale, location e.g. upland area v lowland coast, time, preparation etc can be expected.

Level 3 (12-17 marks)
Candidates apply their knowledge and critical understanding to assess the extent to which primary and secondary impacts, or combinations of them, impact on the human and physical environments as the hurricane moves away from its origin. Some clear appreciation that this will vary with the level of technology/development e.g. LEDC v MEDC and/or with individual nature of hurricanes can be expected.

Level 2 (6-11 marks)
Candidates apply some of their knowledge and critical understanding to assess the extent to which hurricanes differ in impact on the human and physical environments of areas at different levels of development.

Level 1 (0-5 marks)
Candidates apply limited or vague knowledge and limited critical understanding to assess in a limited, if at all, way the extent to which hurricanes differ in impact on environments at different levels of development.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

12.   **'It is the resultant hazards rather than the earthquake event that cause the greatest losses.' To what extent do you agree with this statement?**   **[60]**

A01 Knowledge of content (0-8 marks)

Level 4 (7-8 marks)
Candidates will have detailed and well exemplified knowledge of the hazards resulting from an earthquake such as physical impacts e.g. mass movement, after-shocks, floods, even volcanic eruptions etc, and human impacts such as fire, disease, loss of communication, destruction of local economy etc (or primary v secondary). Some knowledge of short term v long term hazards can be expected at this level.

Level 3 (5-6 marks)
Candidates will have clear and exemplified knowledge of earthquakes and the resulting hazards such as a variety of physical impacts and human impacts or primary and secondary impacts.

Level 2 (3-4 marks)
Candidates will have a sound knowledge of earthquakes and the resulting hazards such as a variety of impacts. Exemplification may be limited in detail.

Level 1 (0-2 marks)
Candidates will have limited or vague knowledge of earthquakes and their impacts.

A02 Critical understanding of content (0-22 marks)

Level 4 (18-22 marks)
Candidates will demonstrate a detailed understanding of the inter-relationship of the initial earthquake shock and a range of resulting hazards. There will be a detailed understanding of what is meant by 'losses', whether physical, economic or in terms of deaths. Cause and effect will be well understood.

Level 3 (12-17 marks)
Candidates will demonstrate a clear understanding of the inter-relationship of the initial earthquake shock and a range of resulting hazards. There will be an understanding of what is meant by 'losses'. Cause and effect will be clearly understood.

Level 2 (6-11 marks)
Candidates will demonstrate a sound understanding of the relationship of the initial earthquake shock and a range of resulting hazards. There will be some understanding of what is meant by 'losses'. Cause and effect will be understood.

Level 1 (0-5 marks)
Candidates will demonstrate limited or vague understanding of the inter-relationship of earthquakes and hazards. 'Losses' will be vaguely understood probably only being seen as deaths.

A03 Application of knowledge and critical understanding in unfamiliar contexts (0-22 marks)

Level 4   (18-22 marks)
Candidates apply their detailed knowledge and critical understanding to evaluate why resultant hazards occur and cause losses. Some appreciation that this statement's accuracy may vary with scale, location e.g. LEDC v MEDC and vary over time (more mitigation now so initial impacts may be less than in the past) can be expected. The extent will vary with the level of warning, precautions, communications, planning, technology etc. A clear conclusion to the evaluation is expected.

Level 3 (12-17 marks)
Candidates apply their clear knowledge and critical understanding to evaluate why resultant hazards occur and cause losses. Some appreciation that this statement's accuracy may vary with location e.g. LEDC v MEDC can be expected. The extent will vary with a variety of factors. A conclusion to the evaluation is expected.

Level 2 (6-11 marks)
Candidates apply their knowledge and critical understanding to evaluate why hazards occur in an earthquake and cause losses. Some appreciation that this statement's accuracy will vary with a variety of factors may be demonstrated. A limited, if any, conclusion to the evaluation may be offered.

Level 1 (0-5 marks)
Candidates apply only limited or vague knowledge and understanding of the topic and offer little or vague evaluations of why the level of losses varies.

Maximum 11 marks for application and 11 marks for evaluation

A04 Communication (0-8 marks)

Use generic assessment criteria

Grade Thresholds

Advanced GCE Geography A 3832 7832
January 2010 Examination Series

Unit Threshold Marks

Unit		Maximum Mark	A	B	C	D	E	U
2683	Raw	90	66	59	52	45	39	0
	UMS	90	72	63	54	45	36	0
2684	Raw	120	83	75	67	60	53	0
	UMS	120	96	84	72	60	48	0

Specification Aggregation Results

Overall threshold marks in UMS (ie after conversion of raw marks to uniform marks)

	Maximum Mark	A	B	C	D	E	U
3832	300	240	210	180	150	120	0
7832	600	480	420	360	300	240	0

The cumulative percentage of candidates awarded each grade was as follows:

	A	B	C	D	E	U	Total Number of Candidates
3832	0	0	20.0	40.0	80.0	100.0	6
7832	18.6	49.2	74.6	96.6	100.0	100.0	61

67 candidates aggregated this series

For a description of how UMS marks are calculated see:
http://www.ocr.org.uk/learners/ums_results.html

Statistics are correct at the time of publication.