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- Soils
Agriculture (Questions)

1. a) Define the term agribusiness.

(2 marks)

b) Discuss the statement that "Agribusiness pursues profit at the expense of the environment."

(12 marks)

(Marks available: 14)

2. a) Outline the land-use theory proposed by Von Thunen.

(5 marks)

b) To what extent do you think his theory is relevant today?

(10 marks)

(Marks available: 15)

3. With reference to examples discuss how human factors affect the global distribution of agricultural systems.

(Marks available: 15)

4. a) For a country or region of your choice, discuss the changes in agricultural systems and the reasons for those changes.

(8 marks)

b) To what extent have the changes outlined in 4a been a success?

(7 marks)

(Marks available: 15)
Agriculture (Answers)

Answer outline and marking scheme for question: 1

a) You would get one mark for a basic definition and one mark for elaboration. The following would get two marks:

"Agribusiness refers to the situation where the agricultural enterprise is owned by corporate business and operates for profit maximisation. Farmers produce cash crops for food or as a raw material in manufacturing. It generally involves large scale arable farms, is highly capital intensive and mechanised."

b) You are focusing on the consequences of agribusiness on the environment. Possible consequences to discuss would include:

- Eutrophication of lakes and rivers
- Removal of ponds
- Poisoning from pesticides
- Soil erosion
- Genetically modified crops
- Degradation of landscape

You would get two marks for each factor you discussed and one extra mark for quoting relevant case studies/examples. Your discussion should relate to the pursuit of profit maximisation.

You are after twelve marks so look to discuss at least four points.

(Total = 14 marks)

Answer outline and marking scheme for question: 2

a) Your answer should include the following points for full marks:

- What Von T’s theory is
- A graph or diagram showing how he comes up with his theory
- Explanation of the graph
- His full model of agricultural land-use and one with modification

You need to include all of this with a clear explanation for full marks.

b) Is asking you to evaluate his model. There are several advantages and disadvantages and you need to demonstrate that you know them. Four to six marks are available for advantages such as:

- It helps us to understand one of the processes involved in determining land-use
There are some world examples that relate in part to his model
Locational rent is a theory that has been applied in economic and urban geography

And four to six marks for disadvantages such as:

- His assumptions make the model inapplicable to the real world - the flat physical landscape for example
- He makes no reference to the role of government
- Man is not an economic animal always trying to maximise profit
- The world has changed totally since he devised his model making his work out dated.

Obviously each of these points would have to be fully discussed to receive full marks.

Note: you can get 4 - 6 for each section but this will still only be up to a total of ten!

(Total = 15 marks)

Answer outline and marking scheme for question: 3

These kinds of questions are a gift because hopefully you will have simply learnt the factors 'parrot fashion'.

Factors you could discuss include:

- Land tenure - owner occupiers have the greatest incentives to increase yields
- Market - farmers will grow crops that are profitable
- Transport - see Von Thunen
- Capital - will determine the level of technology a farmer can utilise
- Technology - new technology can increase yields and affect the landscape
- Government - policies will influence what systems a farmer uses or crops he grows
- Von Thunen - provides us with an explanation of land-use. He uses locational rent to explain how land use will change as you move away from an urban area. As you move away so intensity will decrease as a consequence of inhibitive transport costs.

Expect to get three marks for a well-discussed point that refers to examples. This means you would have to discuss at least five!

(Total = 15 marks)

Answer outline and marking scheme for question: 4

a) To answer this effectively you will have to:

- Clearly outline the changes by explaining what was there first and what is there now - for three marks
- Explain why there has been a change - for the other five marks
You must refer to a specific change to get any marks. Possible changes to discuss include:

- The move in the UK towards organic farming
- The growth in agribusiness
- The collectives of communist countries
- Changes in Europe as a consequence of the common agricultural policy

b) To answer this you must consider the reasons for change:

*For example:* the common agricultural policy came about because of food shortages and in-efficiency in European farms.

To discuss its success you would have to weigh up the fact that we have a plentiful supply of food at affordable prices due to efficient farming techniques against the fact that we also have massive food surpluses, increased use of fertilisers and pesticides and, the destruction of hedgerows.

You can get seven marks for this section so look to fully discuss four factors.

*(Total = 15 marks)*
Coastal Processes (Questions) *

1. a) Describe the main differences between constructive and destructive waves.

(6 marks)

b) Referring to a named stretch of coastline, explain how marine, physical and human processes interact to produce a variety of landforms.

(12 marks)

(Marks available: 18)

2. a) Outline 2 of the processes by which coastlines are eroded.

(4 marks)

b) Briefly outline the key stages in the formation of a stump.

(4 marks)

c) Explain how urbanisation at the coast impacts on coastal processes.

(8 marks)

(Marks available: 16)

3. a) Draw a fully labelled diagram to show the process of longshore drift.

(4 marks)

b) Explain why many spits develop a curved end.

(4 marks)

c) For any named stretch of coastline evaluate the success of the coastal management strategies adopted.

(12 marks)

(Marks available: 20)
4. **a)** What is a coastal sediment budget?  

(2 marks)

**b)** Explain the difference between isostatic and eustatic sea level change.  

(4 marks)

**c)** For a named feature of coastal submergence, explain its formation and usefulness to man.  

(18 marks)

(Marks available: 24)
Coastal Processes (Answers)

Answer outline and marking scheme for question: 1

a) Once again, a diagram should be used to support your answer without it the maximum marks available will be 4. For maximum marks you should include:

- Constructive Waves:
  
  These are depositional waves as they lead to sediment build up, and are most common where a large fetch exists. They tend to have a low gradient, a larger swash than backwash, low energy, elliptical orbit and a low frequency of 6 - 8 per minute.

- Wave period is high in contrast:
  
  Destructive waves act as agents of erosion, because backwash is greater than swash. They are most common where fetch is short, have a mainly circular orbit, a steep gradient, and "plunge" onto the beach. Frequency is height 10 - 12 per minute, but wave period is low, on average 16 -18 seconds between crests.

So, the question requires 2 definitions (2 marks each and a diagram 2 marks).

b) Important Points!

- Name only 1 stretch of coastline it is what the question asks for!
- 10 is the maximum mark if no human processes are included
- If the account is general and the coast not located maximum marks will be 5

The examiner will expect you to have written about:

- Marine processes combining with sub-Ariel processes
- Marine processes combining with human processes
- Erosional features
- Depositional features

You gain credit in your answer for:

- Naming and locating specific features along your stretch of coastline, for example, Spurn head
- Explaining in depth how marine processes interact with human and other physical processes (a diagram would be a good idea)
- Using a variety of features

An answer that includes only a few limited statements, imprecise locations, is very descriptive and only relates to 1 or 2 landforms would not be getting above 5 marks.

A top level answer would have good structure, reference to a range of physical and human interactions, show a sound understanding of the formation of a number of precisely located features and have accurate well labelled maps / diagrams.
(Total = 18 marks)

Answer outline and marking scheme for question: 2

a) Again, really another question requiring 2 good full definitions of the processes you choose.

For example:

- Hydraulic Pressure:

  Cliffs and rocks contain many lines of weakness in the form of joints and cracks. A parcel of air can become trapped / compressed in these cracks when water is thrown against it. The increase in pressure leads to a weakening / cracking of the rock.

(2 marks)

b) A fully labelled diagram would help you obtain good marks. In order to have a high level answer be sure to include:

- Mention of joints or faults being attacked and made larger by marine erosion. Caves occur where the weakness is at the base of the cliff, and can become a blowhole if the crack extends all the way to the surface.

The following sequence:

Cliffs, caves, arch, collapsed arch, stack stump.

c) This question cannot be answered properly unless you show some understanding / appreciation of both coastal and river processes interacting at the coast.

For example, "urbanisation and artificial channelisation of rivers speeds up river flow. It can also reduce sediment available to beaches, starving coasts of sediment. Rates of beach erosion are increased as at Barton on Sea that may require human intervention in the form of concrete coastal management strategies. This can then cause problems further down the coast within the same sediment cell."

Marks: What to look for in your answer:

7 - 8 A diagram to illustrate the points you have made that is accurately labelled. Clear demonstration of the impact on coastal and river processes. Good use of examples.

4 - 6 Poor diagram, less detailed explanation and fewer references to examples. More concentration on either rivers or coasts.

1 - 3 No diagram, very little evidence of understanding of the links between processes. No examples used (or vague).
Answer outline and marking scheme for question: 3

a) Make sure that your diagram is annotated as fully as possible in order to gain full marks. In addition you should illustrate:

- That you know what longshore drift is
- That it can operate in more than one direction
- It tends to correspond with direction of maximum fetch and prevailing wind direction
- It can be limited by the use of groynes

b) Although a brief answer it is important that you relate to a named spit in this answer. For example, Spurn Head. = 3 marks maximum without it.

Other marks will come from mentioning:

- Usual direction of dominant fetch / prevailing wind
- 2nd most dominant fetch / prevailing wind
- Frequency of 2nd most dominant fetch and wind
- Importance of presence of a river or any other area of shelter
- A quick sketch of the processes acting on the feature

c) It is vital that you name a stretch of coastline to gain maximum marks. You will need to examine the success and failure of the strategy you have chosen to look at.

Marks will be awarded in your answer for the following points:

- Description of area you are looking at, for example, location, pressures on the area past history, rates of erosion, etc.
  
  (2 marks)

- Why there was a need for coastal management - aims

  (2 marks)

- A sketch map

  (2 marks if well annotated)

- Outline of the measures adopted and how they work

  (2 marks)

- Evidence of success
(2 marks)

- Evidence of failure (perhaps at other coastal locations)

(2 marks)

- Conclusion

(2 marks)

This means not all the points are needed but instead a good explanation of the points you are making.

Remember to include facts and figures to support point you make. An example of a good part of this answer is illustrated below:

"The need for coastal management at Chesil Beach stems from its importance for coastal protection, and the wide variety of flora and fauna that is found on its stony habitat. The plan was devised in 1989 with its main aims being, to manage conflicts between recreational users and limit their impact on ecosystems, educate visitors about the area, reduce soil erosion and produce a sustainable development plan for all interested parties."

(Total = 20 marks)

Answer outline and marking scheme for question: 4

a) No need for detail here just a straight definition will gain 2 marks.

Movement of sediment in one cell does not impact on beaches in another. It is the division of the UK coastline into separate cells, where sediment from one cell does not venture into another. It is very important for coastal management strategies.

b) 2 marks per definition one on isostatic change the other on eustatic.

- Isostatic Change:

  Local changes in sea level, due to ice weight depressing Earth’s crust lying beneath it.

- Eustatic Change:

  Large scale / worldwide changes. In times of maximum glaciations three to four times more water was stored on land than it is today. Global change in the hydrological cycle resulted and a worldwide eustatic fall in sea level of up to 150m.

c) Several choices of features are available although the best / easiest example is that of a Ria. Marks will be awarded for the following:
• Definition of a Ria: drowned river valleys. In the ice age when rivers still flowed they cut down to the new lower sea level. With the rise in temperatures and release of water from land they became flooded
• Example of a Ria (Milford Haven in South Wales)
• Brief diagram of formation
• Sequence of events in ice age leading to its formation (- Ice sheets and glaciers form, eustatic fall in sea level, and negative change in base level
• Ice sheets continue to grow. Land is depressed by weight, isostatic change, and positive change in base level

Ice sheets begin to melt, eustatic sea level rise, positive change in base level.

• Continued decline of glaciers, isostatic uplift of land, and positive change in base level.)
• What it is used for today (deep water port for the docking of oil tankers)
• Why it is so suitable for this.
• Examples of economic and recreational activities that take place in the named ria.

Each statement will receive at least one mark. Up to 2 with more detailed explanation.

(Total = 24 marks)
1. a) Describe the type of vegetation found in the Mediterranean Woodlands.

(3 marks)

b) Explain how this type of vegetation has adapted to its climate.

(4 marks)

c) Describe the impact humans have had in Mediterranean woodlands.

(4 marks)

(Marks available: 11)

2. a) Explain why deforestation can reduce soil fertility.

(3 marks)

b) How can deforestation affect people who live in these areas?

(4 marks)

c) Describe how tropical rainforests can be managed.

(3 marks)

(Marks available: 10)

- Increased surface runoff due to deforestation can cause increased flooding, which can lead to the destruction of infrastructure.
- Homes of native groups of people living in the forests can be lost.
- As the soil becomes less fertile farmers in North and Central Brazil have moved to shanty towns, like Roçhina, in urban areas.
- The Carajas mining project has created 2000 jobs.

(4 marks)

C) Give yourself marks if you mentioned the following points:

- Sustainable development.
- Replacing the same amount of trees as you remove.
• Create more National Parks where deforestation cannot occur.
• Reduce the mass burning of trees.
• You may also gain marks for using relevant case studies.

(3 marks)

(Marks available: 10)
Ecosystems (Answers)

Answer outline and marking scheme for question: 1

a) Give yourself marks if you mentioned any of the following points:

- Deciduous forest/Coniferous forests/Dense shrub land.
- Oaks and pines/Maquis/Garrigue.

(3 marks)

b) Give yourself 1 - 2 marks if you mention the following points:

- Waxy leaves/Long roots/Fire resistant
- Give yourself 3 - 4 marks if you can expand the above points:
  - Waxy leaves prevent water loss.
  - Long roots reach water found deep below the surface.
  - Small trees and shrubs are fire resistant.
  - Rosemary rolls up its leaves to reduce moisture loss.
  - Thick bark protects against the heat.

(4 marks)

c) Give yourself marks if you mentioned any of the following points:

- Much woodland has been cleared for fuel and building materials.
- Areas have been cleared for farming.
- Topsoil containing nutrients is washed away.
- Grazing has caused damage to shrub land.
- Fires have destroyed woodland.
- Soil left infertile.

(3 marks)

(Marks available: 12)

1. Answer outline and marking scheme for question: 2

a) Give yourself marks if you mentioned the following points:

- Humus is not replaced.
- Nutrients are washed away downwards.
- Leaves do not fall to create humus.
- The vegetation creates most of the nutrients.

(3 marks)
b) Give yourself 1 - 2 marks if you mentioned the following points:

- Increased flooding/homes lost/moved to urban areas.
- Created jobs.

Give yourself 3 - 4 marks if you can expand any of the above points. You may also use case studies.

- Increased surface runoff due to deforestation can cause increased flooding, which can lead to the destruction of infrastructure.
- Homes of native groups of people living in the forests can be lost.
- As the soil becomes less fertile farmers in North and Central Brazil have moved to shanty towns, like Roçhina, in urban areas.
- The Carajás mining project has created 2000 jobs.

(4 marks)

c) Give yourself marks if you mentioned the following points:

- Sustainable development.
- Replacing the same amount of trees as you remove.
- Create more National Parks where deforestation cannot occur.
- Reduce the mass burning of trees.
- You may also gain marks for using relevant case studies.

(3 marks)

(Marks available: 10)
Environmental Hazards (Questions)

1. a) Define the terms Greenhouse Effect, Ozone Layer, Acid rain.
   
   (9 marks)

   b) The evidence to support the arguments for global warming is inconclusive. Discuss.
   
   (15 marks)

   (Marks available: 24)

2. a) Outline the main sources of Greenhouse Gases.
   
   (6 marks)

   b) Explain how human and physical factors can affect the atmosphere at a local scale.
   
   (15 marks)

   (Marks available: 21)

3. a) What are the 2 main ways acid rain is deposited?
   
   (4 marks)

   b) Describe the damage acid rain causes?
   
   (6 marks)

   c) "Acid rain is an international pollutant." Explain the statement with reference to examples.
   
   (15 marks)

   (Marks available: 25)
Environmental Hazards (Answers)

Answer outline and marking scheme for question: 1

a) Make sure your definitions are in-depth enough to gain full marks. 3 marks per definition is generous.

'The Greenhouse effect is a gradual increase in the temperature of the lower atmosphere. Up to 30 gases produced by human activity have been identified as contributing to the effect. They include carbon dioxide, methane, and nitrous oxide. The name for the process is given because the gases act as the glass in a greenhouse helping to trap the sun’s energy.'

A fully labelled diagram would also be sufficient to gain 3 marks.

b) You need to clearly outline the arguments for and against global warming and at the end of your answer reach a conclusion based on the evidence you have used. You can either deal with all the arguments for global warming first, followed by those, which are against it, or directly compare the evidence. The majority of marks will be given for presenting evidence, but credit will be awarded for arriving at a logical conclusion based fully on the information you have related to. The more evidence you present the higher the mark. Remember you do not have to agree with the statement.

Evidence you need to include:

- Greenhouse gases occur naturally in the atmosphere.
- There is evidence to suggest that the earth has experienced cooler and warmer periods in the past. (UK little ice age1540 - 1700).
- We have not fully left the last ice age.
- Fossils and rocks - for example, coal are present in the UK yet could not have formed under present climate conditions.
- Other causes of climatic change exist - for example, volcanic activity, plate tectonics, variations in solar energy, and composition of the atmosphere.
- The majority of the warmest years have been in the past 2 decades.
- Hurricanes are increasing in frequency and strength.
- The incidence of flooding in low-lying coastal areas, for example, Bangladesh is increasing.
- Glaciers in the Arctic are melting.
- Mean average sea levels have increased in this century.
- Temperature increases have coincided with industrialisation and the rise in number of Greenhouse gases emitted from industry.

Do include facts and figures to support arguments. It is all very well to say that temperatures have risen but means little unless you give the evidence.

(Marks available: 24)
Answer outline and marking scheme for question: 2

a) Although this is a relatively simple question, be careful to acknowledge both natural and man-made sources.

\textit{For example:} 'Many greenhouse gases exist naturally, such as methane and it is thought to be human actions that are increasing their concentrations within the lower atmosphere.'

You will be awarded marks for mentioning the following sources:

- Water Vapour. A natural source that comes from oceans, lakes, rivers, reservoirs. Humans have little impact upon levels. Water vapour and clouds are responsible for nearly 98% of the natural greenhouse effect.
- Carbon Dioxide. Both a natural and man-made source - for example, burning of fossil fuels, and forests, breathing animals, less produced by southern hemisphere.
- Methane (CH$_4$). Much from break down of organic matter by bacteria (rice Paddy Fields) cows, swamps and marshes.
- Ozone. Comes naturally from some oxygen atoms. Ozone in the troposphere is due to chemical reactions between sunlight and agents of pollution.
- CFC's. Fridges, polystyrene packaging and aerosols but increasing due to ability to survive within the atmosphere for 100 years.
- Nitrous Oxide. Nitrate fertilisers, transport and power stations (combustion).

b) To gain full marks the examiner will be looking for reference to the following:

- Accurate factual knowledge
- Wide-ranging and accurate use of examples
- Examples to support answers dealing with wind, precipitation and temperature.
- Clear structure
- Atmospheric quality
- Stability and instability
- Scale
- Seasonal variations
- Locational examples

(Marks available: 21)

Answer outline and marking scheme for question: 3

a) 'Acid rain is deposited by both dry and wet deposition. Dry occurs close to the source usually no further away than 5km. It is a result of gas and aerosol emissions. Wet deposition occurs further away from the source after the gases have risen into the atmosphere and mixed with water vapour producing clouds and acid rain.'
b) One mark awarded for mentioning any of the following:

- **Vegetation/Soil.** Much initial concern focused on the death of coniferous trees in Scandinavia. As rain falls to the ground (or snow melts) toxins are released into the soil. Tree roots become damaged, and soil is deficient in nutrients. The ability of vegetation to withstand bacteria and disease is reduced.

- **Lakes.** Acid rain has led to acid levels in lakes in Scandinavia being exceptionally high. The number of fish in lakes in Norway has fallen since the 1950's.

- **Water Supply.** Aluminium is washed into lakes and reservoirs from the surrounding land, leading to algae bloom that upsets the ecosystem. Some evidence suggests a link between increased levels of Al in water and Alzheimer's disease.

- **Buildings.** Acid deposition encourages more rapid weathering of buildings, and their discolouration via carbonation.

The explanation for each will gain you up to 2 marks per point that you have made.

c) This examiner is expecting an answer that relates to wet deposition. It is most likely that the example you use will be that of the UK exporting its acid rain to Scandinavia. The way the answer should be structured and its content is outlined beneath:

- Introduction: What is acid rain, how is it formed.
- Exemplifications to show you understand the question: The UK an industrial country 'exports' its acid rain to Sweden and Norway.
- Explanation of why and how acid rain is exported: The dominant wind direction, depressions passing over the UK to Norway / Sweden, way pollutants mix in the atmosphere.
- An example of the way acid rain has damaged the recipient country (the more you give the more credit you will receive)
- Possible solutions to acid rain.

*(Marks available: 25)*
Introduction to Weather and Climate (Questions) *

1. a) Give a definition of albedo.
   (2 marks)

   b) Describe the major inputs and outputs into the solar energy budget.
   (4 marks)

   c) Outline the ways that energy is redistributed around the globe.
   (9 marks)

   (Marks available: 15)

2. a) Explain the difference between weather and climate.
   (3 marks)

   b) Describe the conditions that create low pressure.
   (3 marks)

   c) Draw a fully labelled diagram of the tri-cellular model.
   (9 marks)

   (Marks available: 15)

3. a) What is an air mass?
   (2 marks)

   b) Give an account of the life of a depression.
   (9 marks)

   (Marks available: 11)

4. a) Give definitions of ELR and DALR.
   (4 marks)
b) Urban areas experience vastly different climates from surrounding rural areas. Discuss.

*(11 marks)*

*(Marks available: 15)*
Introduction to Weather and Climate (Answers) *

**Answer outline and marking scheme for question: 1**

Do look at the marks available for each question and the command words - for example, describe, evaluate, explain, discuss, etc. as these tell you what is expected in the answer. Take time planning, read the entire exam paper, and always support answers you give with relevant diagrams and examples.

**a) Albedo just a straight definition is required here.**

'The reflective capacity of a surface, expressed as a percentage. It is the ratio between incoming energy and that which is reflected.' For extra marks give examples - for example, Snow has a high albedo (95%) Grass has a low albedo (25%).

**b) Major inputs and outputs into the solar energy budget:**

**Marks: What to look for in your answer:**

A definition of a solar energy budget, the way the earth is heated (Short wave and long wave energy)  
3 - 4 Methods that inputs of energy are lost - reflection, scattering, absorption. Outputs and loss of energy by wind, condensation, and heat lost to space at night. Use of diagram to support answer.

1 - 2 No mention of long and short wave energy, poor or no diagram. Little use of key geographical terms, for example, scattering

**c) Ways by which energy is redistributed around the globe:**

**Marks: What to look for in your answer:**

Answer begins with outline of vertical and horizontal heat transfers and why they exist. The scale of transfers is shown (large scale ocean currents to small scale sea breezes) Processes of radiation; conduction, convection, and latent heat are mentioned. Discussion of winds, including jet streams, depressions, hurricanes, mountain valley winds. Figures are included. Examination of at least 2 energy transfers in detail. Examples are used to support answer.

7 - 9 Horizontal and Vertical transfers are mentioned but without specific geographical terms. Less awareness of the scale of transfers from local to global. Limited depth in explanation, fewer facts and figures used. Some attempt to explain an energy transfer in detail.

4 - 6 Very descriptive, little mention of why energy transfers exist. Limited appreciation of their scale, no diagrams.

1 - 3
(Total = 15 marks)

Answer outline and marking scheme for question: 2

a) Difference between weather and climate.

Show that you know the key points of time and scale. Weather is the actual atmospheric conditions in the short term, of precipitation, cloud cover, sunlight, wind speed etc. Climate is the average conditions taken over a minimum 30-year period. The expected conditions of an area. For example, Equatorial Climate.

b) Show that you know low pressure is rising, unstable air and that it can be formed as a result of:

- Intense heating
- The meeting of 2 different air masses
- Uplift from mountains

c) Make sure your diagram includes all of the following:

Equator

Hadley, Ferrel, Polar cell

ITCZ

Polar Front Jet Stream and Sub Tropical Jet Stream

Areas of high and low pressure

Places where air is rising / falling

Winds

Depressions

Weather conditions

Approximate location of cell boundaries

(Total = 15 marks)
Answer outline and marking scheme for question: 3

a) Again a straight definition is all that is required here. 'A body of air with relatively uniform characteristics of temperature and humidity'.

b) The most important point here is to show that you fully understand what is happening in each of the 3 stages of a depression. The marks awarded are shown below:

Marks: What to look for in your answer:

- Introduction outlining what a depression is (area of low pressure, rain, winds, cross the UK from west to east, last 1 - 3 days, are unstable).
- Full discussion of each stage accompanied by diagrams. Thorough explanation.

7 - 9 Embryo - meeting of Tm and Pm air along polar front, warm, less stable air forced aloft, pressure lowers warm and cold front develop.

Mature - continued fall in pressure, stronger winds, warm sector, and differences found at cold and warm front.

Decay - occluded front, no warm sector remains, pressure begins to rise clearing showers.

4 - 6 Less detail in what a depression is and diagrams that are not fully labelled. Knowledge of the 3 stages shown more descriptive answer.

1 - 3 No diagrams. Little attempt to say why a depression changes as it crosses the UK.

(Total = 11 marks)

Answer outline and marking scheme for question: 4

a) Definitions of the DALR and ELR:

ELR...

This is the expected decrease in temperature with height through the lower atmosphere, approx. 6.5 degrees per 1000m. It varies according to height, time of year, and over different surfaces.

Dry Adiabatic Lapse rate (DALR)...
This is the rate a parcel of air cools at as it rises (or warms if falling) if condensation does not occur. The rate is approximately 1 degree per 100m.

b) A long answer question that provides much opportunity for the use of examples to support the differences described:

Marks: What to look for in your answer:

9 - 11 A very full answer that is well structured and uses relevant examples. Will begin with an explanation of what a microclimate is, and lead into the differences in an urban area, with reference to precipitation, temperatures, humidity, wind speeds, air quality. Specific examples of temperature differences etc are included. For each difference the reasons for the differences are fully explained. For example, the influence of building materials, their albedo, pollutant particles etc.

6 - 8 As above but less use of examples and not such a comprehensive explanation of why differences exist.

4 - 7 Shows that there is a difference in urban areas but very few examples are used. Answers tend to be 'temperatures are higher because of buildings - they lack depth'.

1 - 3 Little attempt to show what a microclimate is. No use of examples, differences are stated with no reasons given.

(Total = 15 marks)
1. a) Describe the key features found at a destructive plate boundary.

(6 marks)

b) Explain why some tropical and subtropical areas experience a greater frequency and risk of tropical cyclones and seismic activity than others.

(6 marks)

c) Natural Hazards have a greater impact on LEDC’s than MEDC’s discuss.

(12 marks)

(Marks available: 24)

2. a) Define the term mass movement and outline the factors that influence the speed of its movement.

(6 marks)

b) Although Mass movements occur naturally their impact increases dramatically as a result of human activity. Discuss with reference to specific examples.

(15 marks)

c) The marks for this question will be divided as follows:

Definition of mass movement = 2 marks.

Factors influencing movement = 4 marks.

(4 marks)

(Marks available: 25)

3. a) Describe the features necessary for hurricane formation.

(4 marks)

b) Explain how the formation of hurricanes differs from that of tornadoes.

(6 marks)
c) Evaluate the success of a disaster prevention programme for a named area or country you have studied.

(15 marks)

(Marks available: 25)

4. Hazards have social, economic and demographical impacts. Examine the main factors that affect these.

(Marks available: 25)
Natural Hazards (Answers) *

Answer outline and marking scheme for question: 1

a) Marks will be given for the following, be careful not to explain any of the features. Begin by saying that plates are moving towards each other at a destructive plate boundary.

Examples of features created and hazards caused by plate movement are outlined below:

- Subduction Zones and Ocean Trenches, for example, The Peru - Chile trench
- Earthquakes
- Fold Mountains, for example, Andes
- Volcanoes
- Island Arcs (such as those found in Japan)

b) The risk of hazards is increased for the following reasons:

- High seismic risks are associated with plate boundaries. Due to movement of plate and the generation of heat at subduction zones certain areas are more prone to tectonic activity. The location of volcanoes around the Pacific ring of fire is a good example of this.
- Areas experiencing little seismic risk / active volcanoes are far removed from plate boundaries.
- The exception of Hawaii is due to the location of a 'hot spot'.
- Tropical cyclones need certain conditions for their formation. The presence of high ocean temperatures and high humidity is limited to areas close to the equator.

Tropical cyclones are not found along the equator, as the coriolos force is insufficient to allow the spinning motion to develop.

Tropical cyclones do not occur over land as their main supply of energy (warm water) is removed.

c) In this answer you need to show that you understand that the term 'impact' can be defined in a variety of ways, and whilst loss of life can be greater in LEDC's, the economic impacts of hazards in MEDC's cannot be underestimated. You need to include examples to illustrate differences and include reference to the following:

- Population: The higher densities of population in LEDC's (for example, the Mexico City earthquake).
- Available finances (limiting or allowing enforcement of building legislation codes).
- Education is the population suitably educated regards steps to take in the event of a hazard.
- Insurance.
- Economy: How diverse the economy is of a country hit. Is the country reliant on a cash crop economy? For example, Hurricane Mitch - Nicaragua.
- Infrastructure: Are the emergency services equipped to cope with the impact of a hazard?
- Figures to show the impact of a similar strength earthquake in a LEDC and MEDC to help support your answer.

The question expects you to reach a conclusion based on the evidence you have presented in your answer.

(Marks available: 24)
Answer outline and marking scheme for question: 2

a) Answer gaining full marks:

'In its broadest sense mass movement is the movement down slope of any weathered material (regolith) under the influence of gravity.' The type of movement is influenced by:

- Steepness of slope
- Type and nature of regolith
- Type and amount of vegetation
- Water (precipitation, springs, rivers)
- Rock structure and type
- Human activity (type and amount)
- Climate.

b) Without examples, or reference to only one the highest available marks for this question is 10. They are vital to show your understanding of the role of human activity in increasing mass movements. It is a good idea to use examples that are from a variety of countries striking a balance between MEDC's and LEDC's.

Possible examples could include:

- Aberfan: UK 1966
- Holbeck Hotel: Scarborough UK
- Landslides along the Californian Coastline
- Mass movements linked with volcanic activity (Mt. St. Helens)
- Mass Movements caused by climatic influences (Hurricane Mitch - Nicaragua)
- Population pressure increasing likelihood of mass movements due to building on steeper land, for example, Hong Kong and Rio de Janerio.
- Avalanches (increased risk from skiing industry)

When talking about impact in this answer you need to show that you understand that 'impact' is a wide-ranging term and address it by examining the following:

- Loss of life
- Economic impact
- Size of the mass movement
- Impact on buildings, natural vegetation, industry.

As the answer stresses the word 'dramatic' do make sure that you show how human activity led to the impact. For example:

'An example of a mass movement that was increased dramatically as a result of human activity was that which hit the coal mining village of Aberfan, South Wales on 21st October 1966. The landslide which involved over 100 000 cubic metres of colliery waste travelling at speeds over 30 km per hour, killed 144 people, over 100 of whom were school children. The reason for the landslide was a combination of human and physical factors - a build-up...
of rain water inside the waste tip led to its instability, yet human mismanagement proved crucial. The spoil tip was high up on steep valley sides, and despite earlier smaller earth movements the National Coal Board continued to pile waste on the tip.

(Marks available: 25)

Answer outline and marking scheme for question: 3

a) Marks will be awarded for mentioning any of the following (award yourself one mark for each):

- Warm oceans (27 degrees plus) to a depth of 60m
- Location sufficient to allow Coriolis force
- Stable and uniform conditions of temp, humidity and pressure.
- Relative humidity of over 60%
- Little change in horizontal wind with height
- Cyclonic spinning of winds in lower troposphere

b) This question is designed to test that you really do know the differences in formation - not just scale of each. A common mistake at A-Level is to fail to adequately distinguish between each.

Start your answer by defining each, to demonstrate that you know what each is:

'Hurricanes are extremely powerful low-pressure systems, and are believed to be responsible for a greater number of deaths than any other natural hazard. They are generated over the Atlantic and Pacific oceans and are most common in autumn when ocean temperatures are at their highest. They can last for up to a week, have wind speeds in excess of 119km per hour and can be 100's of km across. In contrast tornadoes are much smaller, last for a shorter length of time and form over land rather than sea. Both are part of the global energy transfer.'

The points you need to include are:

- Different air types meet and due to their different properties do not mix
- In the USA warm moist air with its origins in the Caribbean meets colder air that has originated in the northern Rockies
- The need for instability (the two meeting air masses should be conditionally unstable)
- Low-level air with a relative humidity of over 65%
- Existence of low-level southerly jet stream in the humid air

c) Your disaster prevention programme can be for either an MEDC or LEDC, prior to evaluation its success you need to outline its key features - such as:

- Training and education
- Land Use Planning
- Building Codes
- Communication of information
In addition, do not forget to include any information that may be relevant to making the programme a success or failure:

*For example*: the state of the economy of the country, are they dependent on a cash crop economy?

What are the available finances to spend on the programme?

Is their adequate understanding of the programme by the local population - if not why not?

Is there any evidence to show that the programme has been a success?

*For example*: evacuation procedures in the Southeast USA to escape hurricanes, and the use of hurricane shelters. How easily can emergency services reach the injured?

Does the population know about the potential risk of the area they live in or does population pressure reduce their choices?

Include the issue of hazard perception, which may reduce the effectiveness of the programme.

Do, towards the end of your answer relate back to the question. That is decide if you think the programme has been a success or failure, drawing on the evidence you have presented.

*(Marks available: 25)*

**Answer outline and marking scheme for question: 4**

A full essay answer, so planning is vital, as is a solid, logical structure and appropriate use of geographical terminology. The examiner is looking for understanding that loss of life is the most extreme consequence, but loss of livelihood, community stress, loss of property and businesses are also impacts. You will be expected to demonstrate your knowledge and understanding in the following ways:

**Knowledge**

Factors that affect the impact should begin with the level of development of a country. This should be at a more complex level than simply MEDC’s versus LEDC’s, by doing this you will put your answer in a higher band. Take each impact in turn: For example, the social impacts could be reduced / increased as a result of religious beliefs. Demographic impacts vary because of both population structure and density. Economic impacts will be linked to levels of development, wealth and insurance. Extra credit will be awarded for mention of ability of country to forecast hazards.

**Understanding**

Using a range of examples will show better understanding, and that different factors will affect different areas of the world. Good answers will show that one factor may be important for one hazard, but not for another. *(For example, loss of life or property).*
Population (Questions)

1. a) For an area you have studied describe the distribution of its population.
   
   
   (8 marks)

   b) Discuss the human and physical factors responsible for the distribution described in 1a.
   
   (12 marks)

   (Marks available: 20)

2. a) What do you understand by the terms net outmigration and ethnic minority?
   
   (4 marks)

   b) With reference to social and economic factors discuss why ethnic minorities tend to ‘cluster’ in certain areas of cities?
   
   (8 marks)

   (Marks available: 20)

3. For your chosen human environment...

   a) Identify the processes of migration both domestically and internationally.
   
   (6 marks)

   b) To what extent are these migration patterns a consequence of perceived economic gains or environmental conditions?
   
   (14 marks)

   (Marks available: 20)
Population (Answers)

Answer outline and marking scheme for question: 1

a) 8 marks therefore 16 minutes.

Two things to remember here:

- You have been asked to refer to a specific area so general reasons are no good
- You have only been asked to describe so do not waste time in part 'a' with explanation.

It is a good idea to include an annotated sketch map. If it is accurately drawn (mind you they won't expect atlas quality - you only have 16 minutes!) with clear annotations that include facts and figure then you can gain all of the marks just with the sketch map. It also provides a good reference point for your discussion.

I would also add my own description to support what I have put on the map.

b) A longer answer required for 12 marks - try allocating about 24 minutes.

There will be 6 to 8 marks available for physical factors and 6 to 8 for human. This means you can gain credit for being particularly strong in one aspect but cannot get full marks if you do not discuss both human and physical. Nor will you get 16 for writing more!

The marks will be allocated in pairs where you will get one mark for identifying a relevant point and one for explanation. For example...

"The majority of Brazil's population live on the South-east coast with particularly high concentrations around the cities. In and around Rio de Janeiro for example population densities exceed 50 people per km squared. Population density is high here for a number of reasons. Rio de Janeiro grew up as a consequence of the natural harbour, which encouraged trade and industry. This in turn encouraged migration as people arrive looking for work. More recently the city has become a major tourist destination and is still the focus for much of Brazil's investment."

The above answer would gain two marks as it identifies a reason - the natural harbour and then explains how that leads to high population density - the industry that attracts migrants looking for work.

You should be looking to write three such statements with reference to physical factors and three with reference to human factors. If you have time add more because it is always better to have too many than too few - but do not go over your time allocation!

(Total = 20 marks)

Answer outline and marking scheme for question: 2

a) A question that illustrates your need to learn definitions. 2 marks are allocated for each definition. 1 if it is basic, 1 extra for elaboration.
"Ethnic minority - a group or community that is of an ethnicity different to that of the dominant population."

(1 mark)

"This group can be identified by physical factors such as skin colour but also on religious or cultural practises."

"They often occupy certain areas in the urban mosaic possibly in enclaves or ghettos."

1 mark for either of these or similar elaborative points.

"Net out-migration is the balance between immigration to an area and emigration from an area.

(1 mark)

"It can be a positive number meaning that the population of the given area will be falling or negative suggesting an increase in population. It can be expressed in absolute terms but also as a percentage. Can refer to an area, city, country or, continent. The only restriction is global."

1 mark for any of these elaborations.

b) Asks for reference to social and economic factors. 8 marks available so assume an even distribution of 4 for social and 4 for economic. Although it is possible that a really good social or economic answer could gain 5 or even 6 but full marks would not be available for just discussing one of the factors.

Possible economic factors for discussion include:

- Cost of housing: It is unlikely that a new migrant from the developing world will have a great deal of money. Housing in the inner cities is the cheapest to buy and there is a greater availability of cheap places for rent. Therefore ethnic minorities will cluster due to the structure of the housing market.

- Work: The migrant is unlikely to arrive with a job so the inner cities provide good access to the CBD where work is likely to be found.

- The inner cities can offer entrepreneurs a good threshold population whilst rental/purchase of commercial property can still be relatively cheap. This is advantageous to the person wishing to set him/herself up in business.

- Many ethnic minority groups have an economic support network that encourages people to live close to one another.

Possible social factors to include:

- Clustering means minority groups can support specialist shops such as Chinese supermarkets or lobby for religious facilities such as a mosque.

- Clustering is also a very good defensive measure especially if the host population is seen as unwelcoming and aggressive

- Clustering can be a deliberate attempt to maintain culture and tradition

- The point of entry for many new immigrants is often the family already in the host country. Therefore it is likely that the person will live in the family house, maybe work in the local area perhaps in a family business and then not want to leave the area he/she has become established in. This could also be listed under economic factors.
To gain the full 8 marks you should have discussed at least two relevant points from each list.  

(Total = 20 marks)

**Answer outline and marking scheme for question: 3**

You must refer to one region or country for 3a and 3b. Choose carefully and refer specifically to your chosen human environment.

**a) 6 marks so 12 minutes.**

Marks allocated for identifying different processes of migration within a region both domestically (Rural to urban, rural to rural, urban to rural, urban to urban) and internationally (immigration and emigration).

All of the points do not need to be mentioned but to gain good marks you should refer to at least 3 with specific reference to your chosen human environment.

**b) To what extent are these migration patterns a consequence of perceived economic gains or environmental conditions? 14 marks so allow 28 minutes.**

This is an evaluative question that asks you to explain the causes of the migrations identified in '3a'.

**The easy way to answer this is:**

- Discuss the patterns of migration that are a consequence of perceived economic gains, for example, Movement for potential work
- Discuss the patterns of migration that are a consequence of the prevailing environmental conditions - both human and physical
- Show that you appreciate that migration is not just a consequence of one factor, it is usually a whole host of contributory factors
- Discuss migration that is a result of a variety of factors including, that which is primarily social or cultural.

Throughout this answer you will get the great credit for referring specifically to your region. The examiner also wants you to demonstrate that migration is not always a consequence of one or two factors but is usually a consequence of a whole host of contributory factors.

(Total = 20 marks)
River Processes and Management (Questions) *

1. a) What is the negative impacts human development can cause on a flood plain?
   (4 marks)

   b) Referring to a large named drainage basin, explain how natural processes can change fluvial landforms.
   (12 marks)

   (Marks available: 16)

2. a) Describe two processes by which rivers transport material.
   (4 marks)

   b) It is impossible for man to manage rivers effectively. Discuss with reference to at least one river management scheme.
   (12 marks)

   (Marks available: 16)
River Processes and Management (Answers) *

Answer outline and marking scheme for question: 1

a) A short answer question but you still need to demonstrate a knowledge of the characteristics of a flood plain and their value to man. Marks will be awarded for mentioning the following:

- Flood plain characteristics, for example, low lying, fertile, flat.
- Provide opportunities for recreation, farming, and development.
- Negative impacts: buildings can be damaged by floods, possible death / injury to residents, buildings and concrete increase the speed of drainage raising the flood risk and frequency. Increased costs of insurance, bridges will limit river flow, engineering works may be hindered. Mark also allocated for the use of an example to support your answer.

b) A much longer answer is required here and you should spend approximately 25 marks on this. You will be expected to show your understanding by use of key geographical terms of erosion, for example, (abrasion, attrition). Note the requirement of the question a large drainage basin - your local stream will not do.

Your answer must include reference to the following and show the links between them in order to gain high marks (over 10):

- Meanders
- Braiding
- Changes to the long profile from source to mouth
- Upland river features (rapids, v-shaped valleys, interlocking spurs etc.)
- Lowland river features (bluffs, meanders, braiding, levees)
- Changes in cross profile

It is vital that you show you understand how natural processes alter fluvial landforms in your chosen large drainage basin. No reference will limit your answer to a maximum of 8 marks.

(Total = 16 marks)

Answer outline and marking scheme for question: 2

a) The question only really needs two full definitions to gain 4 full marks. Do not waste time with explanations they will not be rewarded.

Naming 2 processes, for example, suspension / traction

(1 mark)

1.5 marks per good definition.
“Traction only occurs when a river is in flood; it is when the largest boulders are rolled along the floor of the river bed.”

b) This question requires you to show that you are able to evaluate evidence and give a balanced well-reasoned argument, as to why you agree / disagree with the statement.

The best answers will draw on 2 contrasting management schemes (success v failure).

Prior to reaching a conclusion for each you should have addressed:

- River location
- Frequency of flooding
- Amount of flood damage (pre / post management)
- Reasons for flooding (human and natural)
- River characteristics (meandering / lateral erosion and examples of nature v man, for example, "In its natural state water can flow freely onto the flood plain whereas artificial levees can squeeze floodwater creating greater possibilities of flooding"
- Consequences of floods
- Ways of managing floods (dams)
- Success and failure of the measures

At least one mark will be given per point made.

Diagrams will increase marks.

(Total = 16 marks)
River Profiles (Questions)

1. For any named drainage basin, explain the main processes operating within it.

   (Marks available: 15)

2. a) What are the chief processes operating in a drainage basin system?

   (6 marks)

   b) How can change to land use in a river channel limit flooding? You should include references to a named river.

   (12 marks)

   (Marks available: 18)
River Profiles (Answers)

Answer outline and marking scheme for question: 1

A long answer that you will need to plan, and should spend approximately half an hour answering. Careful consideration of the ways processes interact to result in a high or low probability of flooding is vital. Figures and reference to a storm event should be used to support your answer.

Begin with a brief outline of the main characteristics of your drainage basin:

"The drainage basin of the River X is located in... It has an elongated shape, and the relief is predominantly low lying. The climate is mild with winter temperatures rarely falling below freezing."

Reference to the following is required:

- Basin size / shape / relief
- Land use and vegetation (farming, forestry etc.)
- Any urban areas
- Climate
- Rock and soil type

How these factors influence the processes of infiltration, evapotranspiration, soil moisture stores etc.

For example: "Discharge for the river is highest from October to January when numerous depressions pass over the area. Evapotranspiration is reduced at this time as a result of low temperatures and limited interception a result of leaf loss from deciduous trees. These factors combine to increase the flood risk at this time of the year. An example of this was shown in..."

(Marks available: 15)

Answer outline and marking scheme for question: 2

a) You need a diagram - without it the maximum marks will be 4. The following are required with some brief explanation.

- Outputs: transpiration, evaporation, river runoff
- Inputs
- Stores
- Transfers

b) Modification you should relate to in your named drainage basin include:

- Zoning of land use
- Measures to conserve soil (forestation to reduce runoff)
- Land use planning measures, for example, house building limited to higher land away from flood risk
• Lower density of building on flood plain
• Land uses that keep the floodplain for its intended use (water storage and wetland) these lower the flood risk
• Reservoirs to store water
• Channels cut to divert flow in times of heavy rainfall
• Channel realignment
• Banks and levees constructed

**Marks:**

**What to look for:**

9 - 12 Annotated diagram of measures, which explains clearly land use and channel modifications and how these reduce flood risk. A deep understanding is displayed.

4 - 8 Diagram, but incomplete annotation. Links to how methods reduce flood risk is less clear.

1 - 3 Poor diagram, very little annotation. Little understanding demonstrated.

*(Marks available: 18)*
Tourism (Questions)

1. a) What do you understand by the terms 'recreation' and 'tourism'?
   
   (4 marks)

   b) For a region or regions you have studied examine the effects of recreation and tourism on the human and physical environment.
   
   (10 marks)

   (Marks available: 14)

2. a) Identify two major changes in global tourism that have occurred in the past twenty-five years.
   
   (4 marks)

   b) Explain why these changes have occurred.
   
   (10 marks)

   (Marks available: 14)

3. a) For an area you have studied explain why it is in need of regeneration.
   
   (4 marks)

   b) How has tourism been utilised to regenerate the area mentioned in 3a?
   
   (4 marks)

   c) Evaluate the success of the regeneration programme you have discussed.
   
   (10 marks)

   (Marks available: 18)

4. a) What do you understand by the term sustainable tourism?
   
   (2 marks)

   b) State a case study example of sustainable tourism and justify your choice.
c) How can tourism be used to improve the quality of life in developing world countries?

(Marks available: 15)
Tourism (Answers)

Answer outline and marking scheme for question: 1

a) Approximate time to answer the question - 8 minutes.

"The term tourism refers to the industry that provides for tourists such as the tour operators and the provision of hotels. It also refers to the process travel by a tourist."

"Recreation is an activity that somebody chooses to do in his or her spare time for the purposes of health both mental and physical, pleasure, fun, intellectual stimulation or any combination of these. It differs from sport as it is not governed by a strict set of rules but sport can be recreation if it is pursued primarily for the reasons outlined above."

b) Approximate time to answer the question - 20 minutes.

You need to be careful to differentiate between the impacts of tourism and the impacts of recreation.

To gain the highest marks you should have a balanced answer that examine impacts of recreation and tourism on the built and physical environment. You should also make specific references to places.

Some factors you could discuss are outlined below...

**Impact of recreation on the built environment include:**

- The built environment can be conserved or enhanced as tourism is used to regenerate an area. In the Bristol dockside regeneration several listed buildings have been renovated and now form a vibrant part of the economy. Specifically related to recreation would be the Watershed media centre or the new '@Bristol' interactive technology museum that are based in listed buildings.
- The growth in the leisure industry has seen the development of many purpose built 'health clubs' such as those under the David Lloyd banner.

**Impact of recreation on the physical environment includes:**

- Footpath erosion is a problem in all national parks these days as a result of the increase in walking and mountain biking. Problems are particularly bad in the Peak district and Snowdonia.
- Scuba diving has led to the destruction in many areas of coral reef. As a consequence scuba diving in Australia is covered by strict legislation.
- Many regions of the European Alps have faced major deforestation as new ski runs are made to provide for the increased demand. This has increased the frequency and impact of avalanches.

**Impact of tourism on the built environment includes:**

- In areas of historic importance many buildings are suffering badly because of the increase in tourism. The physical numbers can erode away steps whilst the increase in corrosive fumes from cars and coaches can corrode buildings.
The vibrations from vehicles can also have an effect on the foundations of buildings. Both of these are occurring in many areas of historic Greece.

Tourism can have a beneficial effect on the built environment as entrance charges can pay for the maintenance or renovation of historic buildings. The National trust care for over 200 hundred historic buildings including entire villages using money from entrance fees and subscriptions. They are also helping to preserve over 600 miles of the UK's coastline.

Impact of tourism on the physical environment includes:

- Again tourism can benefit a natural environment if the tourism is affectively managed. As mentioned above the National Trust has used entrance fees and subscriptions to manage and conserve over 600 miles of the UK's coast.
- A less desirable impact is the deforestation and loss of natural habitat that occurs when a holiday complex is built. The large hotels on the Costa del Sol and Goa could be used as examples.
- Hotel complexes demand a vast quantity of water for watering gardens, laundry, guests and swimming pools. This can have a disastrous effect by lowering the water table. This can effect crop growth or cause springs to dry up. Very often the locals are dependent on these springs for their water. This has occurred in Goa.

(Marks available: 14)

Answer outline and marking scheme for question: 2

a) There are several major changes that you could choose from including:

- Increase in numbers of international and domestic tourists.
- Greater diversity of destinations including more long haul destinations.
- The growth of tourism in the developing world.
- Greater diversification in holiday type to include activity based, culture based, safari type, educative, theme park holidays (Disney world).
- Increase in the duration of holidays.

b) Depending on your answers to 2a you should refer to several of the following factors:

- More holidays: paid holidays increased
- A smaller world: faster travel time increase tourism
- Development: Governments promote tourism as it can benefit their economy
- Elderly: Health care and pensions has meant that people are living longer
- Society: Holidays are a normal part of Western society
- Income: People are earning more than ever before and prices are relatively cheaper
- Communication: TV travel programmes raise awareness whilst credit cards and ICT makes booking holidays easier

You will be marked on your ability to identify relevant factors from the above options and relate them to your answer for '2a'. For a ten-mark question you should be fully explaining at least four factors.
(Marks available: 14)
Answer outline and marking scheme for question: 3

For this question you need good case study knowledge. The case study on this site is the redevelopment of Bristol.

a) You would have 10 minutes at most for this bit.

Clearly state the reasons why the area is/ was rundown. For Bristol this would include:

- Decline of the Docks as a result of new docks at Avonmouth and large ships no longer being able to navigate the Avon to get to Bristol docks.
- Decline of industry in the city due to competition from oversea and the general movement to new out of town estates.
- Planning blight as the council is unsure of how to redevelop the docks. This discourages investment.

The consequence is an area with high unemployment derelict buildings and increasing social problems. An area in need of regeneration.

b) You would have 10 minutes maximum for this as well. You’ll need good knowledge of your case study so you can clearly explain what has been done to regenerate the area and importantly what part tourism has played. For Bristol your answer should include:

- The area identified for redevelopment
- The source of finance
- How the environment was improved e.g. new well-lit walkways, using listed buildings to house attractions or for accommodation such as the YHA.
- What tourist attractions were developed e.g. The SS Great Britain or IMAX theatre.

c) 10 marks available so approximately 20 minutes of time.

This is an evaluation question so you have to look at the good points and bad points. It is a good idea to quickly scribble down as many as you can think of on a piece of rough paper so that you can plan you answer.

It is important to discuss good and bad, as this is what the examiner will be looking for.

For Bristol you should discuss at least five of the following factors...

**Successes include:**

- Over £500 million pounds of inward investment
- Over 3000 new jobs
- A mixed commercial environment that includes café bars, restaurants, cinemas, shops
- New developments for the arts
- Sports facilities
- An industrial museum and maritime heritage museum
- Various festivals such as 'The Festival of the Sea'
The preservation and utilisation of listed buildings. For example the Watershed media centre that includes a cinema, studios, art gallery and café bar was formerly two warehouses.

Residential developments providing much needed housing.

Over 750,000 visitors in 1998 expected to exceed 1 million in 2000.

Rated as one of the best harbour-side redevelopments in the UK.

The scheme has successfully redeveloped what was a very rundown area. Development is ongoing as proposals are made for the redevelopment of other sites.

On the whole the redevelopment has been very well received but there has been some criticism.

Failures:

- Concerns about how the area would fare during recession especially as it is so dependent on entertainment - one of the first things people would reduce if their incomes fell.
- Some criticism of the Millennium Square in that it is feature less and has done nothing to improve traffic congestion.
- New houses are very expensive - you could argue that the real need was for cheaper social housing.

(Marks available: 18)

Answer outline and marking scheme for question: 4

a) 4 minutes for this. Simple definition, something like...

"Sustainable tourism is the term that refers to tourism which utilizes resources (Coastlines, wildlife, Mountains, historic buildings) to benefit people today but through effective management also conserves those resources for future generations. It is often small scale with local people involved in the decision-making and management. Profits are invested back into the local community or natural environment."

b) 5 marks - 10 minutes.

Think about what we have just said sustainable tourism is and try and fit a case study to it. The one on this site that is very relevant is Operation Campfire.

To justify your choice simply explain why it is an example of sustainable tourism. There are 5 marks available so 3 well explained points would be enough.

3 factors you could expand on from operation campfire could be...

(i) The fact that they only cull 5% of the wildlife so the resource is infinite and will therefore benefit future generations.

(ii) Any profits from hunting licenses are injected back into the villages so local people are benefiting from the tourism. Profits are used to build hospitals and schools.
(iii) Local people are the decision makers so they can get optimum benefit from the resources.

c) 8 marks - 16 minutes.

To explain how tourism can improve the quality of life in the developing world you should refer to case studies when you can and discuss at least 4 of the following points:

- A valuable source of foreign currency
- Reduce levels of unemployment
- Improves the infra-structure - better for industry
- Can provide new training and education
- Multiplier effect - encouraging supportive industries
- Need to make sure you have local owners and employees to reduce leakage
- Foreign currency can be invested in schools, hospitals, housing programmes etc.

(Marks available: 15)
Urban Profiles (Questions)

1. **a)** Why is rapid urbanisation a feature of most countries in the developing world?
   
   *(8 marks)*

   **b)** What are the consequences for the urban area of such rapid urbanisation?
   
   *(12 marks)*

   *(Marks available: 20)*

2. **a)** What do you understand by the term ‘counter-urbanisation’?
   
   *(3 marks)*

   **b)** Why is counter-urbanisation a feature of most developed world countries?
   
   *(5 marks)*

   **c)** For an area you have studied examine the consequences of counter-urbanisation on rural villages.
   
   *(8 marks)*

   *(Marks available: 16)*

3. For an area of urban regeneration...
   
   (i) Identify the reasons for its initial decline.
   
   *(5 marks)*

   (ii) Discuss and evaluate the solutions.
   
   *(10 marks)*

   *(Marks available: 15)*
Urban Profiles (Answers)

Answer outline and marking scheme for question: 1

a) A good answer here will identify two factors:

Firstly a strong candidate will talk about the population growth that these countries are experiencing and make reference to the demographic transition model, birth rates, death rates and natural change.

Secondly he/she would go on to fully explore the processes of rural to urban migration with specific reference to case studies.

Both of these should be clearly linked to the processes of development.

b) Consequences of rapid urbanisation:

A poor answer will talk very generally about just a few factors with little or no reference to any specific case studies.

A good answer will however examine the consequences, in detail, on the economy, environment and society of the urban area. He/she will make specific reference to one or a number of case studies.

Factors that could be include:

- Collapsing infrastructure
- Increasing levels of pollution
- A polluted water supply
- Inadequate housing and services.
- A lack of employment
- Under-employment
- Increased risk of disease raising death rates including infant mortality

Each of these should be expanded with specific reference to your case study/studies.

A very good answer might even consider the positive aspects of urbanisation in the developing world such as the vibrant informal economy and the abundant supply of labour.

(Marks available: 20)

Answer outline and marking scheme for question: 2

a) A definition is required. The question is worth 3 marks so you need a detailed definition. This would suffice...
"Counter-urbanisation" is the process by which people and businesses are leaving the urban areas to relocate in smaller towns or rural villages.

It was first noted in the USA. Similar patterns were detected in London in the 1950’s initially as a result of slum clearance and relocation to New Towns but then as a ‘voluntary’ movement. This pattern has since been identified in nearly all UK cities. It has significant implications for the environments, economies and societies of both the urban area people are leaving and the rural areas they are moving to.

b) Show that you know the reasons for counter-urbanisation. This question is worth 5 marks so you can’t explore every reason but if you discussed 3 from this list you would have every chance of top marks...

- Environmental and social problems with inner cities pushed people away from urban areas. At the same time more rural areas were being viewed in a very positive light.
- The growing popularity of the 'out-of-town' industrial and businesses parks as industry also became unsatisfied with inner city areas.
- Improvements in rural transport infrastructures and increased car ownership
- The growth in Information Communication Technology (E-mail, Fax, Video-conferencing) has allowed further freedom as people can work from home and are not so tied to urban areas.
- People move for social reasons to be re-acquainted with family or friends; retire to a quiet place; believe the countryside to be more suitable for families or decide the climate/ environment is better for their health. All of these are quoted as reasons for moving from urban areas to Cornwall.

c) 8 marks here so allow yourself about 16 minutes.

To get a good grade on this question you need to explore the effects of counter-urbanisation on the commuter' villages or 'dormitory towns'.

Make sure you have looked at economic, social and environmental factors and refer specifically to your case study.

Some consequences you could discuss include:

- House prices being pushed up by migrants
- Public transport going into decline
- Traditional rural services starting to close
- Shops and services that survive often find that they have to change to meet the needs of the new population.
- As a large percentage of the migrants will be commuting to work traffic congestion increases both in the villages and route into urban areas
- Increased demand for housing in valuable greenbelt and other countryside areas

(Marks available: 16)
You need to have good knowledge of an urban regeneration case study. There is a Bristol one on the site if you need it.

(i) Allow about ten minutes to answer. Always refer to your particular case study. Here is a list of reasons that you might discuss

- Closure of older heavy industries as a consequence of overseas competition
- Decentralisation of industry to 'out of town' locations
- Closure of city docks because larger ships can no longer navigate the rivers
- Inner cities go into a cycle of decline as new investor look elsewhere

If you fully discussed two or three of these factors you would get 4 - 5 marks.

(ii) You would get up to 5 marks for discussing the solutions that the authorities attempted and another 5 for evaluating those solutions.

Using the Bristol case study you would have to talk about 'The Bristol Urban Development Corporation' and 'The Harbour-side developments'. Explain what each attempted to do then evaluate their level of success.

When evaluating it is always worth thinking about the effects on the economy, environment and society.

*For example: we could evaluate Bristol's Urban Development Corporation' using the following titles;

**Successes:**

- Environment - rehabilitation of derelict dockland areas
- Economy - provided over 4000 new jobs
- Society - new housing at an affordable cost

**Failures:**

- Environment - greater focus on road networks than environmental concerns
- Economy - Unemployment rose considerably in the area following recession
- Society - New jobs were low paid and unskilled. Opinions of local people were ignored

For the Bristol case study, you would also have to evaluate the more recent Harbour-side redevelopments.

*(Marks available: 15)*
1. "Aid has done more harm than good to those countries most in need of assistance." To what extent do you agree with this statement?

(Marks available: 15)

2. a) Define the term 'Gross domestic product'.

(2 marks)

b) With reference to the table below describe and explain the relationship between Gross domestic product and infant mortality.

(12 marks)

<table>
<thead>
<tr>
<th>Country</th>
<th>Gross Domestic Product US$ per capita</th>
<th>Infant mortality (number of children per thousand who die before their fifth birthday)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>21155</td>
<td>7</td>
</tr>
<tr>
<td>Mexico</td>
<td>2102</td>
<td>51</td>
</tr>
<tr>
<td>Italy</td>
<td>14432</td>
<td>11</td>
</tr>
<tr>
<td>India</td>
<td>335</td>
<td>145</td>
</tr>
<tr>
<td>Mozambique</td>
<td>78</td>
<td>297</td>
</tr>
</tbody>
</table>

(Marks available: 14)

3. Why do some countries in the developing world continue to export primary products whilst others are exporting a significant amount of manufactured goods?

(Marks available: 15)
4. **a)** Describe the different types of indicator that can be used to measure a country's levels of development.

   *(8 marks)*

   **b)** Why should we always take care when using any indicator of development?

   *(8 marks)*

   *(Marks available: 16)*
World Development (Answers)

Answer outline and marking scheme for question: 1

15 marks means about half an hour to answer.

The question is asking you to evaluate the policies of aid. For instance, the good points and the bad points. Even if you totally agree or disagree with the statement your answer should explore both sides of the argument. If you do not then you will not be able to get full marks.

To get the highest marks...

- You should show that you have a good knowledge of the advantages and disadvantages of giving aid. You can relate these to the different types of aid.
- You should show that you can see the whole picture i.e. demonstrate in your answer that you realise that any one country is likely to experience a whole combination of advantages and disadvantages.
- You should refer to specific examples and make sound conclusions.

When discussing the advantages and disadvantages you could refer to any of the following...

Advantages of Aid:

- Provide emergency relief in times of disaster
- Can be used to stimulate the economy if channelled in the right way. This could be on a large national scale or, just as effectively at a very small local scale using intermediate or appropriate technology
- Donors often insist on certain structural reforms that can be of benefit to the country, for example insisting on democratic elections
- Money can be directed towards social programmes such as increasing awareness of family planning or raising the status of women.
- Aid can be in the form of technical or scientific support working co-operatively with local people on small-scale projects such as health/ sanitation initiatives or education programmes.
- Aid can provide money for projects that the country might otherwise not have been able to afford - a hydroelectric power station for example.

Disadvantages of Aid:

- If corruption exists in the recipient country then the Aid payments may not find their way to those in need but instead support an undemocratic regime.
- Aid can be spent on prestige projects like a major international airport, which is of little or no benefit for the most needy. Other large scale projects have had adverse effects on the economy, environment or society. The hydroelectric dam mentioned earlier can have devastating effects on the environment and people.
- Aid relief such as food packages can stifle any emergent farming industries or market as food prices would be driven right down.
- Technical support from the developed world is not necessarily geared towards the country’s needs.
- A country can become dependent on Aid as there is little incentive for them to fend for themselves.
• Aid payments are insignificant when compared to the amount of loan repayments developing world countries pay to the developed world every day. Often countries have to do all they can just to repay the interest.
• Aid is often directed at urban areas so the neediest miss out. This also encourages urbanisation.

You should discuss several (about four good points and four bad points) of the arguments for and against including references to examples.

(Marks available: 15)

**Answer outline and marking scheme for question: 2**

**a) A good definition would be:**

"Gross domestic product is the total value of all goods and services produced within a given country for the given year. It is usually measured in US$ to allow easy comparison between countries and can be divided by the total population to give a 'per capita' figure."

(2 marks)

**b) Firstly, always remember to quote figures from the table to support your answer - the examiner will give marks for this.**

You need to do two things to answer this question:

• Describe the pattern shown in the table.

(4 marks)

• Explain why that pattern exists.

(8 marks)

**The pattern is that as GDP increases so infant mortality falls. To get full marks quote figures to prove this example:**

"Sweden has the highest GDP at $21 155 per capita and the lowest levels of infant mortality just 7 per thousand. Mozambique has the lowest level of GDP at just $78 per capita and an infant mortality rate of 297 per thousand this supports the relationship where the higher the GDP, the lower the infant mortality."

Now to explain why the pattern exists. Remember GDP measures the Goods and Services produced within a country. Therefore if it is low it will mean that the country is producing very little. This would include services such as health care. If the provision of health care is very low then a high rate of infant mortality will be a consequence. You should consider the following when writing your answer...

• High GDP indicates a good provision of health care. Low GDP indicates poor provision of health care. This will affect the level of treatment available and also the ability to vaccinate children
A low GDP also indicates a lack of development and therefore a dependency on subsistence farming so food supply cannot be guaranteed.

A high GDP indicates a good level of development and significant money to invest in sanitation systems and water provision. What about a low GDP?

A high GDP will usually occur as a result of high levels of employment. Therefore people will have money to invest in housing.

You should discuss these factors with reference to the data from the table quoting figures when necessary.

(Marks available: 14)

Answer outline and marking scheme for question: 3

There are two main areas to focus on:

- Explain the reasons why some countries (mainly African) are still exporting primary products.
- Explain why some developing world countries are now exporting a significant percentage of manufactured goods.

To get the highest marks you need to talk about specific countries.

Reasons why many countries still only export primary products include...

- The climate and or soil is favourable to agricultural production
- They have significant quantities of natural resources
- The colonial infrastructure is skewed towards the export market
- They have established trade patterns with their former colonial power

In addition changing to a more manufacturing based economy is difficult because...

- They have few resources to invest in the necessary technology. This is partly due to the pressures of debt repayment.
- The transport infrastructure is inadequately developed and poorly maintained
- The labour force does not possess the necessary skills
- The developed world puts heavy tariffs on some imported product to protect their domestic industries

Having discussed these factors with reference to examples for approximately half the marks you should then look at the reasons behind the successes of some of the countries in the developing world.

We are really talking about the newly industrialised countries and specifically the reasons behind their success. These reasons include...

- Some have significant domestic capital due to favourable environmental conditions. Brazil and coffee for example.
- Government investment in import substitute industries to establish a strong domestic economy.
Once the above is well established the government then encourage industries that will first mimic then improve on existing products for sale to the developed world.

These countries are very competitive as labour cost are very low

Multinational corporations also locate in these countries because of the low costs.

The workforce is often very compliant. In Singapore for example there is no social benefits system so everybody has to find a job.

Some of these countries such as Singapore and Hong Kong are strategically well located being near the huge markets of China and India.

Discuss at least four of these factors with reference to specific example and you are on your way to full marks.

(Marks available: 15)

Answer outline and marking scheme for question: 4

a) 8 marks so about 16 minutes to answer.

For four marks you should identify and describe four of the following or similar:

- Per capita income
- GDP per capita
- Infant mortality
- Birth rates
- Death rates
- Calorie intake per capita
- Literacy rates

Make sure you explain how they measure development.

For the second four marks you need to show knowledge of multi-criteria indicators such as the 'Human Development Index' or 'Human Suffering Index'

b) 8 marks - 16 minutes to answer.

You need to show that you realise many of the indicators of development have disadvantages.

For 4 to 6 marks evaluate 2 or 3 indicators explaining that this is why we must use caution. For example you could use some of the advantages or disadvantages outlined in this table:

Gross Domestic Product

| Advantages: | Disadvantages: |
A useful figure for comparing countries. Often used to rank countries to establish a fair system of aid payments. Can hide inequalities as it does not show the distribution of wealth.

Is a good indicator of the state of the economy and provision of services. Can be manipulated by governments who want to appear poor to collect more aid.

Fairly easy to calculate from official government figures. Does not take into account subsistence or informal economies which are very important in less developed countries.

For the extra 2 marks discuss the issues of using a system of developed world ideals to measure development in the developing world. For example, the road to our development is very much at the expense of the environment whether it be pollution or deforestation - is this really what we should all be aiming for? Alternatively, many cultures put little value on material wealth.

(Marks available: 16)