

# A-level GEOGRAPHY

# PAPER 2

Mark scheme

Sample assessment material

V0.1



Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aga.org.uk

# Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

# Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

## Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Qu	Part	Marking guidance	Total marks
tion A Global systems and global governance			
01	1	Which of these phrases describes what is meant by the globalisation of the world economy?	1
		A	AO1=
01	2	Which of these phrases describes the global commons?	1
		D	AO1=
01	3	Which of these pairs of statements can both be applied to all transnational corporations (TNCs)?	1
		С	AO1=
02	1	Describe and comment on the patterns shown in Figure 1.	6
02	'	Describe and comment on the patterns shown in Figure 1.	0
		Mark scheme	AO2=
		Level 2 (4–6 marks)	700-
		The answer shows a clear ability to interpret, analyse and evaluate evidence from the map.	
		The comments show clear ability to construct arguments and/or draw conclusions.	
		Level 1 (1–3 marks)	
		The answer shows ability to interpret map evidence in a basic way.	
		Comments may show basic ability to analyse evidence and to begin to construct arguments.	
		Notes for answers	
		The five known sources are all developed/industrial economies.	
		The known destinations are all countries that are developing and are now in the middle rank of economies (with the exception of Singapore).	
		The suspected destinations are mainly in less developed and less industrialised countries. Russia might be considered an exception to this pattern.	
		The USA exports its electronic-waste all over the world. Most of the EU's waste goes to Africa and Asia. Australia, Japan and South Korea appear to export almost all their waste to China, with Australia also exporting to nearby India.	

# Discuss how the practice of outsourcing labour from richer to poorer countries might present both problems and opportunities for the countries that receive the new jobs.

AO1=4 AO2=5

9

#### Mark scheme

#### **Level 3** (7–9 marks)

The answer is well developed, showing good geographical knowledge and understanding.

The answer shows ability to analyse, interpret and evaluate information relating to geographical issues.

At the top of the level the answer is thorough and balanced and shows the ability to think like a good geographer.

#### **Level 2** (4–6 marks)

The answer shows clear knowledge and understanding.

The answer shows ability to analyse geographical knowledge, applied to geographical issues, with some clarity.

#### **Level 1** (1–3 marks)

The answer demonstrates basic knowledge and understanding of places and processes.

The answer may begin to show basic ability to interpret information relating to issues.

#### Notes for answers

#### Opportunities include:

- jobs in the new industries, which may provide higher pay, better conditions and more opportunities than traditional work
- profits for local companies involved
- taxes paid to the government.

#### Problems include:

- cheap labour can be exploited in poor countries with weak unions and governments
- TNCs might wield great power to influence governments
- environmental and labour laws might be poorer than in richer countries
- TNCs might move again to countries with even cheaper labour
- tax avoidance may be an issue.

## Discuss the roles of the British Antarctic Survey (BAS) and nongovernment organisations (NGOs) in protecting threatened environments in Antarctica.

9

AO1=4 AO2=5

#### Mark scheme

**Level 3** (7–9 marks)

The answer is thorough and detailed showing knowledge and understanding of places, environments and processes.

The answer shows the ability to analyse, interpret and evaluate geographical issues.

**Level 2** (4–6 marks)

The answer shows some clear geographical knowledge and understanding.

The answer shows the ability to analyse and interpret geographical knowledge, applied to issues.

**Level 1** (1–3 marks)

There is some basic geographical knowledge and understanding, often in the form of isolated points.

The answer may provide an attempt at some basic interpretation of geographical knowledge.

#### Notes for answers

Answers might include any of the following.

- It is an area of wilderness, which should be conserved for aesthetic and spiritual reasons and to preserve the home of unique wildlife species.
- It is, at present, one of the most unpolluted and unaltered areas on the planet.
- BAS sees this as an important area for scientific exploration, with an ice cover that holds a record of Earth's climate over several hundred millennia. This is essential for prediction of future changes. Therefore the BAS is committed to conservation.
- The seas around the continent hold a unique ecosystem. This
  provides a food source for many species and any further
  disruption of this ecosystem could have drastic consequences
  for other parts of the oceans and for species on which people
  rely. Organisations like Greenpeace, WWF and other NGOs see
  enormous value in the area and are actively involved in
  conservation.
- Greenpeace tends to be involved in direct action, leading to formation and support of pressure groups.
- WWF is more involved in scientific research and publication of information for lobbyists.
- The climate means that any changes to the environment would take a long time to restore – as with the problem of pollution from visitors, which would only break down very slowly, if at all. So many different groups, including tourist industry groups, work to ensure low impacts from all visitors, keeping a very

careful balance between numbers visiting and stress on the environment, lest too many tourists destroy the very attractions that have drawn them to the area in the first place...and the same applies to scientists.



# Section B Changing places

	1		, ,
03	1	Figure 2a shows that:	1
		С	AO1=1
	ı		
03	2	Figure 2b shows that:	1
		D	AO1=1
		T	
03	3	Which of the following statements about the dependency ratios is correct?	1
			AO1=1
		D	
			<del>                                     </del>
04	1	Describe how this place has changed between 1935 and 2015 and comment on the reliability of the two sources of evidence.	6
			AO2=2
		Mark scheme	AO3=4
		Level 2 (4–6 marks)	
		The answer shows a clear ability to interpret, analyse and evaluate evidence from the pictures.	
		The comments show clear ability to construct arguments and/or draw conclusions.	
		There are clear references to change, with generalisations about the place being developed as part of the best answers.	
		The answer is balanced, drawing on evidence from both pictures and commenting clearly on the reliability of the sources.	
		Level 1 (1–3 marks)	
		The answer shows ability to interpret evidence from the pictures in a basic way.	
		Comments may show basic ability to analyse evidence and to begin to construct arguments.	
		Comments will probably refer to specific features without providing an overview or generalisation about change in the place.	
		Any comments on reliability are basic with limited appreciation of the role of media like painting in depicting reality or impressions of places.	
		Notes for answers	
		Answers might refer to:	
		<ul> <li>port activity and port-based industry which was evident in 1935 but which appeared to be mainly derelict in 2015</li> <li>in 1935 there were wooden staithes along the riverbank, suggesting port functions, but these were derelict in 2015</li> </ul>	

- crowded and polluted housing and working conditions in 1935, but by 2015 much of the housing had been demolished and replaced with woodland, especially on the steeper slopes
- lack of open space in 1935, leading to an unhealthy living environment with housing and industry squashed together, but a generally cleaner and more healthy environment in 2015
- in 1935 there were buildings, probably industrial, along the riverbank, but difficult to tell what their function was. In 2015 there were (a) glass-fronted buildings and (b) oil/gas storage tanks which showed change of industrial function. (In fact (a) housed restaurant/club which had recently been abandoned and (b) was a specialised oil storage facility that was abandoned some years before 2015.)
- painting may be considered less reliable than photography because there is more scope for individual interpretation and selection. However, it may show a deeper understanding of the nature of the place because it allows the painter to show more of the character of what is there
- photography may show a more literal view of the place, but even a photo is selective in what it shows. Comments on changes through photo-shopping etc are relevant
- the photo shows a wider area and so provides more context for any discussion.

# O4 Discuss the extent to which your source helped you to understand the development of the human geography of that place.

9

## AO1=4 AO2=5

# Mark scheme

**Level 3** (7–9 marks)

The answer is well developed, showing good geographical knowledge and understanding.

The answer shows ability to analyse, interpret and evaluate information relating to geographical processes and issues.

At the top of the level the answer is thorough and balanced and shows the ability to think like a good geographer.

Level 2 (4-6 marks)

The answer shows clear knowledge and understanding.

The answer shows ability to analyse geographical knowledge, applied to geographical processes and issues, with some clarity.

Level 1 (1-3 marks)

The answer demonstrates basic knowledge and understanding of places and processes.

The answer may begin to show basic ability to interpret information relating to geographical processes.

#### Notes for answers

Accept reference to:

- pictures including paintings, photos, etc.
- · sculpture or models
- songs, poems, etc.
- literary text
- etc.

For 'human geography' accept references to:

- settlement and housing
- population characteristics (class, gender, age, race, religion, etc)
- transport and communications
- employment
- social conditions and the living environment of the people, etc.

Examiners must be aware that a key aspect of current theories of understanding of place studies is that there is no single objective truth about perception of place. It depends on an individual's view of that place, and even this can vary over time. The best answers will show an awareness of this.

O4 3 In your study of a local place you should have come across different perceptions of its character held by different people.

AO1=4 AO2=5

9

Describe some of these perceptions and discuss the extent to which they are supported by quantitative data on that area, such as local census data.

#### Mark scheme

Level 3 (7–9 marks)

The answer is thorough and detailed showing knowledge and understanding of places, environments and concepts.

The answer shows the ability to analyse, interpret and evaluate qualitative and quantitative data and to apply it to interpret issues.

Level 2 (4-6 marks)

The answer shows some clear geographical knowledge and understanding of places, environments and concepts.

The answer shows the ability to analyse and interpret qualitative and quantitative data and apply to examine issues.

Level 1 (1-3 marks)

There is some basic geographical knowledge and understanding, often in the form of isolated points.

The answer may provide an attempt at some basic interpretation of qualitative and/or quantitative data.

#### Notes for answers

The answer should deal with some or all of the following:

- the meanings of 'Experienced place' and 'Media place'
- the concept of 'perception' and the ideas of aspects of reality
- the concepts of 'resident' and 'outsider'
- the nature of the chosen place and how it is seen in different ways by different groups
- how and why the different groups develop their different perceptions of the chosen place
- presenting details of the quantitative data used
- analysing aspects of that data.

Again, examiners must be aware that a key aspect of current theories of understanding of place studies is that there is no single objective truth about perception of place. It depends on an individual's view of that place, and even this can vary over time. The best answers will show an awareness of this.



#### Section C

#### Question 5 Contemporary urban environments

05	1	What is meant by urbanisation?	3	
		Mark scheme	AO1=3	
		An approximation of (i) or (ii) or a good (iii) = 1 mark		
		A close approximation of (i) or a good (ii) = 2 marks		
		A good (i) = 3 marks		
		Notes for answers		
		<ul> <li>(i) An increasing proportion of the population of a country (or region, or world) living in cities as opposed to living in rural areas.</li> <li>(ii) The process of moving from rural area to an urban area.</li> <li>(iii) The growth of cities.</li> </ul>		

# Describe the trends shown by the data in Figure 4 and comment on their significance for the characteristics of urban areas in England.

# 9

# AO2=4 AO3=5

#### Mark scheme

Level 3 (7-9 marks)

The answer is thorough in its interpretation of the data.

Comment is thorough and develops a coherent analysis and evaluation of the geographical significance of the data used.

#### Level 2 (4-6 marks)

The answer gives a clear interpretation of some aspect(s) of the data.

Comments in the answer show a clear analysis of some of the data, with some clear evaluation at the top of the level.

## **Level 1** (1–3 marks)

At least one relevant point in the data and interpreted in a basic way.

As more relevant data is presented and interpreted the answer moves up through the level.

Any comment on the significance of data is basic and takes the form of isolated points.

#### Notes for answers

Relevant points from the data include:

- in 1999 most regions had more than 50% built on brownfield sites
- in 1999 the most urbanised regions had 60% or more on brownfield
- between 1999 and 2004 the percentage on brownfield

increased substantially in all regions

- between 2004 and 2009 the percentage went on increasing in all regions but the rate slowed in all regions, except east (where it stayed the same)
- by 2009 London's new build was almost entirely on brownfield sites and other more urban regions were also 75% or more.

#### Comments might refer to:

- the renewal of the urban environment and the removal of derelict land and buildings
- protection of green belts and other rural areas around cities
- loss of open space in cities, and increased density of population.

#### 05 | 3 | Can cities ever be sustainable? Discuss.

#### 30

#### AO1=9 AO2=21

#### Mark scheme

## Please refer to grid on page 19.

#### Notes for answers

The answer should start with a definition of 'sustainable'.

This should then be developed with specific reference to urban areas. For instance it might include reference to:

- sustainable architecture domestic and other types
- food and water supplies and the relationship between urban and rural areas
- conservation of the urban environment open spaces in urban areas
- transport and communications
- Waste disposal and recycling
- population and population policies
- distribution of wealth, welfare and opportunity quality of life
- etc.

The above should be developed in a general way, with a theoretical basis and then the theory should be applied to different case study examples, possibly including:

- world cities
- cities in more developed regions
- cities in less developed regions
- larger and smaller cities.

#### Good answers will include:

- a variety of points of view
- a degree of balance, although the candidate can choose to emphasise one side more strongly as long as this is justified by the evidence presented
- a clear conclusion, although this does not necessarily have to come down on one side or another. Ambiguity is acceptable, as long as it is justified.

#### Question 6 Population issues and the environment

06	1	Distinguish between fertility rate and birth rate.	3
		Mark scheme	AO1=3
		One clear definition or two basic definitions = 1 mark.	
		Two clear definitions but no element of comparison = 2 marks.	
		Two clear definitions with some explicit comparison = 3 marks.	
		Notes for answers	
		'Fertility rate' is the number of children that the average woman can expect to bear during her lifetime.	
		'Birth rate' is the number of live births per year per thousand population.	

# Using Figure 5, describe the main changes shown and comment 06 2 9 on their possible social and economic consequences for Iran. AO2=4AO3=5 Mark scheme Level 3 (7-9 marks) Thorough interpretation of the data, with the key points emphasised. Commentary shows a thorough geographical understanding through analysis, interpretation and evaluation of the population geography shown by the graphs. **Level 2** (4–6 marks) Clear interpretations of the graphs are given, with precise references to the data. Commentary which shows some clear analysis and interpretation. A theme or structure is starting to be developed. **Level 1** (1–3 marks) Basic interpretation of the graphs is presented. Points observed are isolated without clear structures developed. Any commentary is basic without a clear theme or structure in the comments. Notes for answers Between 1990 and 2000 there is a sudden fall in the birth rate, leading to a marked reduction in the proportion of people in the 0-4 and 5-9 cohorts. At the same time there appears to have been a fall in the death rate, leading to an increase in the cohorts over 40, but this is not as marked as the fall in the lower age cohorts. The two trends continue to 2010 and are predicted to continue to 2020, although as the 'bulge' in women born before 1990 reaches child-

bearing age there is a small increase in the lower age cohorts, starting with the 0–4 group in 2010.

This means there has been a dramatic fall in the dependency ratio as the increase in older people has not matched the fall in younger people. This provides the 'demographic dividend' which means that, if work can be provided for the majority of the working age population, the country should enjoy a huge economic boost.

There is also potential for the development of a large, educated, young adult population, which might produce different social patterns from those seen previously. In particular, the reduction in family size has great potential to bring about change, especially in the position of women in society.

# O6 Assess the social and environmental implications of these predictions.

#### 30

#### AO1=9 AO2=21

#### Mark scheme

Please refer to grid on page 19.

#### Notes for answers

Social implications might include:

- increased demand for food, shelter, medical care, etc. And increased competition for resources
- this increased competition will push up world prices and might lead to increased world trade, which will stimulate economic growth
- the increased population can provide a demographic dividend to countries with growing population, if that population can be employed and if the rate of population growth can be stabilised. This will boost those economies, in the short term at least
- population growth will also produce pushes for migration, which may be matched by pulls in countries with ageing and falling populations. This may trigger a range of further economic pressures in both source and destination countries
- the consequences will be different in more developed and less developed countries – and between the less and least developed countries
- competition for limited resources might increase, with varied levels of conflict ensuing
- on the other hand the pressure might lead to more rational use and sharing of resources

# Environmental implications might include:

 pressure on resources leading to their overuse, and consequences such as desertification, deforestation, soil erosion and degradation, loss of agricultural potential. over-

- fishing of rivers and oceans, increasing shortages of mineral raw materials, etc
- if the increased population develops a reasonable standard of living this might lead to increased use of fossil fuels, increased production of greenhouse gases, global warming, raised sea level, etc
- on the other hand the development of technology and systems
  of production and consumption might produce new ways of
  coping with increased pressure by integrating conservation and
  production systems (eg circular economy production systems).



#### Question 7 Resource security

# 07 | 1 | What is meant by water stress?

3

#### AO1=3

Mark scheme

Award one mark for each point with two marks for developed points.

#### Notes for answers

Water stress occurs where demand for water exceeds supply. It may be seen as a short-term issue, perhaps due to a dry summer, but it can also be a more long-term problem caused by factors such as reduction in groundwater supplies, loss of political control over a river basin, pollution of a groundwater source or increasing population, intensive agriculture, industrial demand, etc.

# Using Figure 6, describe and comment on the changes in the consumption of nuclear energy and hydroelectricity.

9

#### AO2=4 AO3=5

# Mark scheme

Level 3 (7-9 marks)

The data is described in detail and the main features and trends are emphasised in the answer.

Commentary is thorough and relevant and shows detailed understanding of the way the data illustrates key ideas from the geography of energy.

Level 2 (4-6 marks)

Clear description with clear references to the data.

Relevant manipulation of the data can allow the answer to move up through the level.

Commentary which shows clear understanding.

**Level 1** (1–3 marks)

Simple generalised statements of pattern but with no sense that the graphs have been examined closely.

Basic commentary only.

#### Notes for answers

Between 1987 and 2007 consumption of nuclear energy in Asia Pacific doubled, increasing much more quickly than in Europe and North America. Then it stayed the same until 2010, after which it fell by about 50%. At the start of the period, up to about 1996, consumption in North America and Europe increased a little but since then it has remained more or less stable.

Between 1987 and 2000 hydroelectric power (HEP) consumption in Asia Pacific increased significantly and then increased again by 2012. Over the whole period consumption in South America doubled. In Europe and North America it was more or less stable.

The reason for the overall rapid increase in these two forms of energy consumption was the rapid growth of the economies of East Asia, particularly of China, as it underwent industrialisation. The region needed energy wherever it could be obtained. Much of the increase in HEP production was due to the Three Gorges Dam in China coming online.

The sudden decrease in nuclear power after 2010 was due to the Fukushima disaster and the subsequent closure of Japan's nuclear power stations.

Increase of HEP consumption in South America was also due to industrialisation and development, especially in Brazil, and to the abundant resources that were developed as the economies grew.

With reference to both physical and human factors, discuss how the energy mixes of contrasting countries might change in the foreseeable future.

# 30

AO1=9 AO2=21

#### Mark scheme

Please refer to grid on page 19.

#### Notes for answers

Expect references to the actual energy mixes and award credit for knowledge of the mixes.

Expect knowledge of issues that might affect changes in the mixes between now and approximately 2030 (the date up to which most EU countries are planning at present). The issues might include:

- exhaustion of some resources
- development of new resources and new technologies
- concerns over safety, especially of nuclear power
- imminent obsolescence of many coal and nuclear power stations
- strategic considerations and energy security
- cost and poverty issues
- need for carbon emission reductions.

Some probable changes to deal with these issues, might include:

- · development of renewable resources
- carbon capture and sequestration (CCS)
- changing geopolitical alliances
- improved efficiency of technology for key energy users
- demand reduction strategies insulation, etc
- etc.

# Essay marking criteria

Level/mark range	Criteria/descriptor
Level 5	Detailed knowledge of contrasting places (with a range of scales) and
(25-30 marks)	environments, which is consistently well integrated into the response.
	Highly detailed knowledge of concepts, processes, interactions and change,
	used to support the development of the response.
	<ul> <li>Critical analysis, interpretation and evaluation show flair and creativity, with detailed synoptic links well integrated into the response.</li> </ul>
	Technical geographical language is used precisely, clearly and consistently
	throughout.
	Clear and appropriate essay structure which is detailed throughout.
	Remains highly focused upon the theme and demands of the question
	throughout.
	Flair and creativity permeates the response through detailed subject
1 14	knowledge linked with the application of knowledge to the question posed.
Level 4 (19–24 marks)	Knowledge of contrasting places (with a range of scales) and environments,      which is now and the data itself and an environment.
(19–24 Illarks)	<ul> <li>which is generally detailed and relevant.</li> <li>Detailed knowledge of concepts, processes and interactions and change,</li> </ul>
	used to support the development of the response.
	Critical analysis, interpretation and/or evaluation generally show detail and
	relevance. Synoptic links are appropriate with some evidence of integration.
	There is a broad range of technical geographical language which is used
	precisely and clearly.
	Clear and appropriate essay structure which is detailed throughout.
	Remains relevant to the theme and demands of the question throughout
	with evidence of the link between knowledge and the application of knowledge in different contexts.
Level 3	Knowledge in unreferr contexts.     Knowledge of contrasting places and environments is generally clear and
(13–18 marks)	relevant with evidence of integration of it into the response.
,	Knowledge of concepts, processes and interactions is clear and used to
	support the response.
	Analysis, interpretation, and/or evaluation shows clarity and geographical
	understanding. Use of synoptic links is evident.
	Technical geographical language is generally used clearly and
	<ul> <li>appropriately.</li> <li>There is a clear and appropriate essay structure with clear focus upon the</li> </ul>
	theme and demands of the question.
Level 2	Knowledge of places (with a range of scales) and environments is evident
(7-12 marks)	with key place features emerging.
	The answer shows partial but accurate knowledge of concepts, processes
	and interactions.
	Emerging evidence of analysis, interpretation and evaluation. Basic
	<ul><li>synopticity.</li><li>Appropriate use of some technical geographical language.</li></ul>
	Essay structure evident with focus upon the theme and demands of the
	question in part.
Level 1	A basic response which shows limited knowledge of places and
(1-6 marks)	environments.
	Basic knowledge of concepts, processes, interactions and change.
	Analysis, interpretation and evaluation show limited development.
	Attempts made to use appropriate technical geographical language with
	limited success.
Level 0	Limited evidence of structure.  Nothing worthy of gradit
(0 marks)	Nothing worthy of credit.
(v marks)	

