



GEOGRAPHY

ATAR course sample examination

Marking Key

Marking keys are an explicit statement about what the examining panel expect of candidates when they respond to particular examination items. They help ensure a consistent interpretation of the criteria that guide the awarding of marks.

The examining panel provide a provisional marking key. The marking key is refined or modified as necessary in the light of sample marking and discussion between the chief examiner and the chief marker.

Section One: Multiple-choice

20% (20 Marks)

Question	Answer
1	b
2	c
3	a
4	c
5	d
6	a
7	b
8	c
9	b
10	a
11	d
12	a
13	b
14	d
15	c
16	c
17	b
18	d
19	d
20	d

Section Two: Short response

40% (40 Marks)

Question 21

(3 marks)

- (a) Identify **one** site feature of the built-up area of Maslin Beach at AR 7098. (1 mark)

Description	Marks
Identifies one site feature (e.g. elevation, natural drainage, natural vegetation, slope, soil).	1
Total	1
<p>Site should be identified by referring to the physical features of a place. Features referred to should be for the site of the built up area indicated, not areas two or three grid squares away (two or three kilometres away)! Surrounding natural vegetation does provide evidence of vegetation type before clearing.</p> <p>Answers could include:</p> <ul style="list-style-type: none"> • topography – height, (30–60 metres), sloping downhill from SE to NW, relatively uniform • landforms – gentle rise from coast to inland • drainage – small watercourse near Gulf Parade • vegetation – limited evidence of original vegetation • soils – probably sandy soils associated with the coastal features. 	

- (b) Describe **one** situation feature of the built-up area of Maslin Beach at AR 7098. (2 marks)

Description	Marks
Describes any situation feature (e.g. latitude and longitude, distance and direction from other places or features, location in relation to major transport routes).	2
Identifies any situation feature (e.g. latitude and longitude, distance and direction from other places or features, location in relation to major transport routes).	1
Total	2
<p>Situation can be described by referring to the location of a place in relation to its surroundings or its proximity to (distance and direction from) other places or features. Situation features should be described accurately, using appropriate geographical terminology.</p> <p>Answers could include:</p> <ul style="list-style-type: none"> • distance and direction from other settlements or major features, e.g. Approximately 6 km WSW of McLaren Vale town site, 3 km south of Seaford Rise, 1–1.5 km SSE of Ochre Point • latitude and longitude, e.g. 35° 13'S 138° 28'E. • location in relation to or on major transport routes, e.g. West of Old Coach Road, South East of Gulf Parade. 	

Question 22

(2 marks)

Calculate how long (in minutes and seconds) a car travelling at an average speed of 72 kilometres per hour will take to go from the intersection of Victor Harbor Road and Main Road (GR 745012), south along Main Road to Willunga. Show your method of calculation and your answer.

Description	Marks
Correctly shows calculations to determine their answer i.e. correct and logical method of calculation, not answer.	1
Correct answer is provided.	1
Total	2
<p>The distance between the intersection and the southern border of the map is 12 cm, which represents 6 km in the real world. Add the additional 3 km to Willunga, as indicated on the map margin, giving a total of 9 km.</p> <p>$\frac{\text{Speed (72 km/hr)}}{\text{Time (60 minutes)}} \times \frac{\text{Distance (9 km)}}{\text{Time (? minutes)}} = 60 \times \frac{9}{72} = 7.5 = 7 \text{ minutes } 30 \text{ seconds}$</p> <p>Alternatively</p> $\text{Time} = \frac{\text{Distance}}{\text{Speed}} \times 60$ $= \frac{9}{72} \times 60$ $= 7.5 = 7 \text{ minutes } 30 \text{ seconds}$	
<p>Note: Accept 0.5 km variation in distance, resulting in acceptable answers ranging from 7 minutes 5 seconds to 7 minutes 55 seconds.</p>	

Question 24

(6 marks)

With specific reference to **Source 5**, explain **two** of the changes that result from the negative impacts of human behaviour/activities on ecosystems and/or climate.

Description	Mark
For each of the two identified changes (2 x 3 marks)	
Explains one of the changes that result from the negative impacts of human behaviour/activities on ecosystems and climate. Clearly demonstrates cause and effect or the relationship between the negative impacts and the changes. Specifically refers to the source to support the explanation.	3
Describes one of the changes that result from the negative impacts of human behaviour/activities on ecosystems and climate. May refer to the source to support the description.	2
States one of the changes that result from the negative impacts of human behaviour/activities on ecosystems and climate. Limited, or no reference to the source.	1
Total	6
Changes may include: <ul style="list-style-type: none"> • direct and indirect impacts of climate change • loss of ecosystem services • degradation of ecosystems causes further climate change • climate change causes further biodiversity loss. 	

Question 25

(2 marks)

Outline **one** impact of growing affluence **or** advances in technology on the type, rate and/or extent of land cover change.

Description	Marks
Outlines one impact of growing affluence or advances in technology on the type, rate and/or extent of land cover change.	2
Identifies one impact of growing affluence or advances in technology on the type, rate and/or extent of land cover change.	1
Total	2
Answers could include: <p>Growing affluence:</p> <ul style="list-style-type: none"> • increasing (per capita) demand for many products e.g. food (especially meat), timber and minerals resulting in greater rates and extent of land cover change • the greater tendency for more affluent cities to sprawl therefore requiring more land to be cleared for residential, commercial and transport land uses • more affluent populations to consume and replace goods at a faster rate, thereby resulting in greater rates and extent of land cover change. <p>Advances in technology:</p> <ul style="list-style-type: none"> • allow land to be farmed more readily and rapidly, resulting in greater and quicker land cover change • forests to be cleared more readily and rapidly, resulting in greater and quicker land cover change • minerals to be mined more readily and rapidly, and at greater distances from their points of consumption, resulting in greater and quicker land cover change. 	

Question 26

(2 marks)

Define the concept 'natural biome'.

Description	Mark
Defines the concept natural biome.	2
Partially defines the concept natural biome.	1
Total	2
<p>A natural biome is a community of life forms adapted to a large natural area. They may cover a region made up of several ecosystems and refer to the biotic or living components of that region. There is no obvious or direct human interaction with the biome.</p> <p>Note: Answer must indicate that a natural biome is a community of living things and that a natural biome has not been directly altered, changed or transformed by human actions to be awarded full marks.</p>	

Question 27

(4 marks)

With specific reference to **Source 6**, describe the type and extent of land cover change that can be observed to have taken place on the island of Borneo between 1973 and 2010.

Description	Marks
Describes the type of land cover change that can be observed to have taken place on the island of Borneo between 1973 and 2010. Refers to categories stated on the source.	2
Identifies in general terms that land cover changes have occurred.	1
Subtotal	2
Describes the extent of land cover change that can be observed to have taken place on the island of Borneo between 1973 and 2010. Uses quantitative terms to indicate extent.	2
Identifies in general terms the extent of land cover change.	1
Subtotal	2
Total	4
<p>Type of land cover change: Answer should use terms from the source such as forest, non-forest, cleared forest, forest clearance, logged forest, intact forest, industrial plantations and logging. Other terms may be relevant and correct, such as removal of tropical hardwoods or palm oil plantations/production, but are based on prior knowledge or learning and are not essential to receive full marks.</p> <p>Extent of land cover change: Answer should give an indication of the percentage or proportion of land that has been cleared or altered to support their answer.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • approximately a third of the forest cover has been cleared between 1973 and 2010 • 20 per cent of forest existing in 1973 was still intact in 2010 • almost half of the forest existing in 1973 existed as logged forest in 2010 • 10–15 per cent of the forest existing in 1973 was used for industrial plantations by 2010. 	

Question 28

(2 marks)

Define the process of invasion and succession occurring in urban areas.

Description	Marks
Defines the process of invasion and succession occurring in urban areas.	2
Defines in general terms the process of invasion and/or succession occurring in urban areas.	1
Total	2
<p>Refers to the gradual invasion of one land use type into an area dominated by a different land use, succession has occurred when the invading land use has almost completely transformed the land use in that particular area.</p> <p>Answers should refer to both invasion and succession.</p>	

Question 29

(4 marks)

With specific reference to **Source 7**, describe **two** changes that have occurred as the process of urbanisation has taken place between 1960 and 2020.

Description	Marks
For each of the two changes (2 x 2 marks)	
Describes a change that has occurred as the process of urbanisation has taken place between 1960 and 2020, referring to data from the source.	2
Identifies a change that has occurred as the process of urbanisation has taken place between 1960 and 2020.	1
Total	4
<p>Changes may include:</p> <ul style="list-style-type: none"> • description of overall trends • comparison between urban and rural populations • variations within urban and rural populations over time. <p>Answers could include:</p> <ul style="list-style-type: none"> • urban population has grown steadily over the whole period • rural population has experienced a reduction in the rate of growth over the period shown • rural population has declined as a proportion of the total population • urban population has increased as a proportion of the total population • in (insert year) urban population was (relevant figure) whilst in (insert year) urban population had increased to (relevant figure). 	

Question 30

(6 marks)

Describe **one** implication of urbanisation on world population growth in urban places and **one** implication of urbanisation on world population growth in rural places.

Description	Marks
Describes one implication of urbanisation on world population growth in urban places.	3
Outlines one implication of urbanisation on world population growth in urban places.	2
States an implication of urbanisation on world population growth in urban places.	1
Subtotal	3
Describes one implication of urbanisation on world population growth in rural places.	3
Outlines one implication of urbanisation on world population growth in rural places.	2
States an implication of urbanisation on world population growth in rural places.	1
Subtotal	3
Total	6
<p>Answers could include:</p> <p>Implications on urban places As the level of urbanisation increases, population growth in urban places accelerates as</p> <ul style="list-style-type: none"> • people move from rural to urban places, thereby adding to the urban population through migration • younger people are more likely to move to urban places, thereby adding to the urban population through natural increase as they produce children • in the longer term, urban population growth may slow as fewer potential migrants remain in rural places and because birth rates are lower in urban places. <p>Implications on rural places As the level of urbanisation increases, population growth in rural areas slows or reverses as</p> <ul style="list-style-type: none"> • people move from rural to urban places, thereby reducing the rural population through migration • younger people are more likely to move urban places, therefore rural population ages and the rate of natural increase falls in rural places • rural places may therefore experience absolute population decline. 	

Question 31

(4 marks)

- (a) With specific reference to the June 2006 population pyramid, outline **one** difference in the age and sex distributions between the capital cities and rest of Australia. (2 marks)

Description	Marks
Outlines one difference in the age and sex distributions between the capital cities and rest of Australia. Quotes data directly from the source to support their answer.	2
Identifies one difference in the age and sex distributions between the capital cities and rest of Australia.	1
Total	2
<p>Answers could include:</p> <p>A higher proportion of</p> <ul style="list-style-type: none"> the population in all age groups over 45 reside in the rest of Australia as compared to the capital cities the population in all age groups 0–14 reside in the rest of Australia as compared to the capital cities the population in all age groups 20–44 reside in the capital cities as compared to the rest of Australia males aged 15–19 reside in the rest of Australia than females in the same age group. 	

- (b) With specific reference to the June 2006 and June 2017 population pyramids, outline **one** change that has occurred between 2006 and 2017 in the distribution of the population in the 20 to 34 year old age groups. (2 marks)

Description	Marks
Outlines one change that has occurred between 2006 and 2017 in the distribution of the population in the 20 to 34 year old age groups. Quotes data directly from the source to support their answer.	2
Identifies one change that has occurred between 2006 and 2017 in the distribution of the population in the 20 to 34 year old age groups.	1
Total	2
<p>Answers could include:</p> <ul style="list-style-type: none"> the proportion of 20–34 year olds living in the capital cities in 2017 is higher than the level in 2006 the proportion of 20–34 year olds living in the rest of Australia in 2017 is higher than the level in 2006 the increase in the proportion of 20–34 year old females living in capital cities in 2017 compared to 2006 is greater than the increase in the proportion of 20–34 year old males living in the capital cities. 	

Section Three: Extended response

40% (40 Marks)

Question 32

(20 marks)

(a) Choose **two** of the natural systems listed below and describe the ways in which they influence the Earth’s climate.

- heat budget
- hydrological cycle
- carbon cycle
- atmospheric circulation

or

Describe **two** key elements of ecosystem structure and dynamics from the five listed below.

- biotic and abiotic elements
- food chains and webs
- biomass
- trophic levels
- flows of matter and energy

(8 marks)

Description	Marks
For each of the two natural systems (2 x 4 marks) or two key elements of ecosystem structure and dynamics (2 x 4 marks)	
Describes in detail the ways in which the chosen natural system influences the Earth’s climate, or describes in detail a key element of ecosystem structure and dynamics from the list provided. Presents a wide range of appropriate supporting evidence and examples to develop and strengthen the description. Applies accurate and relevant geographical terminology and concepts to develop a cohesive and concise response.	4
Describes the ways in which the chosen natural system influences the Earth’s climate, or describes a key element of ecosystem structure and dynamics from the list provided. Uses a range of appropriate supporting evidence and examples to develop and strengthen the description. Applies relevant geographical terminology and concepts to develop a cohesive response.	3
Outlines with, some generalised information, how the chosen natural system influences the Earth’s climate, or outlines with, some generalised information, a key element of ecosystem structure and dynamics from the list provided. Uses limited evidence and examples to support statements and generalisations. Limited use of geographical terminology and concepts.	2
States some features of the chosen natural system. Limited or inaccurate information is provided on the ways in which the chosen natural system influences the Earth’s climate, or states some components of ecosystem structure and dynamics from the list provided. Limited or incorrect information is provided for the key element. Limited or no use of geographical terminology and concepts, in a largely unstructured response.	1
Total	8

- (b) With reference to specific examples, discuss **two** ways in which human activity has adapted or may be required to adapt to **either** climate change **or** loss of biodiversity. (12 marks)

Description	Marks
For each of the two adaptations (2 x 6 marks)	
Discusses a way in which human activity has adapted, or may be required to adapt, to global climate change or loss of biodiversity. Detailed information is provided about the nature and effectiveness of the adaptation. Presents a wide range of appropriate supporting evidence and examples to develop and strengthen the discussion. Applies accurate and relevant geographical terminology and concepts to develop a cohesive and concise response.	5–6
Explains a way in which human activity has adapted, or may be required to adapt, to global climate change or loss of biodiversity. Relatively accurate information is provided about the nature of the adaptation. Uses some supporting evidence and examples to develop and strengthen the explanation. Applies relevant geographical terminology and concepts to develop a cohesive response.	3–4
Describes a way in which human activity has adapted, or may be required to adapt, to global climate change or loss of biodiversity. Limited or no information is provided about the nature or effectiveness of the adaptation. Limited evidence is used to support statements and generalisations. Limited or no use of geographical terminology and concepts in a largely unstructured response.	1–2
Total	12
Adaptation refers to alteration or adjustment in response to a changed environment. Answers for climate change may include: <ul style="list-style-type: none"> • alternative energy sources (at varying scales) • carbon capture schemes • alternative agricultural practices • alternative transportation methods • development of alternative fuels. Answers for loss of biodiversity may include: <ul style="list-style-type: none"> • preservation strategies • conservation strategies • restoration and /or revegetation strategies • breeding programs • changes in primary industry practices • use of quotas, restrictive licencing and seasonal restrictions • gene and seed banks. 	

Question 34

(20 marks)

(a) Describe **two** of the following demographic characteristics of **either** metropolitan Perth **or** a regional urban centre in Western Australia.

- age
- gender
- socioeconomic distribution
- cultural distribution

(8 marks)

Description	Marks
For each of the two demographic characteristics (2 x 4 marks)	
<p>For either metropolitan Perth or a regional urban centre in Western Australia:</p> <p>Describes in detail the selected demographic characteristic. Detailed information is provided on the distribution and features of the selected characteristic.</p> <p>Presents a wide range of appropriate supporting evidence and examples to develop and strengthen the description. Applies accurate and relevant geographical terminology and concepts to develop a cohesive and concise response.</p>	4
<p>Describes the selected demographic characteristic. Information is provided on the distribution and features of the selected characteristic.</p> <p>Uses a range of appropriate supporting evidence and examples to develop and strengthen the description. Applies relevant geographical terminology and concepts to develop a cohesive response, with well-developed sentences and paragraphs.</p>	3
<p>Outlines the selected demographic characteristic. Brief information is provided on the distribution or features of the selected characteristic.</p> <p>Uses limited evidence and examples to support statements and generalisations. Limited use of geographical terminology and concepts.</p>	2
<p>States some information on the selected demographic characteristic. Little or no information is provided on the distribution or features of the selected characteristic.</p> <p>Limited or no use of geographical terminology and concepts, in a largely unstructured response.</p>	1
Total	8
<p>Descriptions could include the characteristics of two of the demographic measures listed including their:</p> <ul style="list-style-type: none"> • relative location (e.g. to CBD or other functional zones or areas of significance, suburbs, precincts) • areal extent • highest/lowest values and/or maximum/minimum range of the selected characteristic. 	

To answer Question 34(b) refer to a planning strategy adopted to address **one** challenge facing **either** metropolitan Perth **or** a regional urban centre in Western Australia **and** a planning strategy adopted to address **one** challenge facing a megacity.

- (b) Evaluate **both** of these strategies using the concept of sustainability. (12 marks)

Description	Marks
For each of the planning strategies evaluated (one for metropolitan Perth or a regional urban centre in Western Australia and one for a megacity) (2 x 6 marks)	
<p>Evaluates how and whether the strategy addresses the challenge, using the concept of sustainability. Detailed and accurate information is provided about the effectiveness of the strategy. Candidates evaluate the strategy by referring to its environmental, economic and social benefits and costs</p> <p>Presents a wide range of appropriate supporting evidence and examples to develop and strengthen the evaluation. Applies accurate and relevant geographical terminology and concepts to develop a cohesive and concise response.</p>	5–6
<p>Explains how the strategy addresses the challenge using the concept of sustainability. Relatively accurate information is provided about the features of the strategy. Candidates may explain the strategy by referring to its environmental, economic and social benefits and costs</p> <p>Uses some supporting evidence and examples to develop and strengthen the explanation. Applies relevant geographical terminology and concepts to develop a cohesive response.</p>	3–4
<p>Describes briefly how the strategy addresses the challenge. Limited, or no information is provided in relation to sustainability or the effectiveness of the strategy.</p> <p>Limited evidence is used to support statements and generalisations. Limited or no use of geographical terminology and concepts in a largely unstructured response.</p>	1–2
Total	
12	
<p>Sustainability refers to meeting the needs of current and future generations through simultaneous environmental, social and economic adaption and improvement.</p> <p>The term ‘strategy’ may be interpreted as referring to a large scale plan such as ONENYC, a specific strategy within such a plan or a more local initiative. All of these approaches are to be accepted and assessed on how well the answer relates the strategy to the concept of sustainability.</p> <p>Responses should clearly indicate what challenges the strategies are addressing.</p>	

Question 35

(20 marks)

(a) Describe **two** of the following demographic characteristics of a megacity you have studied.

- age
- gender
- socioeconomic distribution
- cultural distribution

(8 marks)

Description	Marks
For each of the two demographic characteristics for the chosen magacity (2 x 4 marks)	
<p>Describes in detail the selected demographic characteristic. Detailed information is provided on the distribution and features of the selected characteristic.</p> <p>Presents a wide range of appropriate supporting evidence and examples to develop and strengthen the description. Applies accurate and relevant geographical terminology and concepts to develop a cohesive and concise response.</p>	4
<p>Describes the selected demographic characteristic. Information is provided on the distribution and features of the selected characteristic.</p> <p>Uses a range of appropriate supporting evidence and examples to develop and strengthen the description. Applies relevant geographical terminology and concepts to develop a cohesive response.</p>	3
<p>Outlines the selected demographic characteristic. Brief information is provided on the distribution or features of the selected characteristic.</p> <p>Uses limited evidence and examples to support statements and generalisations. Limited use of geographical terminology and concepts.</p>	2
<p>States some information on the selected demographic characteristic. Little or no information is provided on the distribution or features of the selected characteristic.</p> <p>Limited or no use of geographical terminology and concepts, in a largely unstructured response.</p>	1
Total	8
<p>Descriptions could include the characteristics of two of the demographic measures listed including their:</p> <ul style="list-style-type: none"> • relative location (e.g. to CBD or other functional zones or areas of significance, suburbs, precincts) • areal extent • highest/lowest values and/or maximum/minimum range of the selected characteristic. 	

To answer Question 35(b) refer to a planning strategy adopted to address **one** challenge facing **either** metropolitan Perth **or** a regional urban centre in Western Australia **and** a planning strategy adopted to address **one** challenge facing a megacity.

- (b) Evaluate the extent to which **both** of these strategies used to address the challenge, have or will enhance the place's liveability. (12 marks)

Description	Marks
For each of the planning strategies evaluated (one for metropolitan Perth or a regional urban centre in Western Australia and one for a megacity) (2 x 6 marks)	
<p>Evaluates how and whether the strategy used to address the challenge has, or will, enhance the place's liveability. Detailed information is provided about the features and ability of the strategy to enhance the measures of liveability identified.</p> <p>Presents a wide range of appropriate supporting evidence and examples to develop and strengthen the evaluation. Applies accurate and relevant geographical terminology and concepts to develop a cohesive and concise response.</p>	5–6
<p>Explains how the strategy used to address the challenge has, or will, enhance the place's liveability. Relatively accurate information is provided about the features of the strategy used to enhance the measures of liveability identified.</p> <p>Uses some supporting evidence and examples to develop and strengthen the explanation. Applies relevant geographical terminology and concepts to develop a cohesive response.</p>	3–4
<p>Describes briefly how the strategy addresses the challenge. Limited, or no information is provided in relation to the features of the strategy nor the extent to which the strategy has, or will, enhance the place's liveability.</p> <p>Limited evidence is used to support statements and generalisations. Limited or no use of geographical terminology and concepts in a largely unstructured response.</p>	1–2
Total	
12	
<p>Liveability refers to the quality of space and the built environment. The concept of liveability has been linked to a range of factors, for example, quality of life, health, sense of safety, access to services, cost of living, comfortable living standards, mobility and transport, air quality and social participation.</p> <p>The term 'strategy' may be interpreted as referring to a large scale plan such as ONENY, a specific strategy within such a plan or a more local initiative. All of these approaches are to be accepted and assessed on how well the answer relates the strategy to the concept of liveability.</p> <p>Responses should clearly indicate what challenges the strategies are addressing.</p>	

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