

## 2015 HSC Geography Marking Guidelines

### Section I

#### Multiple-choice Answer Key

Question	Answer
1	A
2	B
3	D
4	D
5	C
6	B
7	C
8	D
9	B
10	A
11	C
12	A
13	B
14	A
15	C
16	A
17	D
18	D
19	C
20	C

## Section II

### Question 21 (a)

Criteria	Marks
• Provides correct answer	2
• Shows some understanding of gradient calculation	1

*Sample answer:*

$$\frac{180}{3200} = 1:17.8$$

*Answers could include:*

0.05625

### Question 21 (b)

Criteria	Marks
• Provides correct answer	2
• Shows some understanding of vertical exaggeration calculation	1

*Sample answer:*

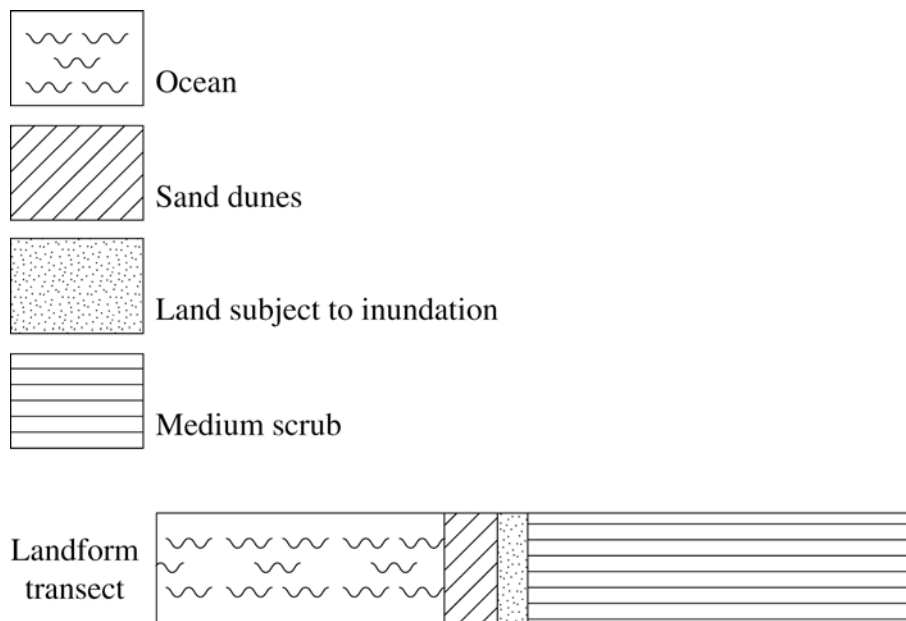
$$\begin{aligned} \frac{\text{vertical scale}}{\text{horizontal scale}} &= \frac{\frac{1}{5000}}{\frac{1}{100000}} = \frac{1}{5000} \times \frac{100000}{1} \\ &= \frac{1}{5} \times \frac{100}{1} \end{aligned}$$

$$VE = 20$$

**Question 21 (c)**

Criteria	Marks
<ul style="list-style-type: none"> <li>Correctly completes the key and constructs the transect</li> </ul>	3
<ul style="list-style-type: none"> <li>Provides a substantially correct key and transect</li> </ul> OR	2
<ul style="list-style-type: none"> <li>Provides a correct key and some features of the transect</li> <li>Identifies some features of the key and/or the transect</li> </ul>	1

*Sample answer:*



**Question 22 (a)**

Criteria	Marks
<ul style="list-style-type: none"> <li>Clearly indicates the main features of the impacts of ONE linkage associated with the economic enterprise</li> </ul>	2
<ul style="list-style-type: none"> <li>Identifies a linkage or an impact associated with the economic enterprise</li> </ul>	1

*Sample answer:*

Economic activity: Agriculture (Rice)

Economic enterprise: Rice Growers Cooperative Ltd, Leeton

One linkage is with the local community. Over 2200 growers in the Riverina provide product to be processed in the various mills in the region. The local community also provides over 1000 employees.

**Question 22 (b)**

<b>Criteria</b>	<b>Marks</b>
<ul style="list-style-type: none"> <li>Clearly describes TWO ecological dimensions associated with the economic enterprise</li> </ul>	4
<ul style="list-style-type: none"> <li>Outlines TWO ecological dimensions associated with the economic enterprise</li> </ul>	3
<ul style="list-style-type: none"> <li>Identifies TWO ecological dimensions associated with the economic enterprise</li> </ul> OR <ul style="list-style-type: none"> <li>Outlines ONE ecological dimension associated with the economic enterprise</li> </ul>	2
<ul style="list-style-type: none"> <li>Makes a general statement about ecological dimensions</li> </ul>	1

***Sample answer:***

The RGC is affected by and affects various aspects of the environment. In the Riverina woodland has been cleared for rice farms with consequent loss of habitat, soil erosion and increased turbidity of local streams. Production also leads to thermal pollution of local streams affecting aquatic life. The RGC is also affected by the environment. Temperature and precipitation changes associated with El Nino events affect levels of production. Yields diminish in times of drought putting greater pressure on land resources to raise production.

**Question 22 (c)**

<b>Criteria</b>	<b>Marks</b>
<ul style="list-style-type: none"> <li>Shows a thorough understanding of TWO global changes in the economic activity</li> <li>Clearly shows the relationship between these TWO global changes and the future direction of the economic enterprise</li> </ul>	6
<ul style="list-style-type: none"> <li>Shows a sound understanding of TWO global changes in the economic activity</li> <li>Clearly links the TWO global changes with the future direction of the economic enterprise</li> </ul>	5
<ul style="list-style-type: none"> <li>Shows a sound understanding of at least ONE global change in the economic activity</li> <li>Shows links between the global change(s) and the future direction of the economic enterprise</li> </ul>	4
<ul style="list-style-type: none"> <li>Provides features of global changes in the economic activity and/or the future direction of the economic enterprise</li> </ul>	2–3
<ul style="list-style-type: none"> <li>Makes a general statement about global changes OR future directions</li> </ul>	1

***Sample answer:***

Global changes in the rice industry will affect the future of the Rice Growers Cooperative Ltd (RGC). Two global changes are in technology and politics. Production is becoming increasingly capital intensive with mechanisation and the adoption of new technology. Satellite technology (developed in Japan) is used for laser levelling of rice fields to reduce soil erosion and better manage water distribution. This new technology will affect the industry and especially this enterprise as there is a need to adopt new technologies. Another global change is political. This may include changes in free trade agreements and investment across international borders. Any such change will affect the RGC and their production.

**Question 23 (a)**

Criteria	Marks
• Clearly describes the spatial patterns of advantage and disadvantage of the large city	3
• Outlines the spatial patterns of advantage and/or disadvantage of the large city	2
• Makes a general statement about spatial patterns of a large city	1

**Sample answer:**

Large city: London

West London generally appears to have more advantage than East London. As a rule people in West London have enjoyed higher incomes, better housing provision and superior social services/facilities such as Hyde Park and the Knightsbridge shopping precinct. East London was traditionally an industrial area that was affected by globalisation that created disadvantage through unemployment, crime and urban decay.

**Question 23 (b)**

Criteria	Marks
• Clearly shows the differences between TWO urban dynamics of change operating in the large city	4
• Outlines features of TWO urban dynamics of change operating in the large city	3
• Identifies TWO contrasting urban dynamics of change operating in the large city	2
OR	
• Outlines ONE urban dynamic of change operating in the large city	1
• Makes a general statement about urban dynamics	

**Sample answer:**

Urban consolidation is an urban dynamic operating within Central and East London. Medium density apartment complexes are being developed to house more people who wish to live closer to employment opportunities in the inner city. This increases population density and the need for community services. In contrast to this some residents are choosing to leave this hectic lifestyle by moving to the urban fringe of London. This dynamic is known as exurbanisation. Improvements in technology and transport links allow these residents to live a semi-rural lifestyle while maintaining links to inner London.

**Question 23 (c)**

Criteria	Marks
<ul style="list-style-type: none"> <li>Shows a thorough understanding of an urban dynamic and the culture of place of the large city</li> <li>Clearly shows the relationship between the urban dynamic and the changes in the culture of place of the large city</li> </ul>	4
<ul style="list-style-type: none"> <li>Provides features of an urban dynamic and the culture of place of the large city</li> <li>Links the changes in the culture of place of the large city to the urban dynamic</li> </ul>	3
<ul style="list-style-type: none"> <li>Provides features of an urban dynamic and/or the culture of place of the large city</li> </ul>	2
<ul style="list-style-type: none"> <li>Makes a general statement about culture of place</li> </ul>	1

***Sample answer:***

Urban renewal in the form of the East London Olympic Games redevelopment and Thames Gateway Projects have altered the culture of place in this region. Prior to the renewal, this area was characterised as a socially disadvantaged region where crime, unemployment, street gangs and graffiti were common. People viewed the area negatively. However renewal has generated many jobs in the area which has been a much needed economic boost. The creation of new facilities such as major retail outlets, sporting facilities and an IT business hub has injected much needed vitality into the region. Streetscapes have transformed with the establishment of urban parks and alfresco dining areas. People are attracted to this new economic hub. Employment generated income for the region and housing quality improved which can change the demographic characteristics of the region.

***Answers could include:***

Urban consolidation in Sydney has affected the culture of place as population density increases to make use of space efficient. These effects include medium to high-density housing that may change the landscape (and architectural heritage) and lifestyle of those living there. Consolidation may also affect the noise and energy of the area.

**Question 24 (a)**

Criteria	Marks
<ul style="list-style-type: none"> <li>Clearly explains how biophysical factors and the location of an ecosystem at risk are related</li> </ul>	4
<ul style="list-style-type: none"> <li>Outlines the features of the biophysical factors and the location of an ecosystem at risk</li> <li>Shows some links between them</li> </ul>	3
<ul style="list-style-type: none"> <li>Outlines the features of the biophysical factors and/or the location of an ecosystem at risk</li> </ul>	2
<ul style="list-style-type: none"> <li>Makes a general statement about an ecosystem</li> </ul>	1

***Sample answer:***

Coastal dunes are found on many of the world's continental land masses. The reasons for their location is due to the influence of weather and climate, hydrological processes, natural stress and topography.

For example along the Sri Lankan coast sand dunes have developed due to the prevailing winds, despite being within the wet tropical zone. Another example of the relationship between biophysical factors and location is hydrological. On Queensland's Fraser Island, some of the sand that makes up the island and the dunes comes from sandstone deposits found in the Sydney region. They have been transported by long shore drift and ocean currents and deposited.



**Question 24 (b)**

<b>Criteria</b>	<b>Marks</b>
• Shows a comprehensive understanding of the response of ONE ecosystem at risk to natural stress	6
• Describes the response of ONE ecosystem at risk to natural stress	5
• Outlines the response of ONE ecosystem at risk to natural stress	4
• Identifies features of natural stress and/or the response of ONE ecosystem at risk to natural stress	2–3
• Makes a general statement about a stress	1

***Sample answer:***

The Great Barrier Reef is a dynamic ecosystem that experiences many natural stresses. Tropical cyclones cause much damage on the reef. An impact would be damage of the coral due to large waves. The waves bring fresh water onto the reef through intensive rain. Another natural stress is from the biosphere. The crown-of-thorns starfish has potential to cause degradation as it consumes coral. This may reach plaque numbers. A response to this is that the starfish consume so much coral that their food supply becomes exhausted and the number of starfish return to a sustainable level.

Coral bleaching is created by the coral polyp and the zooxanthellae relationship breaking down, causing coral to expel algae. As a result the coral loses colour. Recovery from this can take decades. Coral bleaching is a negative response to climate change.

## Section III

### Question 25

Criteria	Marks
<ul style="list-style-type: none"> <li>• Shows a comprehensive understanding of mega cities in the developing world and world cities</li> <li>• Clearly shows the differences between mega cities in the developing world and world cities</li> <li>• Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate</li> <li>• Presents a sustained, logical and cohesive response using appropriate geographical information, ideas and issues</li> </ul>	17–20
<ul style="list-style-type: none"> <li>• Demonstrates a good understanding of mega cities in the developing world and world cities</li> <li>• Shows the differences between mega cities in the developing world and world cities</li> <li>• Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate</li> <li>• Presents a logical and cohesive response using appropriate geographical information, ideas and issues</li> </ul>	13–16
<ul style="list-style-type: none"> <li>• Demonstrates a sound understanding of mega cities in the developing world and world cities</li> <li>• Provides characteristics and features of the differences between world cities and mega cities in the developing world</li> <li>• Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate</li> <li>• Presents a structured response using appropriate geographical information</li> </ul>	9–12
<ul style="list-style-type: none"> <li>• Outlines the nature and character of mega cities in the developing world and/or world cities</li> <li>• May refer to case studies or illustrative examples</li> <li>• Uses some geographical information</li> </ul>	5–8
<ul style="list-style-type: none"> <li>• Demonstrates a basic understanding of mega cities and/or world cities</li> </ul>	1–4

***Answers could include:***

World Cities

- Product and cause of economic and cultural globalisation
- Globalised infrastructure of nation states
- International agencies
- Shared belief of citizens
- Finance and business centres
- Transport and communication hubs
- Major tourist attractions
- Centre of entertainment and cultural activities

Mega Cities

- 10 million people
- Major centres of manufacturing
- Many are former colonial cities
- Suffer from over-urbanisation
- Shanty towns
- Informal economy
- Often have large social divisions
- Insufficient employment
- Inequality

**Question 26**

<b>Criteria</b>	<b>Marks</b>
<ul style="list-style-type: none"> <li>• Demonstrates a comprehensive understanding of management strategies that could be used to address human impacts that are placing TWO ecosystems at risk</li> <li>• Provides points for and/or against these strategies in relation to addressing human impacts on TWO ecosystems at risk</li> <li>• Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate</li> <li>• Presents a sustained, logical and cohesive response using appropriate geographical information, ideas and issues</li> </ul>	17–20
<ul style="list-style-type: none"> <li>• Demonstrates a good understanding of how these management strategies address human impacts that are placing TWO ecosystems at risk</li> <li>• Describes management strategies that could be used to address human impacts on TWO ecosystems at risk</li> <li>• Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate</li> <li>• Presents a logical and cohesive response using appropriate geographical information, ideas and issues</li> </ul>	13–16
<ul style="list-style-type: none"> <li>• Demonstrates a sound understanding of how these management strategies address human impacts that are placing at least ONE ecosystem at risk</li> <li>• Outlines management strategies that could be used to address human impacts on at least ONE ecosystem at risk</li> <li>• Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate</li> <li>• Presents a structured response using appropriate geographical information</li> </ul>	9–12
<ul style="list-style-type: none"> <li>• Outlines management strategies and/or human impacts in relation to ecosystems at risk</li> <li>• May refer to case studies or illustrative examples</li> <li>• Uses some geographical information</li> </ul>	5–8
<ul style="list-style-type: none"> <li>• Demonstrates a basic understanding of ecosystem management strategies</li> </ul>	1–4

***Answers could include:***

Human impacts on dune systems:

- Reduction and alteration of sediment flows
- Coastal development
- Trampling
- Recreational uses
- Vehicles on dunes
- Introduced species and weeds
- Impact of global warming

Management strategies:

- Landuse controls
- Fencing
- Board and chain paths
- Dune reconstruction
- Revegetation
- Mats and netting
- Fire management

**Question 27**

<b>Criteria</b>	<b>Marks</b>
<ul style="list-style-type: none"> <li>• Demonstrates a comprehensive understanding of environmental and social impacts of ONE economic activity</li> <li>• Draws out detailed implications of these impacts of the economic activity</li> <li>• Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate</li> <li>• Presents a sustained, logical and cohesive response using appropriate geographical information, ideas and issues</li> </ul>	17–20
<ul style="list-style-type: none"> <li>• Demonstrates a good understanding of environmental and social impacts of ONE economic activity</li> <li>• Draws out a range of implications of these impacts of the economic activity</li> <li>• Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate</li> <li>• Presents a logical and cohesive response using appropriate geographical information, ideas and issues</li> </ul>	13–16
<ul style="list-style-type: none"> <li>• Describes environmental and/or social impacts of ONE economic activity</li> <li>• Draws out some implications of these impacts of the economic activity</li> <li>• Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate</li> <li>• Presents a structured response using appropriate geographical information</li> </ul>	9–12
<ul style="list-style-type: none"> <li>• Outlines environmental and/or social impacts of ONE economic activity</li> <li>• May refer to case studies or illustrative examples</li> <li>• Uses some geographical information</li> </ul>	5–8
<ul style="list-style-type: none"> <li>• Demonstrates a basic understanding of the environmental and/or social impacts of an economic activity</li> </ul>	1–4

***Answers could include:***

Economic activity: Tourism

*Environmental impacts*

- Increased awareness at international environmental conferences of ecotourism benefits
- Protection of species as a result of interest from tourists
- Whale watching putting value on protection
- Income generated from entrance fees of protected areas assists with management
- Air travel creating pollution
- Mass tourism creating environmental degradation
- Increased development

*Social impacts*

- Interface established between tourists and locals
- Tourist operators contributing to community development
- Indigenous lands being taken over by resorts
- Social exchanges between tourists and locals may not include cultural understanding
- Local traditions may be lost
- Child labour and sex trade are ongoing concerns
- Tourism may change local/traditional practices

# 2015 HSC Geography

## Mapping Grid

### Section I

Question	Marks	Content	Syllabus outcomes
1	1	Definition of spatial dimension	H1
2	1	Barometric pressure	H10, H11
3	1	Rainfall	H10, H11
4	1	Synoptic chart	H10, H11
5	1	Pie chart	H10, H11
6	1	Pie chart	H10, H11
7	1	Population statistics	H11
8	1	Latitude and longitude	H11
9	1	Grid reference	H10
10	1	Map interpretation	H10
11	1	Bearing	H10
12	1	River flow	H10
13	1	Time travelled	H10, H11
14	1	Area	H10, H11
15	1	Scale	H10, H11
16	1	Orientation	H10
17	1	Direction	H10
18	1	Sociocultural factors	H6
19	1	Photo/time	H10
20	1	Urban dynamics and fieldwork	H3, H10

### Section II

Question	Marks	Content	Syllabus outcomes
21 (a)	2	Gradient	H10, H11
21 (b)	2	Vertical exaggeration	H10, H11
21 (c)	3	Transect	H10, H11
22 (a)	2	Linkages	H1
22 (b)	4	Ecological dimensions	H4
22 (c)	6	Future directions	H1
23 (a)	3	Spatial patterns	H12
23 (b)	4	Urban dynamics	H3
23 (c)	4	Culture of place	H3
24 (a)	4	Location of ecosystem	H1
24 (b)	6	Natural stress	H2



**Section III**

<b>Question</b>	<b>Marks</b>	<b>Content</b>	<b>Syllabus outcomes</b>
25	20	World and Mega Cities	H1, H6, H12, H13
26	20	Ecosystems at Risk	H2, H6, H12, H13
27	20	Economic Activity	H1, H4, H12, H13