



BOARD OF STUDIES
NEW SOUTH WALES

2013 HSC Geography Marking Guidelines

Section I

Multiple-choice Answer Key

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

Section II

Question 21 (a)

Criteria	Marks
• States the local relief	1

Sample answer:

300 metres

Question 21 (b)

Criteria	Marks
• Calculates the gradient	2
• Shows some understanding of gradient	1

Sample answer:

1 : 30

$$\begin{aligned}\text{Working: } \frac{\text{rise}}{\text{run}} &= \frac{750 - 450}{9000} \\ &= \frac{300}{9000} \\ &= 1 : 30\end{aligned}$$

Question 21 (c)

Criteria	Marks
• Calculates the vertical exaggeration	2
• Shows some understanding of vertical exaggeration	1

Sample answer:

13.3 (tolerance 13 to 14)

$$\begin{aligned}\text{Working: } \frac{\text{Vertical Scale}}{\text{Horizontal Scale}} &= \frac{\frac{1}{150}}{\frac{1}{2000}} \\ &= \frac{1}{150} \times \frac{2000}{1} \\ &= 13.3\end{aligned}$$

Question 22 (a)

Criteria	Marks
• Explains two reasons for the management and protection of ecosystems, with reference to Source B	6
• Briefly explains two reasons for the management and protection of ecosystems, with reference to Source B	4–5
• Provides reasons for the management and protection of ecosystems. May make reference to Source B	2–3
• Provides general comments about the management and protection of ecosystems	1

Sample answer:

Ecosystems should be protected and managed for intrinsic reasons. In Source B the person is enjoying looking and/or taking a photograph at the waterfall and lake and getting great personal satisfaction from doing so.

Maintenance of genetic diversity is another reason for protection and management. In the photo there is both an aquatic and a terrestrial ecosystem where there would be a great variety of species in the natural habitats to be preserved for the future.

Question 22 (b)

Criteria	Marks
• Clearly explains the biophysical interactions responsible for ecosystem functioning, with specific reference to both diagrams	6
• Explains the biophysical interactions responsible for ecosystem functioning, with specific reference to both diagrams	5
• Briefly explains biophysical interactions responsible for ecosystem functioning, with reference to both diagrams	4
• Describes features of biophysical interactions in relation to ecosystem functioning	2–3
• Provides general comments about biophysical interactions	1

Sample answer:

Ecosystems function in response to the interaction of the four spheres. Diagram A shows the energy flows in an ecosystem where heat from the sun is absorbed by the producers (vegetation). The consumers then eat the vegetation and energy is transferred to the consumers. The primary consumer (eg the rabbit) may then be eaten by the secondary consumer. At each level some energy is lost. This is demonstrated in the trophic levels as the available energy decreases at each consumption level.

In Diagram B, the nutrient cycle is illustrated. Here nutrients are cycled around the ecosystem (with no beginning or end). Nutrients may include nitrogen and carbon. Decomposers are essential to the nutrient cycle and the ability of the ecosystem to function because they break down the nutrients from the biosphere into the soil (lithosphere) and release them back into the atmosphere and biosphere. Nutrients may also come from the atmosphere and the lithosphere.

Question 23 (a)

Criteria	Marks
• Clearly explains the changing relationship between regional centres and small towns	4
• Explains the changing relationship between regional centres and small towns	3
• Provides features of the relationship between regional centres and small towns	2
• Makes general statements about regional centres and/or towns	1

Sample answer:

Small towns are declining in population, as is the range and complexity of goods and services available in them. This is because larger regional centres have grown in population and importance and taken over many of the functions previously provided by the smaller towns. Consequently both the number and significance of small towns have diminished with population and services concentrated in regional centres.

Question 23 (b)

Criteria	Marks
• Demonstrates a sound understanding of the rapid growth of megacities in the developing world, with reference to Source G	4
• Demonstrates some understanding of the rapid growth of megacities in the developing world, with reference to Source G	3
• Outlines the rapid growth of megacities in the developing world. May make reference to Source G	2
• Makes general statements about growth of megacities	1

Sample answer:

Rural poverty often forces (rural push) people away from the countryside into megacities as shown in the bottom two photographs. They move to the cities in large numbers in order to seek opportunities. The top two photographs show the attractions of megacities (urban pull).

The photographs in Source G show educational opportunities at the Royal University of Fine Arts (Tertiary Education) and more specialised health services at the Maternity Clinic, to aid in health care.

Question 23 (c)

Criteria	Marks
• Clearly explains one challenge associated with the provision of services in megacities in the developing world, with reference to Source <i>H</i>	4
• Explains one challenge associated with the provision of services in megacities in the developing world, with reference to Source <i>H</i>	3
• Outlines one challenge associated with the provision of services in megacities in the developing world. May make reference to Source <i>H</i>	2
• Provides general comments about challenges in megacities	1

Sample answer:

The photograph shows the challenge associated with the provision of power supply. The photograph shows that the power supplies are inadequate and may be dangerous and lead to unreliable power supplies. Adequate services cannot be provided as governments lack the financial resources to support the needs of a rapidly growing urban population, many of whom work in the informal economy and do not contribute taxes to the government.

Question 24 (a)

Criteria	Marks
• Indicates the spatial patterns of an economic activity	2
• Provides some relevant information about the spatial patterns of an economic activity	1

Sample answer:

Economic activity: Viticulture and wine making

Viticulture is located in old world countries, eg France, Spain and Italy, and in new world locations eg Australia, California, South Africa.

Most of these areas have a Mediterranean climate. However, with the application of technologies, this spatial pattern has broadened to include many other countries such as China and New Zealand.

Question 24 (b)

Criteria	Marks
• Clearly provides detailed characteristics and features of an impact on the economic activity	3
• Identifies features of an impact of the economic activity	2
• Provides general comments about the economic activity	1

Sample answer:

Runoff from the wineries contains chemicals from the processing operations. This finds its way into waterways and the water table. These pollutants have the effect of poisoning local marine life and contributing to the growth of algal blooms which affects water quality.

Question 24 (c)

Criteria	Marks
• Clearly provides how and/or why two factors contribute to the future directions of the economic activity	6
• Provides how and/or why two factors contribute to the future directions of the economic activity	5
• Provides characteristics and features of two factors contributing to the future directions of the economic activity	4
• Outlines factor/s contributing to the future directions of an economic activity	2–3
• Makes general statement about the economic activity	1

Sample answer:

Economic factor of new and emerging markets particularly in Asia and China. The rising affluent middle classes have a growing demand for high quality wines especially red wines. This trend will continue as the growing affluence of most countries in Asia will ensure a steady demand into the future.

Ecological factor of the increasing trend towards environmentally sustainable agricultural practices means that there are more and more organic vineyards and wineries. An appreciation of the ecological human impact will continue into the future with increased environmental awareness among consumer and producers.

Section III

Question 25

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates deep knowledge and understanding about the impact of humans on the functioning of two ecosystems at risk • Clearly provides a judgement of the ways humans have impacted on the functioning of the ecosystems at risk • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a sustained, logical and cohesive response using appropriate geographical information, ideas and issues 	17–20
<ul style="list-style-type: none"> • Demonstrates knowledge and understanding about the impact of humans on the functioning of two ecosystems at risk • Provides some judgement of the ways humans have impacted on the functioning of the ecosystems at risk • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a logical and cohesive response using appropriate geographical information, ideas and issues 	13–16
<ul style="list-style-type: none"> • Demonstrates some understanding about the impact of humans on the functioning of two ecosystems at risk • Provides characteristics and features of the ways humans have impacted on the functioning of the ecosystems at risk • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a structured response using appropriate geographical information 	9–12
<ul style="list-style-type: none"> • Outlines some of the ways humans have impacted on ecosystems at risk • Refers to case studies or illustrative examples • Uses some geographical information 	5–8
<ul style="list-style-type: none"> • Demonstrates limited understanding of the impact of humans on an ecosystem at risk • Uses limited or no geographical information 	1–4

Question 26

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates deep knowledge and understanding of urban dynamics operating in a large city in the developed world • Identifies and draws out detailed implications of the impact of urban dynamics in terms of ecological sustainability • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a sustained, logical and cohesive response using appropriate geographical information, ideas and issues 	17–20
<ul style="list-style-type: none"> • Demonstrates knowledge and understanding of urban dynamics operating in a large city in the developed world • Identifies and draws out some of the implications of the impact of urban dynamics in terms of ecological sustainability • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a logical and cohesive response using appropriate geographical information, ideas and issues 	13–16
<ul style="list-style-type: none"> • Demonstrates some understanding of urban dynamic/s operating in a large city in the developed world • Identifies and provides characteristics and features of the impact of urban dynamics in terms of ecological sustainability • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a structured response using appropriate geographical information 	9–12
<ul style="list-style-type: none"> • Outlines urban dynamic/s operating in a large city and may refer to ecological sustainability • May refer to case studies or illustrative examples • Uses some geographical information 	5–8
<ul style="list-style-type: none"> • Demonstrates limited understanding of urban dynamic/s operating in a large city • Uses limited or no geographical information 	1–4

Question 27

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates deep knowledge and understanding of an economic enterprise operating at a local scale • Clearly determines the value of factors that have influenced the location of an economic enterprise • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a sustained, logical and cohesive response using appropriate geographical information, ideas and issues 	17–20
<ul style="list-style-type: none"> • Demonstrates knowledge and understanding of an economic enterprise operating at a local scale • Determines the value of factors that have influenced location of an economic enterprise • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a logical and cohesive response using appropriate geographical information, ideas and issues 	13–16
<ul style="list-style-type: none"> • Demonstrates some understanding of an economic enterprise operating at a local scale • Provides characteristics and features of factors that have influenced the location of an economic enterprise • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a structured response using appropriate geographical information 	9–12
<ul style="list-style-type: none"> • Outlines general reasons for the location of an economic enterprise operating at a local scale • May refer to case studies or illustrative examples • Uses some geographical information 	5–8
<ul style="list-style-type: none"> • Demonstrates limited understanding of the location of an economic enterprise • Uses limited or no geographical information 	1–4

Geography

2013 HSC Examination Mapping Grid

Section I

Question	Marks	Content	Syllabus outcomes
1	1	Graph	H11
2	1	Graph	H10
3	1	Definition	H3
4	1	Barometric pressure	H10, H11
5	1	Wind direction	H10, H11
6	1	Mapping technique	H10, H11
7	1	Density	H10, H11
8	1	Area	H11, H10
9	1	Bearing	H11, H10
10	1	Distance/time	H11, H10
11	1	Direction	H10, H11
12	1	Aspect	H10, H11
13	1	Features	H10, H11
14	1	Feature labelled	H10, H11
15	1	Direction of photographer	H13, H10
16	1	Line graph	H10, H11
17	1	Line graph	H10, H11
18	1	Ternary graph	H11
19	1	Ternary graph	H11
20	1	Scale	H10, H11

Section II

Question	Marks	Content	Syllabus outcomes
21 (a)	1	CS — local relief	H9, H10, H11
(b)	2	CS — gradient	H9, H10, H11
(c)	2	CS — VE	H9, H10, H11
22 (a)	6	Management and protection	H5, H2
(b)	6	Biophysical interactions	H9, H1, H8
23 (a)	4	Regional centre / small town	H3
(b)	4	Megacities	H1, H12
(c)	4	Megacities	H1, H12
24 (a)	2	Spatial patterns	H1
(b)	3	Impact	H4, H5
(c)	6	Future directions	H6, H7

Section III

Question	Marks	Content	Syllabus outcomes
25	20	Ecosystems at risk	H1, H2, H8, H12, H13
26	20	Urban places	H1, H5, H8, H12, H13
27	20	People & economic activity	H1, H4, H8, H12, H13