

2018 HSC Geography Marking Guidelines

Section I

Multiple-choice Answer Key

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

Section II

Question 21 (a)

Criteria	Marks
• Correctly completes the transect	2
• Completes some sections of the transect	1

Sample answer:

Cleared land – river – cleared land – open forest – cleared land – open forest

Question 21 (b)

Criteria	Marks
• Correctly identifies the feature	1

Sample answer:

Vehicular track *or* track

Question 21 (c)

Criteria	Marks
• Correctly identifies the season and provides a valid justification	2
• Provides some relevant information	1

Sample answer:

The satellite image is typical of summer because there is an obvious low pressure system over northern Australia.

Answers could include:

- Mid latitude high pressure cell over southern Australia, shown by absence of clouds, which in the winter would shift north
- High latitude cloud belt over Southern Ocean, which in the winter would shift north.

Question 22 (a)

Criteria	Marks
• Outlines why utility value is a reason for the protection of ecosystems	2
• Provides some relevant information	1

Sample answer:

Ecosystems provide services, such as maintaining water quality, which satisfy basic human needs and industrial uses. These social and economic benefits encourage the sustainable management of ecosystems.

Question 22 (b)

Criteria	Marks
• Provides a comparison of the effect of latitude on TWO different ecosystems	3
• Outlines some effect of latitude on at least one ecosystem	2
• Provides some relevant information	1

Sample answer:

Latitude is a major determinant of the location of hot desert ecosystems, with examples in high-pressure belts of mid-latitudes. However, coastal dune ecosystems are less influenced by latitude – they are more influenced coastal processes.

Answers could include:

Comparison of similarities.

Question 22 (c)

Criteria	Marks
• Describes how nutrient cycling affects ecosystems using an example	4
• Outlines a nutrient cycle within ecosystems	3
• Shows some understanding of ecosystem cycles	2
• Makes a general statement about an ecosystem process	1

Sample answer:

Nutrient cycling leads to ecosystem productivity. For example, plants absorb nitrogen from the soil. Nitrogen allows a plant to photosynthesise and to maintain structure. Nitrogen is transferred around an ecosystem through the food chain and decomposition. Consumers such as herbivores, omnivores and carnivores take in the nitrogen from their food allowing them to form tissue. Decomposers break down dead organic material and return nitrogen back into the soil, continuing the cycle. In this way, the nitrogen cycle increases the biomass of the ecosystem.

Question 23 (a)

Criteria	Marks
<ul style="list-style-type: none"> • Outlines the spatial distribution of megacities • Includes relevant examples 	3
<ul style="list-style-type: none"> • Shows some understanding of the spatial distribution of megacities • Includes at least one example 	2
<ul style="list-style-type: none"> • Makes a general statement about megacities 	1

Sample answer:

The majority of megacities are in or near the tropics (23°N and 23°S). They are in highly populated developing countries especially in east and south Asia such as India (eg Mumbai, New Delhi, Kolkata), Bangladesh (Dhaka) and Pakistan (Karachi) and China (eg Beijing, Shanghai, Tianjin – which are further north).

Question 23 (b)

Criteria	Marks
<ul style="list-style-type: none"> • Shows how megacities have responded to TWO challenges of living in megacities 	4
<ul style="list-style-type: none"> • Shows how the megacities have responded ONE of the challenges and outlines ONE other challenge/response 	3
<ul style="list-style-type: none"> • Shows how megacities have responded to ONE challenge of living in megacities <p>OR</p> <ul style="list-style-type: none"> • Shows some understanding of challenges of living in megacities 	2
<ul style="list-style-type: none"> • Identifies a challenge or a response to living in megacities 	1

Sample answer:

Dhaka (Bangladesh) has responded to the challenges of housing through an IGO or UNICEF, providing infrastructure services such as squatter settlement improvement for the urban poor. These infrastructure services include water piping into houses. Kolkata has responded to challenges of employment empowering women through microfinance programs enabling them to buy equipment for self-employment – often in the informal sector.

Question 23 (c)

Criteria	Marks
<ul style="list-style-type: none"> Provides comprehensive reasons for the nature of the relationship between world cities and other urban centres in terms of dominance and dependence 	6
<ul style="list-style-type: none"> Provides some reasons for the nature of the relationship between world cities and other urban centres in terms of dominance and/or dependence 	5
<ul style="list-style-type: none"> Outlines the relationship between world cities and other urban centres in terms of dominance and/or dependence 	3–4
<ul style="list-style-type: none"> Shows some understanding of the relationship between world cities and other urban centres 	2
<ul style="list-style-type: none"> Makes a general statement about world cities or urban centres or dominance or dependence 	1

Sample answer:

Dominant world cities exert economic and cultural influence over other urban centres, which in turn rely on them. Los Angeles dominates most other urban centres in the western world in terms of entertainment because of the power of Hollywood, and New York and London dominate because of their power in global finance and business, as well as cultural influences such as through art and Broadway/West End musicals. An example of an urban centre being dependent on a world city is Dubbo's connection to Sydney. Dubbo receives a large number of tourists through Sydney, as well as many advanced producer services such as law, advertising and accounting. Reasons for these two-directional relationships include: financing and corporate ownership, decision making between TNC head offices and regional offices, and design, fashion and architectural influences.

Question 24 (a)

Criteria	Marks
<ul style="list-style-type: none"> Outlines how ONE biophysical factor affects the spatial pattern of the economic activity 	3
<ul style="list-style-type: none"> Shows some understanding of the spatial pattern of the economic activity and/or one biophysical factor affecting the economic activity 	2
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

Climate determines the location and spatial pattern of viticulture. Traditionally wine growing regions are between latitudes 30° and 50° north and south. France, Italy, the Barossa Valley (Australia) and central California (USA) have Mediterranean climates. Grapes require hot dry summers and cool wet winters, and absence of frosts at critical times. Viticulture also benefits from maximum sunlight hours prior to harvest to increase sugar levels in the grapes.

Question 24 (b)

Criteria	Marks
• Provides points for and/or against how the use of technology has affected the nature of the economic activity	4
• Outlines how the use of technology has affected the nature of the economic activity	3
• Shows some understanding of the use of technology in the economic activity	2
• Provides some relevant information	1

Sample answer:

Technology benefits and provides challenges to the nature of viticulture. Remote sensing and thermal imaging can assist viticulturists to improve yields by targeting irrigation and fertiliser use. For example, the ‘viti-canopy’ app allows growers to regularly check the state of vines without needing to physically inspect them. This development is impacting the nature of the industry in the new world by increasing yields. On the other hand, old world vineyards generally reject the use of technology as it is seen as a negative influence on the *terroir* or unique characteristics of a wine.

Question 24 (c)

Criteria	Marks
• Provides comprehensive ways that the economic enterprise improves its ecological sustainability	6
• Describes ways that the economic enterprise improves its ecological sustainability	4–5
• Outlines way(s) that the economic enterprise improves its ecological sustainability	2–3
• Provides some relevant information	1

Sample answer:

Tamburlaine is an organic vineyard in the Hunter Valley. There are several ways it improves its ecological sustainability. Recycling greywater is beneficial as it avoids the cost and ecological impact of irrigation. Using hay to insulate the storage sheds rather than using air-conditioning reduces electricity consumption. Drying stems and seeds of grapes is useful in the creation of organic fertiliser, as avoiding chemical fertilisers allows the winery to keep its organic certification. Finally, using worm farms and compost improves soil fertility.

Section III

Question 25

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates a comprehensive understanding of an economic enterprise operating at a local scale • Provides a comprehensive explanation of how locational factors have influenced the character of the economic enterprise • Integrates relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a sustained, logical and cohesive response using appropriate geographical information, ideas, terms and concepts 	17–20
<ul style="list-style-type: none"> • Demonstrates a well-developed understanding of an economic enterprise operating at a local scale • Clearly relates locational factors to the character of the economic enterprise • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a logical response using appropriate geographical information and concepts 	13–16
<ul style="list-style-type: none"> • Demonstrates a sound understanding of an economic enterprise/activity operating at a local scale • Provides characteristics and features of some locational factors that have influenced the economic enterprise/activity • Refers to 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 at least ONE locational factor of an economic enterprise/activity • May refer to case studies, illustrative examples or the Stimulus Booklet • Uses some geographical information 	5–8
<ul style="list-style-type: none"> • Demonstrates a basic understanding of an economic enterprise/activity operating at a local scale 	1–4

Answers could include:

- Biophysical – eg climate, soils, topography
- Ecological – eg climate change, sustainability, access to water
- Economic – eg access to markets, supplies and labour
- Transport – eg road and rail networks, airports.

Question 26

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates a comprehensive understanding of urban dynamics • Provides a comprehensive discussion of the effects of urban dynamics on a large city in the developed world • Integrates relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a sustained, logical and cohesive response using appropriate geographical information, ideas, terms and concepts 	17–20
<ul style="list-style-type: none"> • Demonstrates a well-developed understanding of urban dynamics • Provides characteristics and features of the effects of urban dynamics on a large city in the developed world • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a logical response using appropriate geographical information and concepts 	13–16
<ul style="list-style-type: none"> • Demonstrates a sound understanding of urban dynamics • Provides characteristics and features of some urban dynamics in a large city in the developed world • Refers to 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 at least ONE urban dynamic in a large city in the developed world • May refer to case studies, illustrative examples and/or the Stimulus Booklet • Uses some geographical information 	5–8
<ul style="list-style-type: none"> • Demonstrates a basic understanding of urban dynamics 	1–4

Answers could include:

- Identifies a range of urban dynamics – eg urbanisation, counterurbanisation, spatial exclusion, urban consolidation
- Reference to a city – eg Sydney, Paris, Auckland
- Urban consolidation resulting in higher density living, improved access to services but also congestion, crime, pressure on infrastructure etc
- Suburbanisation resulting in cheaper housing but sprawling suburbs, isolation, loss of amenities etc
- Decentralisation resulting in transfer of services and employment from the core to the periphery as the population and businesses relocate
- Mention of specific suburbs, villages: eg Sydney – Penrith, Parramatta, Double Bay, Caringbah; Paris – Bastille, Belleville; New York – Harlem, Brooklyn; Auckland – Herne Bay, Onehunga.

Question 27

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates a comprehensive understanding of the strategies that have been used to manage the threats to at least one ecosystem at risk • Clearly determines the value of the strategies • Integrates relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a sustained, logical and cohesive response using appropriate geographical information, ideas, terms and concepts 	17–20
<ul style="list-style-type: none"> • Demonstrates a well-developed understanding of the strategies that have been used to manage the threats to at least one ecosystem at risk • Determines the value of the strategies • Refers to relevant case studies, illustrative examples and the Stimulus Booklet where appropriate • Presents a logical response using appropriate geographical information, ideas, terms and concepts 	13–16
<ul style="list-style-type: none"> • Demonstrates a sound understanding of the strategies that have been used to manage the threats to at least one ecosystem at risk • Provides characteristics and features of the strategies • Refers to 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"> • Demonstrates some understanding of management strategies and/or threats to ecosystems at risk • May refer to case studies, illustrative examples or the Stimulus Booklet • Uses some geographical information 	5–8
<ul style="list-style-type: none"> • Demonstrates a basic understanding of management strategies and/or ecosystems at risk 	1–4

Answers could include:

- Identifies threats: dune erosion, habitat loss, water quality, soil erosion, illegal dumping, logging
- Identifies a range of strategies: traditional and/or contemporary (sustainable harvesting, water quality monitoring, flood abatement schemes, government regulation encouraging behavioural change, afforestation, exclusion, education etc)
- Value of strategies based on: encouraging biodiversity, encouraging beach access, dune restoration, sustainable water supply, hazard reduction, scarce resources.

2018 HSC Geography Mapping Grid

Section I

Question	Marks	Content	Syllabus outcomes
1	1	Urban dynamics	H3
2	1	Sector graph	H11
3	1	Type of map / vocation	H7, H10
4	1	Compound bar graph	H11
5	1	Relative change	H11
6	1	Density	H11
7	1	Bearing	H10, H11
8	1	Steepest slope	H10, H11
9	1	Calculation of area	H10, H11
10	1	Aspect	H2, H10
11	1	Time travelled	H10, H11
12	1	Cross-section	H10
13	1	Gradient	H10, H11
14	1	Scale of aerial photograph	H10, H11
15	1	Economic activity concept	H1, H4
16	1	Image scale	H8, H10, H11
17	1	Ecosystem concept	H1, H2
18	1	Transect	H11, H12
19	1	Vertical exaggeration	H11
20	1	Linkages and flows	H12

Section II

Question	Marks	Content	Syllabus outcomes
21(a)	2	Transect	H10, H11
21(b)	1	Map feature	H10
21 (c)	2	Satellite photo	H10, H11
22 (a)	2	Management and protection	H2, H6
22 (b)	3	Spatial patterns / dimensions	H1, H12
22 (c)	4	Nutrient cycling	H1
23 (a)	3	Spatial patterns of megacities	H1, H12
23 (b)	4	Response to megacity challenges	H1, H12
23 (c)	6	World city dominance and dependence	H1, H13
24 (a)	3	Environmental factors affecting economic activity	H1, H4
24 (b)	4	Technology factors affecting economic activity	H1, H4
24 (c)	6	Enterprise ecological sustainability	H5

Section III

Question	Marks	Content	Syllabus outcomes
25	20	Locational factors	H4, H12, H13
26	20	Changing urban character	H3, H12, H13
27	20	Management strategies for impacts on ecosystems	H6, H12, H13