

**NSW INDEPENDENT TRIAL EXAMS – 2009
GEOGRAPHY HSC TRIAL EXAMINATION
MARKING GUIDELINES**

Section I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
B	C	C	B	C	D	D	B	A	B	C	B	D	C	D

Section II

Question 16(a)

Criteria	Marks
Accurately outlines TWO reasons why the management and protection of an ecosystem is important.	3
<ul style="list-style-type: none"> • Accurately outlines ONE reason why the management and protection of an ecosystem is important. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Identifies TWO reasons why the management and protection of an ecosystem is important. 	2
Provides some relevant information about the reasons why the management and protection of an ecosystem is important.	1

Suggested answer: Any TWO of the following:

- Maintenance of genetic diversity;
- Utility values - Ecosystems benefit humans in many ways including a source of genetic diversity and information, new resources, medicines, etc;
- Intrinsic values - Ecosystems have a value within themselves, even though they may not have a monetary value to human beings; they have significant worth in other ways;
- Heritage values - Ecosystems have natural aesthetic, historic, scientific and social significance for current and future generations;
- Need to allow natural change to proceed.

Question 16(b)

Criteria	Marks
Provides an accurate evaluation of the pollution management strategies in place on Mount Everest in terms of ecological sustainability.	3
Provides some relevant information about the pollution management strategies in place on Mount Everest in terms of ecological sustainability.	1 - 2

Suggested answer: The Chinese government is limiting the climbers on the Chinese route. The management strategies that the Chinese government have in place will be more ecologically sustainable than those in Nepal. As shown in Sources H and I, there is a significant amount of pollution on the Nepalese route to Mt Everest, which has no restrictions, and consequently is less ecologically sustainable. More strictly enforced rules are required, such as fines for people leaving rubbish. Clean-up could be funded by increasing the cost of climbing permits.

Question 16(c)

Criteria	Marks
Provides an accurate inquiry into the reliability and validity of the article as a source of geographical information.	2
Provides some relevant information about the reliability and validity of the article as a source of geographical information.	1

Suggested answer: This magazine article is a secondary source of information. This decreases the reliability of the information. The information may be valid, however secondary information is edited primary information. This may represent an individual's opinion and therefore not be a reliable information source.

Question 17(a)

Criteria	Marks
Sketches in general terms the population density of Nepal.	2
Provides some relevant information about the population density of Nepal.	1

Suggested answer: Kathmandu has the greatest population density with more than 1100 people per square kilometre. The population is distributed unevenly, with the majority of the population concentrated in the hilly central region and the fertile plains located along the southern border of the country. Very little of the population resides in the mountainous northern region of the country (Himalayas).

Question 17(b)

Criteria	Marks
Provides an accurate description of how the population pyramids for Nepal in 2005 and 2050 are similar and different.	2 - 3
Provides some relevant information about the population pyramids for Nepal in 2005 and 2050.	1

Suggested answer: The 2005 Nepalese population pyramid follows an expanding pattern as opposed to the projected 2050 population pyramid which has a stationary pattern. The expanding pattern present in the 2005 population pyramid is indicative of a high birth rate and a high death rate, with a fall in the number of people in each upward age group and a low life expectancy. The predicted population pyramid for Nepal in 2050 shows a similarly high birth rate, however it shows a low death rate with more people living to old age and an increased life expectancy.

Question 17(c)

Criteria	Marks
Provides a comprehensive description of the spatial distribution of world cities.	4
Provides a basic description of the spatial distribution of world cities.	2 - 3
Provides some relevant information about the spatial distribution of world cities.	1

Suggested answer: World cities occur across the globe, mainly in the Northern Hemisphere. There are three types of world cities and these are dominant cities, major world cities and then the secondary world cities. Dominant cities exercise the most power over the global economy and include cities such as London, Paris, New York and Tokyo. Major world cities link large national economies to the global system and include cities such as Zurich, Frankfurt, Amsterdam, Sao Paulo and Osaka. Secondary world cities provide a link between their regions and the global economy.

Question 18(a)

Criteria	Marks
Accurately calculates the rate of increase in the employment rate between 2002 and 2005.	1

Suggested answer: Rate of increase is 0.66% per year.

Question 18(b)

Criteria	Marks
<ul style="list-style-type: none"> • Accurately identifies ONE economic activity operating in Nepal. • Provides the characteristics and features of the biophysical factors that explain the nature of the activity. • Provides a plausible prediction of the future of the economic activity based on the available data. 	4
<ul style="list-style-type: none"> • Identifies ONE economic activity operating in Nepal. • Sketches in general terms the biophysical factors that explain the nature of the activity. • Provides a prediction of the future of the economic activity based on the available data. 	2 - 3
<ul style="list-style-type: none"> • Identifies ONE economic activity operating in Nepal. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Provides some relevant information about the biophysical factors that explain the nature of an economic activity. 	1

Suggested answer: An example of an economic activity operating in Nepal is tourism. The biophysical factors that explain the nature of the activity include climate, topography and site. The Himalayan mountain range is located at the northern aspect of the country and contains Mt Everest, which is an extremely popular destination for mountaineers and other travellers. Apart from Mt Everest, Nepal boasts a further seven peaks that are over 8 km high and spectacular scenery and culture as shown in the broadsheet.

Question 18(c)

Criteria	Marks
Accurately identifies the sectors that contribute the greatest percentage to Nepal's Gross Domestic Product.	1

Suggested answer: The sectors that contribute the greatest percentage to Nepal's Gross Domestic Product are agriculture and services.

Question 18(d)

Criteria	Marks
Accurately calculates the approximate percentage EACH sector in the pie graph contributes to Nepal's Gross Domestic Product.	2
Accurately calculates the approximate percentage of ONE - TWO sectors in the pie graph.	1

Correct answer: Agriculture 40% (38-42% accepted range); Services 40% (38-42% accepted range) and Industry 20% (16-24% accepted range). Estimates must add to 100%.

Section III**Question 19**

Suggested answer	Marks
<ul style="list-style-type: none"> • Accurately identifies ONE economic activity. • Provides a comprehensive evaluation of the environmental, social and economic impacts of the identified economic activity. • Uses a wide range of examples/statistics/evidence. • Presents a coherent, logical and well-structured answer to the question. • Uses relevant geographical vocabulary throughout. 	17 – 20
<ul style="list-style-type: none"> • Correctly identifies ONE economic activity. • Provides an evaluation of the environmental, social and economic impacts of the identified economic activity. • Uses a range of examples/statistics/evidence. • Presents a logical and well-structured answer to the question. • Uses geographical vocabulary throughout. 	13 – 16
<ul style="list-style-type: none"> • Identifies ONE economic activity. • Provides a discussion of the environmental, social and economic impacts of the identified economic activity. • Uses some examples/statistics/evidence • Presents a well-structured answer to the question. • Uses basic geographical vocabulary throughout. 	9 – 12
<ul style="list-style-type: none"> • Provides a description of the environmental, social and economic impacts of an economic activity. • Uses limited examples/statistics/evidence. • Limited use of geographical vocabulary. 	5 – 8
<ul style="list-style-type: none"> • Identifies the environmental, social and economic impacts of an economic activity. • Uses minimal examples or evidence. • Communication lacks coherence and fluency. 	1 – 4

Suggested Answer: Economic activities include a wide range of activities such as wheat farming, hydroponics, viticulture, textiles, tourism, advertising, retailing, wholesaling, information technologies, financial and business services industries, etc. Answer will vary depending on the economic activity identified however a sample answer for tourism has been provided.

Tourism has both positive and negative social, environmental and economic effects.

Tourism has a complex relationship with the environment. An increase in tourism is often associated with an increase in the construction of infrastructure such as roads, shops, hotels, tourism facilities, etc, which can be detrimental to the surrounding environment. Uncontrolled tourism and poor infrastructure can lead to erosion, pollution, habitat loss and may put pressure on things such as water supplies. On the other hand tourism can be beneficial to the environment and contribute to environmental protection and conservation. Tourism can be a way of raising people's awareness of the environment and can be used as a tool to finance the protection and conservation of an area.

Question 19 continues on the next page

Question 19 continued

Socially, tourism has a major impact on a country or region. Some positive effects of tourism include allowing others to learn about culture and customs, reducing negative stereotypes or perceptions, developing pride and respect for culture, and increasing the self esteem of hosts and tourists. On the other hand tourism can have a negative influence on the host and result in the destruction of indigenous culture, ecological destruction and can cause the exhaustion of local resources. The introduction of foreign foods to appease tourists and the influence of other cultures can result in the dilution of local culture and customs.

Economically tourism also has positive and negative effects. Tourists generate income for locals through the purchase of souvenirs, guided tours, accommodation, food, etc. This revenue can be used to develop infrastructure and protect the environment and culture of an area. The impact of this revenue however depends upon the percentage of earnings that reaches the host community. Some package deals for tourists results in only 20% of travellers fees reaching the local community. This can cause tension, hostility and suspicion among locals and have a negative impact on the community.

Question 20

Criteria	Marks
<ul style="list-style-type: none">• Provides a comprehensive and accurate analysis of the challenges of living in mega cities that shows a depth of knowledge and understanding.• Uses a wide range of examples/statistics/evidence.• Presents a coherent, logical and well-structured answer to the question.• Uses relevant geographical vocabulary throughout.	17 – 20
<ul style="list-style-type: none">• Provides an analysis of the challenges of living in mega cities.• Uses a range of examples/statistics/evidence.• Presents a logical and well-structured answer to the question.• Uses geographical vocabulary throughout.	13 – 16
<ul style="list-style-type: none">• Provides a discussion of the challenges of living in mega cities.• Uses some examples/statistics/evidence• Presents a well-structured answer to the question.• Uses basic geographical vocabulary throughout.	9 – 12
<ul style="list-style-type: none">• Provides a description of the challenges of living in mega cities.• Uses limited examples/statistics/evidence.• Limited use of geographical vocabulary.	5 – 8
<ul style="list-style-type: none">• Identifies the challenges of living in mega cities.• Uses minimal examples or evidence.• Communication lacks coherence and fluency.	1 – 4

Suggested answer: The challenges of living in mega cities include things such as housing, traffic infrastructure, water and power supplies, sanitation services, employment and other social and health issues. Mega cities have a huge number of people residing in them and often struggle to support the number of people they contain. Often the number of houses is not as large a problem as the affordability of housing. High rates of unemployment in mega cities can result from rapid population growth and people who are unemployed find it difficult to find housing and often end up living on the street or in slums. Slums are usually located in areas where others won't live and informal structures are built from scrap material. Slums and shanty towns often result in major health and hygiene problems due to a lack of fresh water, sewage pipes or garbage disposal.

Many mega cities were not originally designed to cope with the number of people that inhabit them. The public transport infrastructure is inadequate which forces people to use motor vehicles on roads which were not designed to cope with the large volume of users. Traffic congestion is an enormous problem in mega cities and results in large amounts of pollution. Similarly the power and water supplies in mega cities can be inadequate to cope with the number of households and businesses that require their input. This can result in large scale power outages and water restrictions or shortages to parts of the city.

Social and health issues associated with mega cities include poverty, hunger, disease and inadequate public services. Slums often develop in metropolitan areas as a result of inadequate housing and infrastructure to support an expanding population and are associated with poverty, crime, disease, malnutrition and a lack of education. Inadequate public health, education and law enforcement infrastructure causes health and social issues in rapidly growing cities.

Question 21

Criteria	Marks
<ul style="list-style-type: none"> Provides a comprehensive assessment of the impact of human induced modifications to energy flow and nutrient cycling on the vulnerability and resilience of ecosystems. Uses a wide range of examples/statistics/evidence. Presents a coherent, logical and well-structured answer to the question. Uses relevant geographical vocabulary throughout. 	17 – 20
<ul style="list-style-type: none"> Provides an assessment of the impact of human induced modifications to energy flow and nutrient cycling on the vulnerability and resilience of ecosystems. Uses a range of examples/statistics/evidence. Presents a logical and well-structured answer to the question. Uses geographical vocabulary throughout. 	13 – 16
<ul style="list-style-type: none"> Provides a discussion of the impact of human induced modifications to energy flow and nutrient cycling on the vulnerability and resilience of ecosystems. Uses some examples/statistics/evidence Presents a well-structured answer to the question. Uses basic geographical vocabulary throughout. 	9 – 12
<ul style="list-style-type: none"> Provides a description of the impact of human induced modifications to energy flow and nutrient cycling on the vulnerability and resilience of ecosystems. Uses limited examples/statistics/evidence. Limited use of geographical vocabulary. 	5 – 8
<ul style="list-style-type: none"> Identifies the impact of human induced modifications to energy flow and nutrient cycling on the vulnerability and resilience of ecosystems. Uses minimal examples or evidence. Communication lacks coherence and fluency. 	1 – 4

Answers may include: Energy flow is the movement of energy through an ecosystem. Energy flow starts with solar energy, which is utilised by plants for photosynthesis. Plants absorb and utilise solar energy which is absorbed by plant eating animals through digestion and transformed into energy and heat. Secondary consumers then consume primary consumers and then tertiary consumers consume and digest secondary consumers. Decomposers breakdown organic matter, releasing the nutrients back into the soil.

When humans use pesticides they may eliminate or decrease the numbers of a link in the food chain which will have a knock-on effect and affect the consumers further up the food chain. Humans can also affect energy flow and food chains when they hunt animals to extinction.

Nutrient cycles refer to pathways by which a chemical element or molecule moves through both the biotic (biosphere) and abiotic (lithosphere, atmosphere, and hydrosphere) compartments of Earth. In effect, the element is recycled, although in some cycles there may be places (called reservoirs) where the element is accumulated or held for a long period of time.

Nutrient cycles are manipulated by various actions of humans and as the vulnerability and resilience of ecosystems is closely related to concentrations of nutrients within a cycle, these human actions greatly influence ecosystems.

The vulnerability and resilience of an ecosystem is related to the biodiversity of an ecosystem. The extent of the ecosystem in terms of its genetic and species diversity will determine its vulnerability. Alpine ecosystems usually have large populations of a small variety of species; in this instance the impact of a loss of a species would have a devastating effect on the ecosystem. More diverse ecosystems however are more resilient to change, with alternative pathways available for ecological processes if one pathway is damaged.

**NSW INDEPENDENT TRIAL EXAMS – 2009
GEOGRAPHY HSC TRIAL EXAMINATION
MAPPING GRID**

Question	Marks	Content	Syllabus Outcomes	Targeted Performance Bands
1	1	Skills; graph interpretation	H10, H11	2-3
2	1	Skills; table interpretation	H10, H11	3-4
3	1	Skills; table interpretation	H10, H11	3-4
4	1	Skills; graph interpretation	H10, H11	2-3
5	1	Skills; distance	H10, H11	3-4
6	1	Skills, directions, bearings	H10, H11	2-3
7	1	Skills, directions, bearings	H10, H11	3-4
8	1	Skills; map interpretation	H10, H11	4-5
9	1	Skills; map interpretation	H10, H11	3-4
10	1	Skills; distance	H10, H11	3-4
11	1	Skills; graph interpretation	H10, H11	3-4
12	1	Skills; graph interpretation	H11	2-3
13	1	Skills; map interpretation	H11	2-3
14	1	Skills; graph interpretation	H11	2-3
15	1	Skills; weather map	H10, H11	4-5
16(a)	3	Ecosystems at risk; protection and management	H2	3-4
16(b)	3	Ecosystems at risk; pollution management strategies	H5	4-5
16(c)	2	Validity and reliability of data	H9	3-4
17(a)	2	Skills, map interpretation	H10, H11	3-4
17(b)	3	Analyse population pyramid	H10, H11	3-4
17(c)	4	Urban places, world cities	H12	3-4
18(a)	1	Graph interpretation	H10, H11	2-3
18(b)	4	Economic activity; biophysical factors	H1, H12, H4	4-5
18(c)	1	Interpret pie graph	H10, H11	2-3
18(d)	2	Interpret pie graph	H10, H11	3-4
19	20	Economic activity; environmental, social and economic impacts	H1, H4, H12, H13	2-6
20	20	Mega cities; challenges	H1, H3, H12, H13	2-6
21	20	Ecosystems; human impact	H1, H2, H12, H13	2-6