

MARKER CODE				



Student Enrolment Number (SEN)									

TONGA FORM SIX CERTIFICATE 2017

GEOGRAPHY

QUESTION AND ANSWER BOOKLET

Time allowed: 3 Hours

INSTRUCTIONS:

1. Write your **Student Enrolment Number (SEN)** on the top right-hand corner of this page.
2. Additional sheets of paper can be obtained from your supervisor if necessary. Write your **Student Enrolment Number (SEN)** on each additional sheet, number the questions clearly and insert them in the appropriate part of your booklet.

Sections/Topics	Total Weight
Section A: Living with Natural Hazards	16
Section B: The use and management of Water Resources	14
Section C: Consequences of Population Growth	10
Section D: The challenges of Urbanization	14
Section E: Geographic Perspectives on Tourism	16
TOTAL	70

3. Follow the instructions and answer all questions in the spaces provided in this booklet.
4. Check that this booklet contains pages **2-27** in the correct order and that page 25-27 has been deliberately left blank.

**YOU MUST HAND IN THIS BOOKLET TO THE SUPERVISOR BEFORE YOU
LEAVE THE EXAMINATION ROOM.**

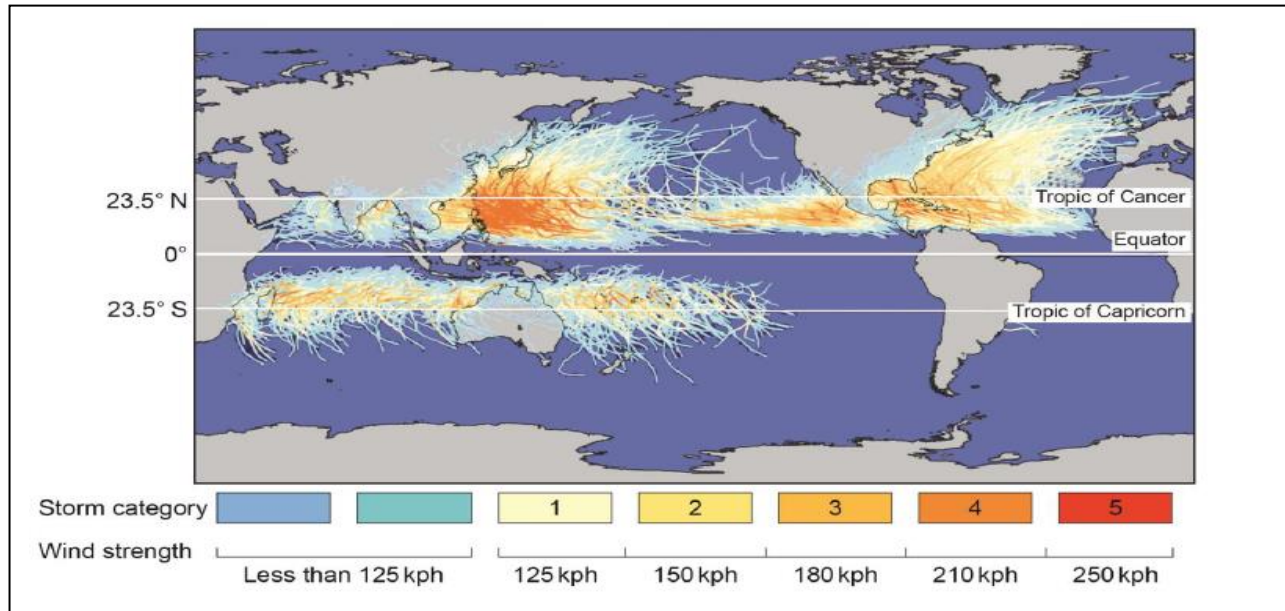
SECTION A: LIVING WITH NATURAL HAZARDS

Spend about 40 minutes answering this section.

Question 1: DISTRIBUTION OF NATURAL HAZARDS.

Study **Figure 1** below and use information from it to answer the questions that follow.

Figure 1: Tropical storms strengths and tracks.



- a. State the region that experiences the strongest storms.

Skill level 1	
1	
0	
NR	

- b. Describe the distribution of the strength of tropical storms shown on the map.

Skill level 2	
2	
1	
0	
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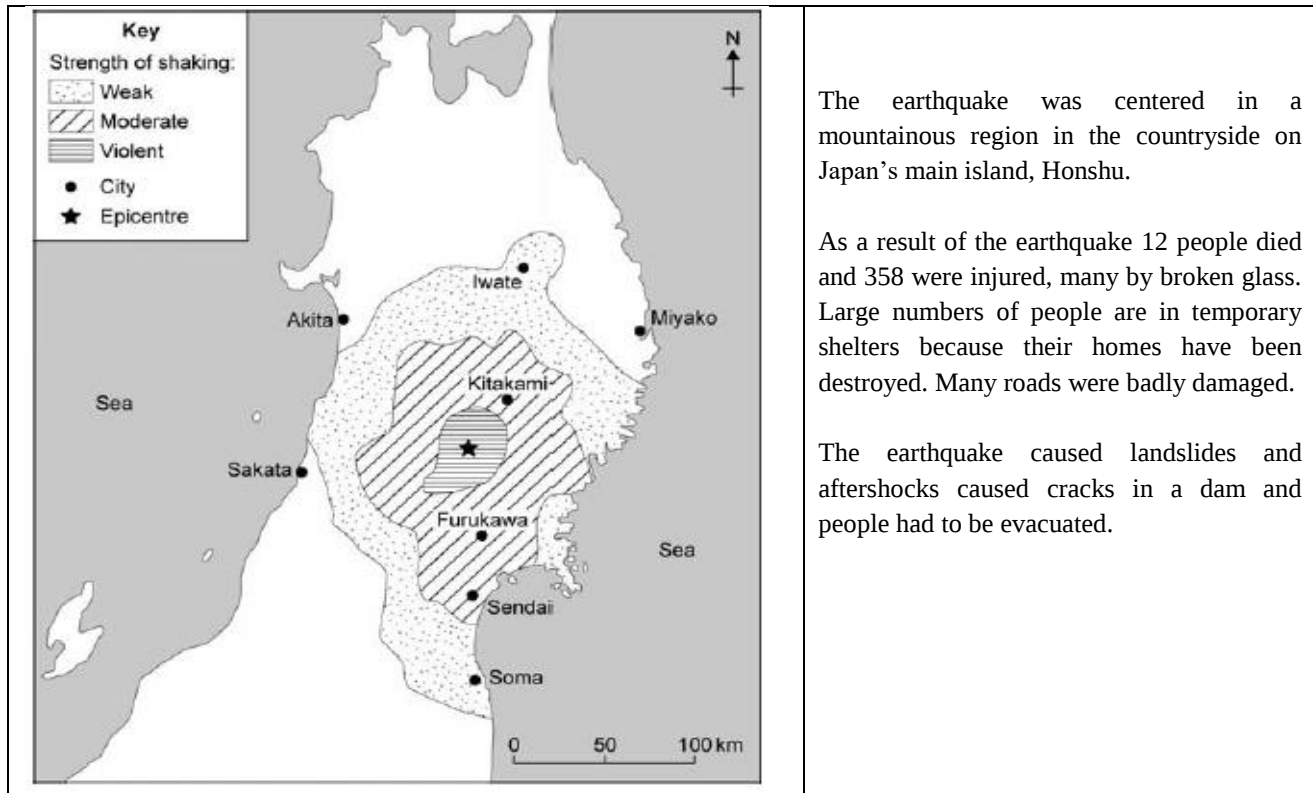
- c. Give **ONE** (1) reason why tropical storms eventually lose their energy.

Skill level 1	
1	
0	
NR	

Question 2: PROCESSES AND FACTORS OF NATURAL HAZARDS

Figure 2 shows information about an earthquake in Japan, 2008. Study **Figure 2** and answer the questions that follow.

Figure 2: Earthquake in Japan, 2008



- a. Name the device that measures the intensity of the earthquake.

Skill level 1	
1	
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NR	

- b. Compare and contrast the effects of the earthquake on Kitakami City and Soma City.

Skill level 3	
3	
2	
1	
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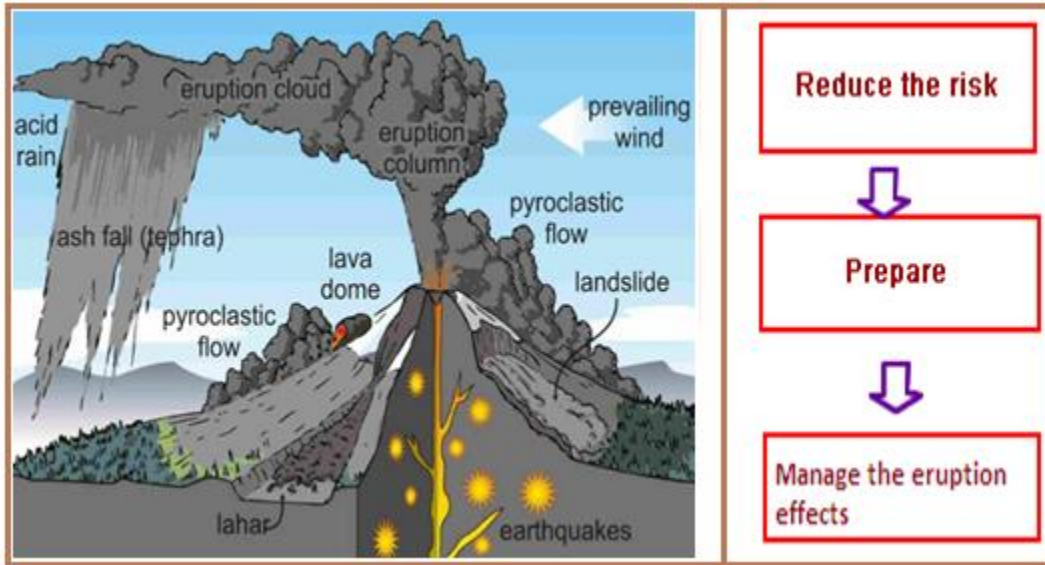
- c. List **TWO** (2) immediate effects of the earthquake on the epicenter.

Skill level 1	
1	
0	
NR	

Question 3: EFFECTS OF VOLCANOES AND PLANNED RESPONSES.

Using the resource given in **Figure 3** below and with reference to named examples, write paragraphs to:

Figure 3



- a. **Explain the effects of volcanic eruptions on the environment.**

[illegible]

	Skill level 3	
	3	
	2	
	1	
	0	
	NR	

b. **Discuss planned responses to volcanic eruptions and their implications.**

[illegible]

Skill level 4	
4	
3	
2	
1	
0	
NR	

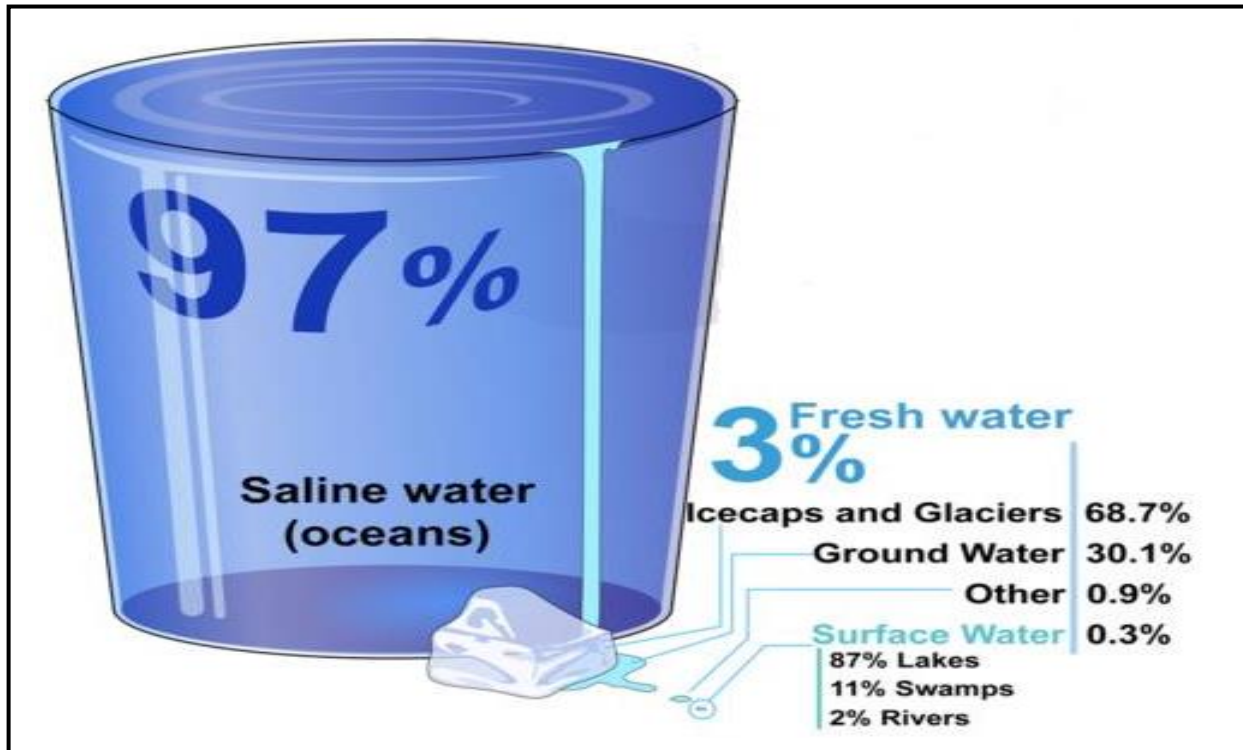
SECTION B: THE USE AND MANAGEMENT OF WATER RESOURCES

Spend about 36 minutes answering this section.

Question 1: NATURE AND DISTRIBUTION OF WATER RESOURCES

Study **Figure 4** and answer the questions that follow.

Figure 4: Global Distribution of Water



- a. State the percentage of usable freshwater.

Skill level 1	
1	
0	
NR	

- b. Give **ONE** (1) reason why freshwater is a limited resource.

Skill level 1	
1	
0	
NR	

- c. Identify the water distribution pattern shown in **Figure 4**.

Skill level 1	
1	
0	
NR	

- d. Name **ONE** (1) example of the water reservoirs shown in **Figure 4**.

Skill level 1	
1	
0	
NR	

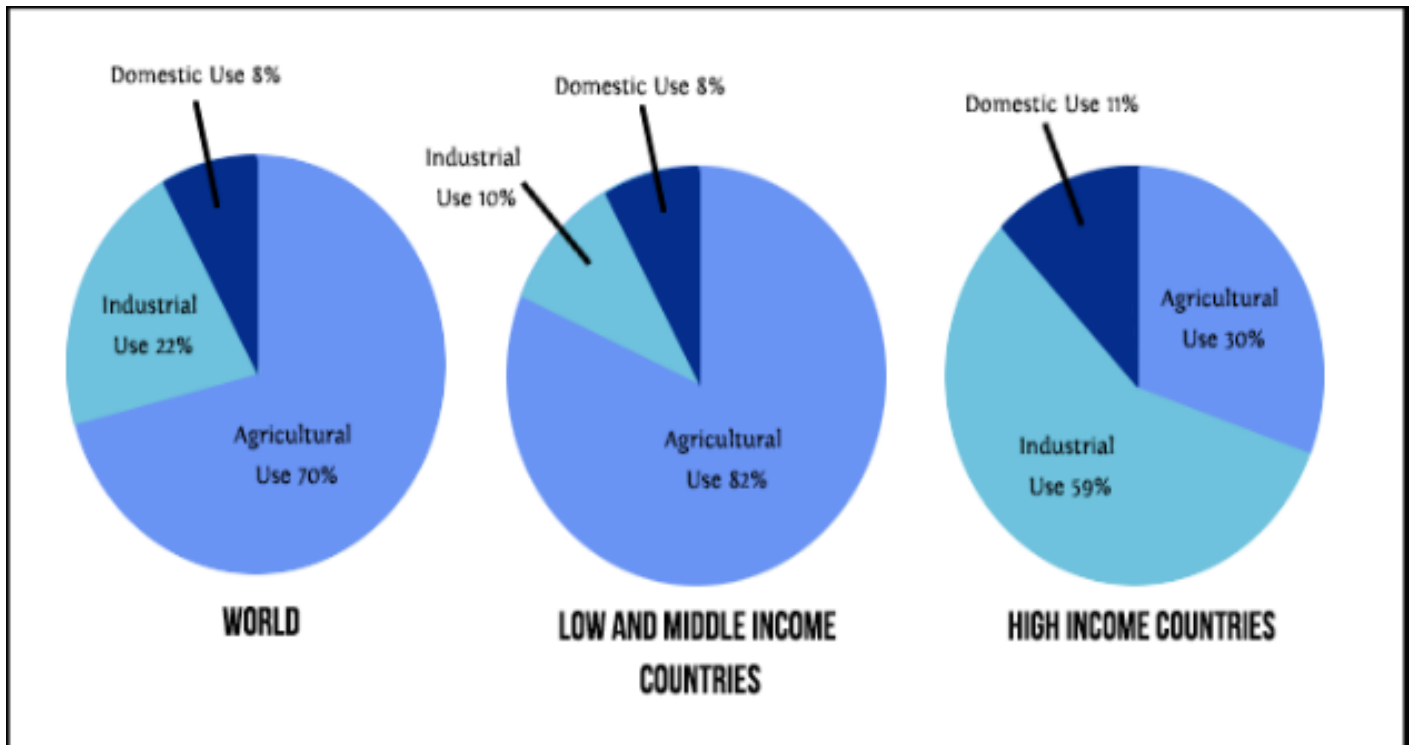
- e. On the outline given below, draw a simple diagram to show the processes of the hydrological cycle. Apply all drawing conventions.

Skill level 3	
3	
2	
1	
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Question 2: USES OF WATER

Study **Figure 5** and answer the questions that follow.

Figure 5: Global Water Use



a. Name the **THREE** (3) major uses of water shown in the graph above.

- i. _____
- ii. _____
- iii. _____

Skill level 1	
1	
0	
NR	

b. Describe the differences in the amount of water used in developing and developed countries.

Skill level 2	
2	
1	
0	
NR	

Question 3: PLANNING AND MANAGEMENT OF WATER RESOURCES.

Using the resource given in **Figure 6** below and with reference to named examples, write a paragraph to:

Figure 6



Discuss the strategies for managing water in areas of water scarcity.

[illegible]

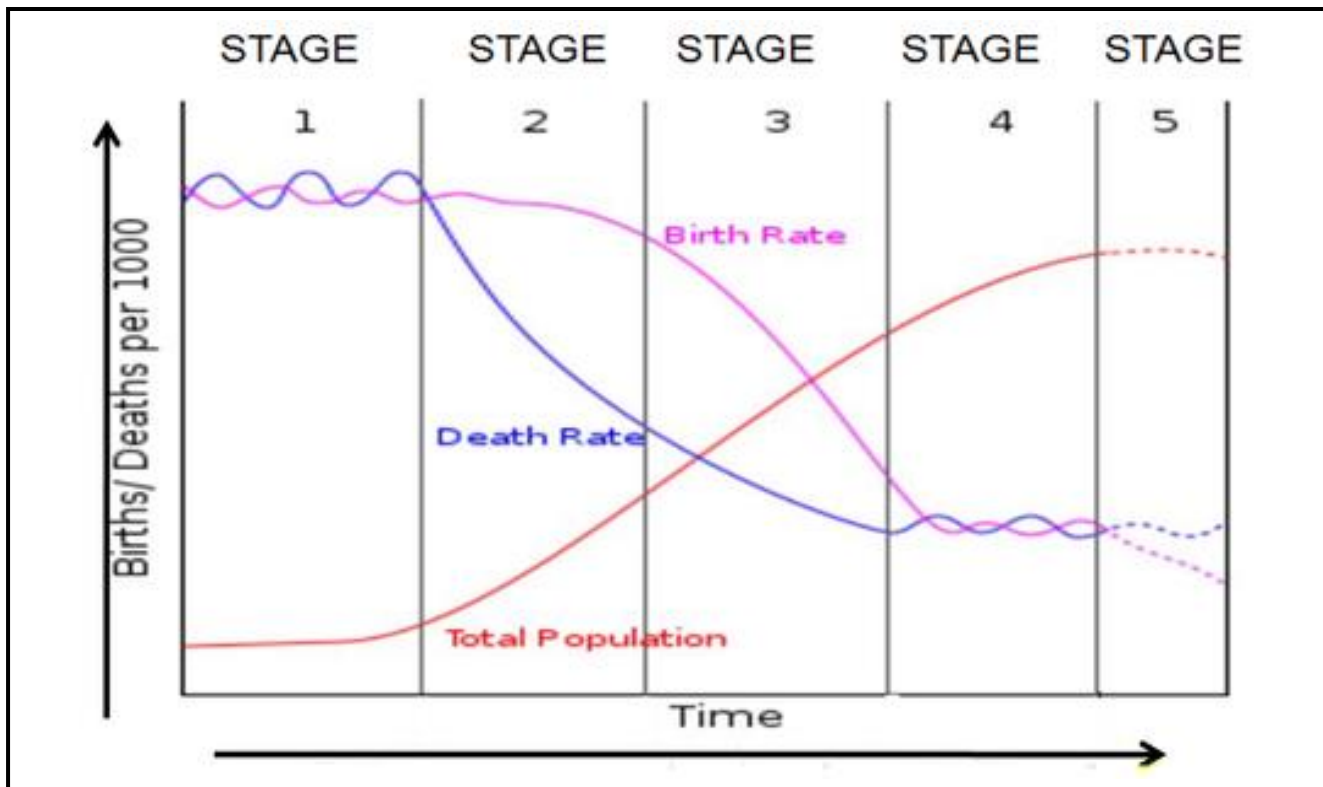
SECTION C: CONSEQUENCES OF POPULATION GROWTH

Spend about 28 minutes answering this section.

Question 1: DEMOGRAPHIC TRANSITION MODEL

Study **Figure 7** and answer the questions that follow.

Figure 7: Demographic Transition Model



- a. On the graph above, locate and name an area of natural increase.

Skill level 1	
1	
0	
NR	

- b. Provide a reason for the falling death rate in **Stage 2** and **3**.

Skill level 1	
1	
0	
NR	

- c. On the box below, draw and label a population pyramid for a country in **Stage 4**.
You must include the following categories for the age-groups: children, youth, working group and old age.

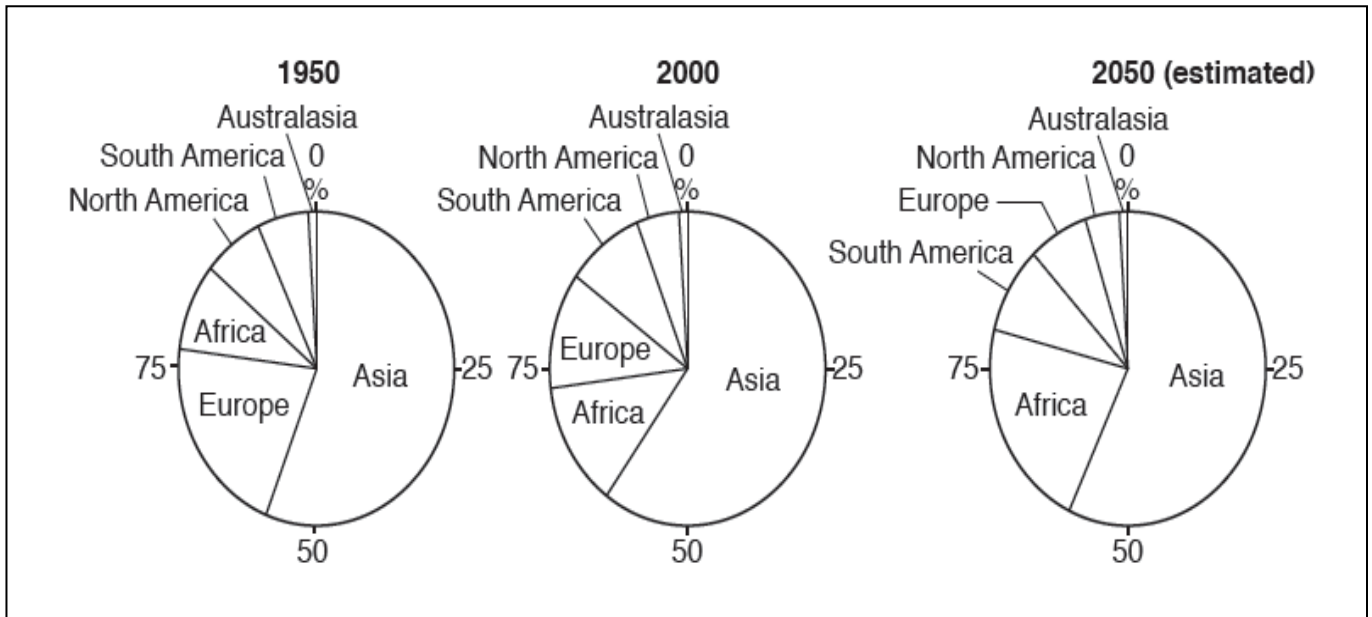


Skill level 2	
2	
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NR	

Question 2: DISTRIBUTION OF THE WORLD'S POPULATION

Use **Figure 8** below to answer the questions that follow.

Figure 8: Distribution of world's population in 1950, 2000 and 2050 (estimated)



- a. Name the continent with the greatest percentage of the world's population from 1950 – 2050.

Skill level 1	
1	
0	
NR	

- b. Describe the pattern of the population growth of the world's continents shown above.

Skill level 2	
2	
1	
0	
NR	

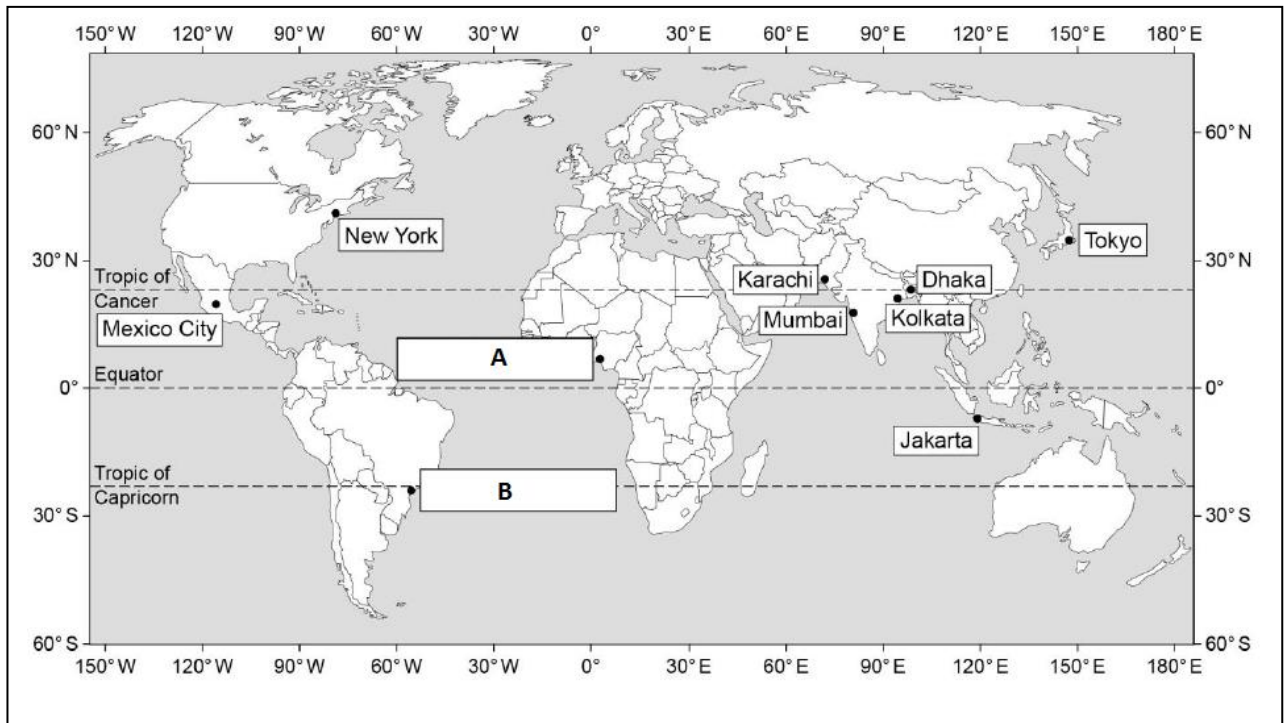
SECTION D: THE CHALLENGES OF URBANISATION

(Spend about 36 minutes answering this section.)

Question 1: NATURE AND DISTRIBUTION OF URBAN AREAS.

Study **Figure 10** and answer the questions that follow.

Figure 10: Location of the World's top 10 megacities



- a. Name the two megacities labeled **A** and **B** on **Figure 10** above on the space provided below.

A: _____

B: _____

Skill level 1	
1	
0	
NR	

- b. Give the definition of a megacity.

Skill level 1	
1	
0	
NR	

- c. Describe the location of the major megacities of the world as shown in **Figure 10**.

Skill level 2	
2	
1	
0	
NR	

Question 2: PROCESSES OF URBAN GROWTH

Study **Figure 11** and answer the questions that follow.

Figure 11: BENEFITS OF URBAN GROWTH

Benefits created by urban growth

It is estimated that 80% of economic growth in developing countries occurs in urban areas. Cities create a wide range of economic and social benefits that are not always available in rural areas. This includes social services such as education and healthcare and access to basic facilities like clean water. Urban areas are often transfer hubs and consequently attract commercial development. Many cities in developing countries are financial centres and contain a large number of international businesses. Because of the growing population and increasing wealth, there is employment available in both the formal and informal sectors. These cities are often referred to as 'engines of growth' because of the way they create socio-economics benefits and are important to the economic development of the whole country.

- a. Suggest why economic factors are more important than physical factors when explaining migration to cities in developing countries.

	Skill level 2	
	2	
	1	
	0	
	NR	

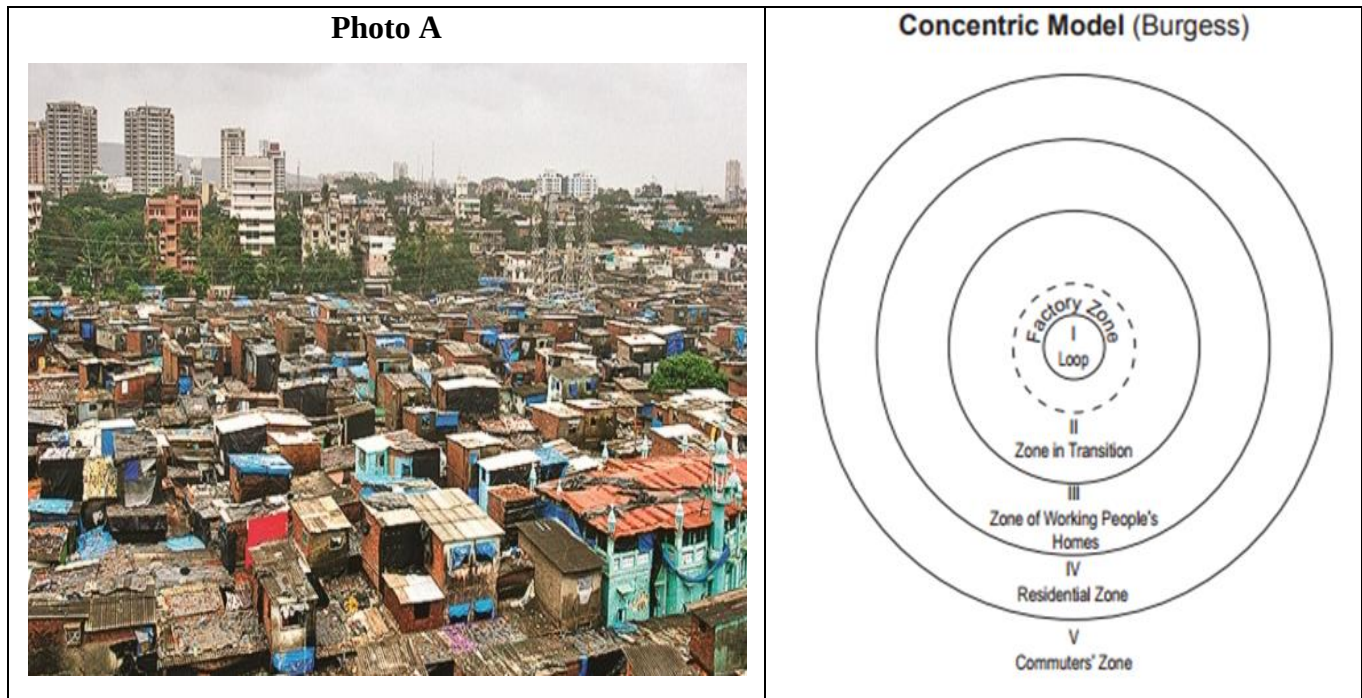
- b. According to **Figure 11**, provide **TWO** (2) factors that encourage people to move from rural areas to the urban areas.

	Skill level 1	
	1	
	0	
	NR	

Question 3: PLANNED RESPONSES TO URBAN GROWTH

Study **Figure 12** and answer the questions that follow.

Figure 12: Urban Growth Model



- a. Name the type of settlement shown in **Photo A** in **Figure 12**.

- b. Explain the development of the settlement in **Photo A** in **Figure 12** in the Concentric Model above.

Skill level 1	
1	
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Skill level 3	
3	
2	
1	
0	
NR	

SECTION E: GEOGRAPHIC PERSPECTIVES ON TOURISM

(Spend about 40 minutes answering this section.)

Question 1: NATURE OF GLOBAL TOURISM

Study **Figure 14** and answer the questions that follow.

Figure 14: Nature of Global Tourism



- a. Define sustainable tourism.

Skill level 1	
1	
0	
NR	

- b. Explain the economic benefits of tourism mentioned in **Figure 14**.

Skill level 3	
3	
2	
1	
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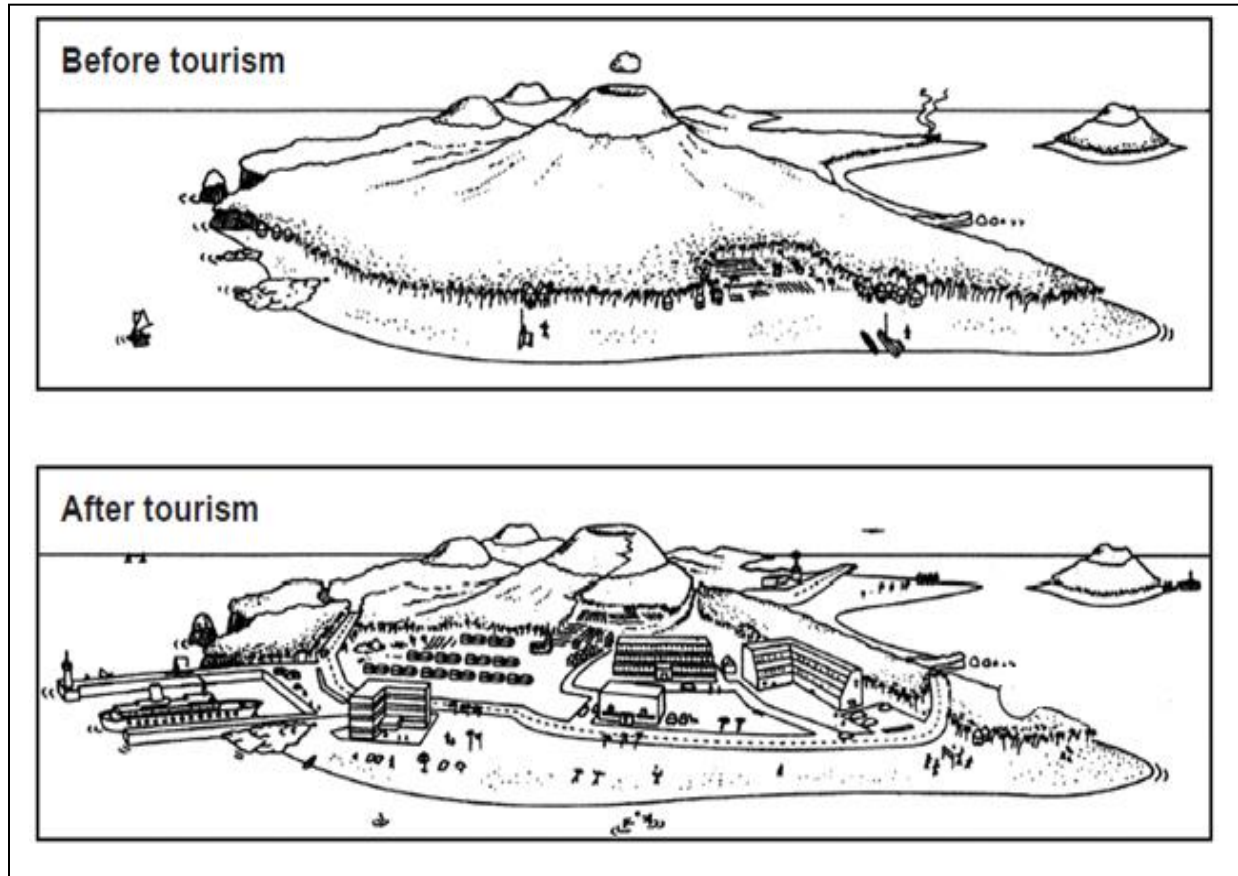
- c. Name **ONE** (1) of the principal countries of origin of international tourists.

Skill level 1	
1	
0	
NR	

Question 2: EFFECTS OF TOURISM DEVELOPMENT

Study **Figure 15** and answer the questions that follow.

Figure 15: Effects of Tourism Development



- a. Provide **ONE** (1) change to the infrastructure and accommodation in the island after development.

	Change
Infrastructure	1.
Accommodation	2.

Skill level 1	1.	2.
1		
0		
NR		

- b. Describe the environmental impacts that were brought over by the development of the island.

Skill level 2	
2	
1	
0	
NR	

b. **Evaluate the effectiveness of the different strategies for managing tourism.**

[illegible]

	Skill level 4	
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	3	
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