MAR	KER C	ODE	



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TONGA FORM SIX CERTIFICATE

2018

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. This paper consists of **FIVE SECTIONS** and is out of 70 Skill Level.

SECTION	TOPICS	TOTAL SKILL LEVEL
A	LIVING WITH NATURAL HAZARDS	30
В	THE USE AND MANAGEMENT OF WATER RESOURCES	14
C	CONSEQUENCES OF POPULATION GROWTH	6
D	THE CHALLENGES OF URBANIZATION	10
E	GEOGRAPHIC PERSPECTIVES ON TOURISM	10
	TOTAL	70

- 3. Answer ALL QUESTIONS. Write your answers in the spaces provided in this booklet.
- 4. Use a **BLUE** or **BLACK** ball point pen only for writing. Use a pencil for drawing if required.
- 5. If you need more spaces for answers, ask the supervisor for extra paper. Write your **Student Enrolment Number (SEN)** on each additional sheet, number the questions clearly and insert them in the appropriate places in this booklet.
- 6. Check that this booklet contains pages 2-27 in the correct order and that pages 25-27 has been deliberately left blank.

SECTION A:LIVING WITH NATURAL HAZARDS

Spend about 77 minutes in this section.

Question One: Distribution of Natural Hazards

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

Figure 1: Location of powerful earthquakes, 2003 - 2012. Eurasian Plate North American 2006 Plate 2003 2008 2011 African Pacific Plate Indian Plate Plate South-2005 Nazca American Plate 2007 Australian Plate-2004, 2012 Plate 2010 Key · epicentre and year Antarctic Plate plate movement

a.	Define	eartho	uake.
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b.	Identify the type of plate boundary at point X in Figure 1 .	Skill lev	vel 1
υ.	. Identify the type of place boundary at point 22 in Figure 1.		
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Describe the distribution and location of the powerful earthquakes shown in Figure 1 .			
Describe the distribution and location of the powerful earthquakes shown in Figure 1. Skill 2 1 0 NR			
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		Describe the distribution and location of the powerful earthquakes shown in Figure 1 .	_ 2

Question Two: Factors and Processes that Produce Natural Hazards

Study Figure 2 below and use the information in it to answer the questions that follow.

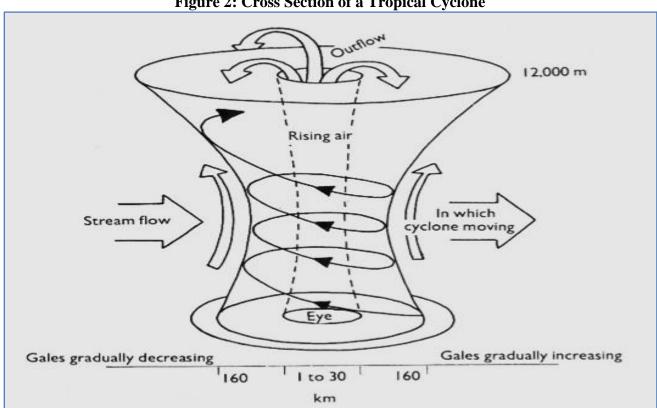


Figure 2:	Cross S	Section (of a	Tropical	Cycl	lone
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Outline the processes of how a tropical cyclone develops.		
	Skill le	vel 2
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b.	Identify a weather condition that is the greatest hazard to people during a tropical cyclone		
	as shown in Figure 2.	Skill le	vel 1
		1	
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		NR	
c.	Describe the weather conditions during the eye of a tropical cyclone.		
		Skill le	vel 2
		2	
		1	
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		Skill le	vel 1
d.	Give a weather condition right after the eye of the tropical cyclone.	1	
		0	
		NR	

Question Three: Effects of Natural Hazards

Study **Figure 3**, **Figure 4** and **Figure 5** below and use their information to answer the questions that follow.

Magnitude Low ➤ Slow Speed of onset Rapid -Duration ► Short Long -Dispersed -Area extent Clustered Spatial predictability Random -Predictable Frequency of event Frequent -Rare

Figure 3: Hazard profile of a major volcanic eruption

a. Discuss the effects of a volcanic eruption with the hazard profile above on people and their activities.

-	Skill level 3		
_	3		
_	2		
_	1		
_	0		
	NR		

1200 Estimated total economic losses (\$US billion) per disaster type 1000 800 Earthquake Storm 600 Volcano Flood Drought 400 200 Ō Africa Americas Asia Europe Oceania

Figure 4: Economic losses caused by natural disasters 1998 – 2012.

b.	Identify the most common	natural disaster in Figure 4.

c.

Skill lev	vel 1
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0	
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NR

Explain why the scale of economic losses varies so much between continents.		
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Figure 5: Impact of two earthquakes in April 2016.

	JAPAN	ECUADOR
	(Asia)	(South America)
Magnitude	7.0	7.8
Deaths	40	661
Injuries	2021	6200
Buildings Destroyed	90	7000

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Question Four: Planned Responses to Natural Hazards

Study **Figure 6** below and use the information in it to answer the following question.

Figure 6: Earthquake preparation

	Steps for earthquake preparedness			
1	Identify potential hazards in your home and begin to fix them!			
2	Create a disaster preparedness plan.			
3	Prepare disaster supply kits.			
4	Identify your building's potential weaknesses and begin to fix them.			
5	Protecting yourself during earthquake shaking – drop, cover and hold on!			
6	After the earthquake, check for injuries and damage.			
7	When safe, continue to follow your disaster preparedness plan.			

Analyse clear planned responses to earthquakes and their implications.		
	Skill lev	vel 4
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SECTION B: THE USE AND MANAGEMENT OF WATER RESOURCES

Spend about 36 minutes in this section.

Distribution of Water Resources Question One:

Use **Figure 7** and **Figure 8** and their information to answer the questions that follow.

Figure 7: Water scarcity areas, 2009

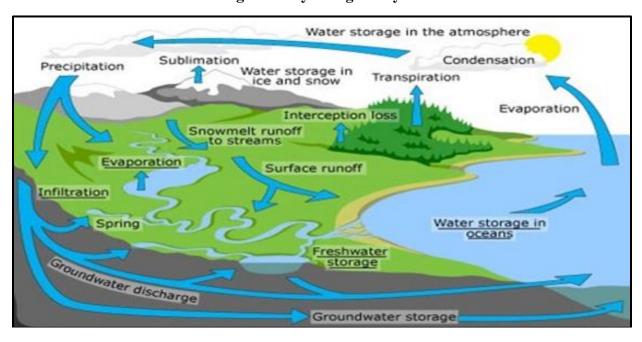
Name a region of physical water scarcity shown in **Figure 7**.

	Skill level 1	
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Skill level 3

Explain the global location and distribution of water scarcity shown in **Figure 7**.

Figure 8: Hydrological Cycle

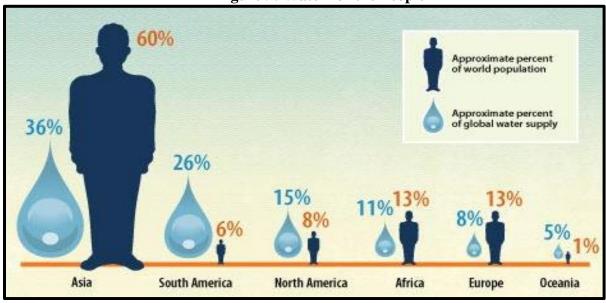


c.	Define the hydrological cycle.		
	, ,	Skill le	vel 1
		1	
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d.	Describe the distribution of water resources within the hydrological cycle.		
		Skill le	vel 2
		2	
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Question Two: Factors and Processes that Affect the Global Distribution of Water Resources.

Use **Figure 9** and the information in it to answer the following question.

Figure 9: Water for the People



Explain the factor that affects the global distribution of water resources shown in Figure 9.

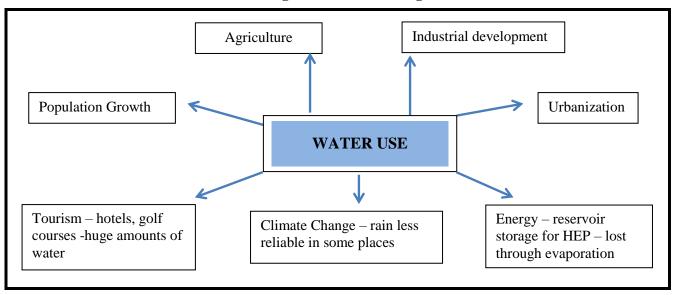
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Question Three: How Fresh Water Resources are used, and the Effects of this Utilization on People and the Environment.

Use **Figure 10** and the information in it to answer the questions that follow.

b.

Figure 10: Water Usage



a. Identify an important use of water in agriculture.

Skill level 1

1

0

NR

Explain how people's perception of water use changes over the years.		
	Skill le	vel 3
	2	
	0	

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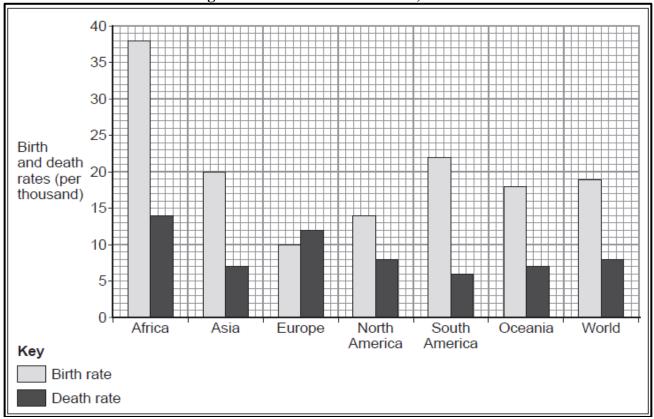
SECTION C: CONSEQUENCES OF POPULATION GROWTH

Spend about 15 minutes in this section.

Question One: Distribution of World Population

Study Figure 11 and use it to answer the questions that follow.

Figure 11: Birth and Death rates, 2015.



a. Name the continent where natural population decrease occurred.

	Skill level 1		
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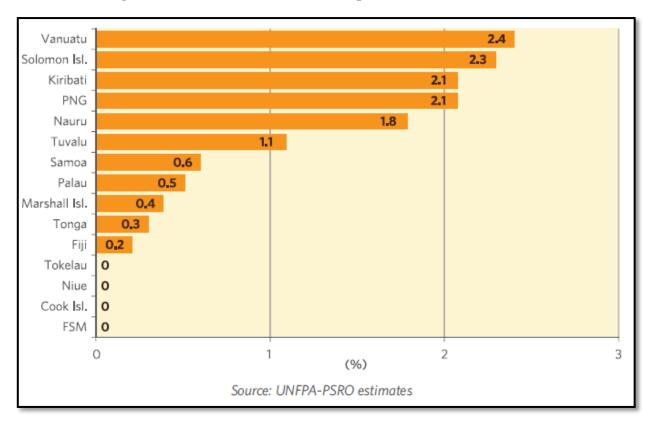
b. Identify the continent where birthrates were twice the world average.

	Skill lev	vel 1
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Question Two: Nature of Population Growth

Study Figure 12 and use it to answer the questions that follow.

Figure 12: Pacific Islands Annual Population Growth Rate (%), 2014.



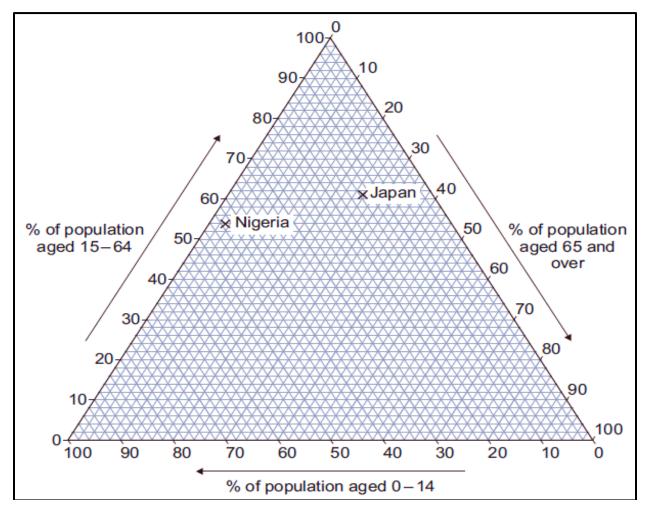
a.	Define population growth rate.	Skill level 1	
		1	
		0	
		NR	

		Skill lev	vel 1
b.	Identify the pattern of population growth in the Pacific Islands as shown in Figure 12.	1	
		0	
		NR	

Question Three: Factors that Influence Population Distribution, Density and Population Change.

Study Figure 13 and use it to answer the questions that follow.

Figure 13: Population Structure for Japan and Nigeria in 2015.



a. State the percentage of population aged 15-64 in Nigeria.

	Skill level 1		
	1		
	0		
_	NR		

b. Name an economic situation that Japan is facing due to its population aged 65 and over.

Skill lev	vel 1
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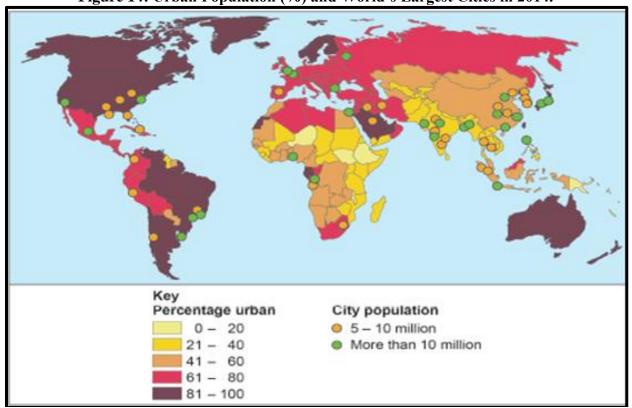
SECTION D: THE CHALLENGES OF URBANIZATION

Spend about 26 minutes in this section.

Question One: Nature and Global Patterns of Urbanization

Study Figure 14 and use it to answer the questions that follow.

Figure 14: Urban Population (%) and World's Largest Cities in 2014.



a.	Define urbanization.	1	
		0	
		NR	

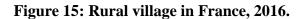
Skill level 1

NR

b.	Describe the global patterns of urbanization as shown in Figure 14 .		
		Skill le	vel
		2	
		1	
			t

Question Two: Factors and Processes that Produce Urbanization

Study Figure 15 and Figure 16 and use them to answer the questions that follow.





a. Identify **ONE** (1) piece of evidence from the photo that shows rural to urban migration is happening in the village.

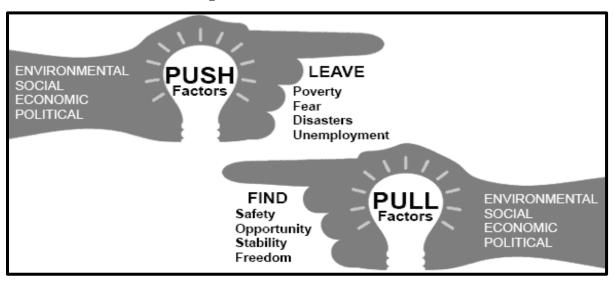
Skill level 1

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Figure 16: Push and Pull Factors



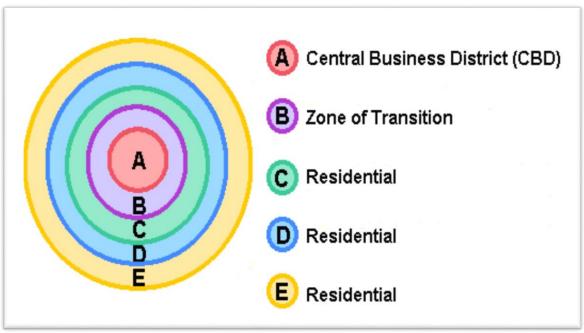
b.

Analyse how rural – urban migration produces urbanization. Refer to named examples from case studies.		
	Skill le	vel 4
	4	
	3	
	2	
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Question Three: Effects of Urban Growth

Study Figure 17 and use it to answer the questions that follow.

Figure 17: Urban Land Use Zone Model



a. Name the model of urban land use zone shown in **Figure 17.**

Skill level 1	
1	
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NR	

b. Identify the type of residence in Zone E as shown in **Figure 17.**

Skill lev	vel 1
1	
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NR	

SECTION E: GEOGRAPHIC PERSPECTIVES ON TOURISM

Spend about 26 minutes in this section.

Question One: Factors that Influence the Growth of Tourism

Study Figure 18 and Figure 19 and use them to answer the questions that follow.

Figure 18: Why Tourism Matters



			Skill level 1	
a.	Define the term tourism.	1		
		0		
		NR		
b.	Explain the influence of tourism worldwide as shown in Figure 18.			
		Skill le	vel 3	
	·	3		
		2		

0 NR

Figure 19: Sustainable Tourism

SUSTAINABLE TOURISM . . .

... is committed to making a low impact on the natural environment and local culture, while helping to generate income and employment for locals."

c. Circle the letter of the **BEST** choice of the tourist activity that fits the description of sustainable tourism above.

	TOURIST ACTIVITY	CHOICE
Environment	Leave lights and air conditioning on in the hotel when out.	A
Trips	Explore the local areas using local transport.	В
Customs	Buy fake imported designer goods.	С
Wildlife	Collects sea shells as souvenir and bury litter on the beach	D

Skill level 1		
1		
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Question Two: Effects of Tourism on People.

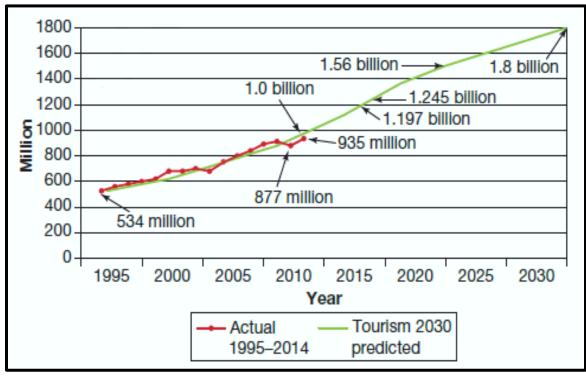
Study Figure 20 and Figure 21 and use them to answer the questions that follow.

Figure 20: Dress Code in Qatar, Middle East.



a.	Describe the socio-cultural effects of tourism on the local people as shown in Figure 20.		
		Skill lev	vel 2
		2	
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		NR	

Figure 21: Projected Future Growth In World Tourism and Earnings.



b.

Explain the economic outlook for tourism in the future.		
	Skill level 3	
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