MARKER CODE					



STUDENT ENROLMENT NUMBER									

TONGA SCHOOL CERTIFICATE 2016

GEOGRAPHY

QUESTION AND ANSWER BOOKLET

Time Allowed: 3 Hours + 10 minutes reading

INSTRUCTIONS

1. This paper consists of **THREE SECTIONS** and is out of **100**.

Topics	Total Skill Level
Geographic Skills and Ideas	20
Physical Environment	32
Cultural Environment	48
TOTAL	100
	Geographic Skills and Ideas Physical Environment Cultural Environment

- 2. Write your **Student Enrolment Number** on the top right hand corner of this page.
- 3. Answer **ALL** questions in the spaces provided in this booklet
- 4. Use **BLUE** or **BLACK** ball point pen. **DO NOT** write in pencil.
- 5. If you need more spaces for answers, ask the supervisor for extra paper.
- 6. Check that your paper consists of 31 pages.
- 7. Make sure you have the topographic map of **Niuatoputapu Island** (No. 78/1)

YOU MUST HAND IN THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

SECTION A: GEOGRAPHICAL SKILLS AND IDEAS

Answer ALL questions in this section. You should spend about 36 minutes on this section.

Part 1: Geographic Skills

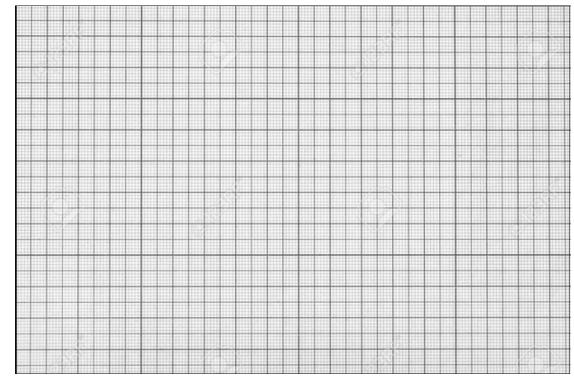
Question 1 Map Reading

Study the map of **Niuatoputapu Island** on **Sheet 78/1**. Use it to answer the questions that follow.

a. Name the feature located on the Southwest of the jetty with an approximate distance of 4,675 meters.

Skill level 1				
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b. Draw the cross-section of line $\mathbf{A} - \mathbf{B}$.

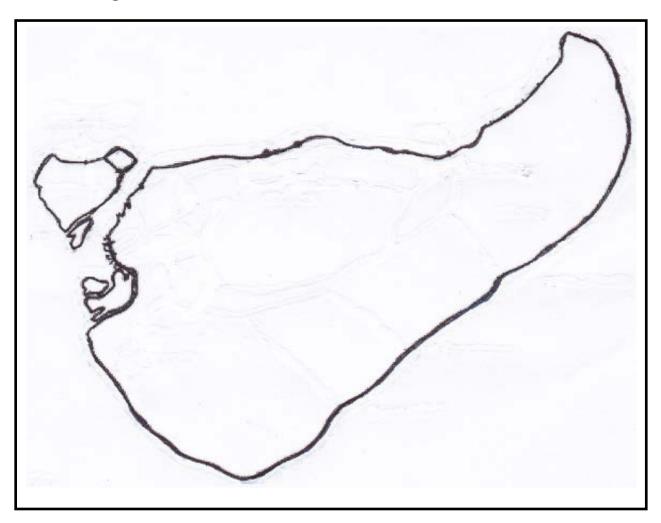


Skill le	vel 3
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Question 2 Map Drawing

Study the **Topographic Map** of **Niuatoputapu Island** on **Sheet No. 78/1**. On the precis map below **locate** the:

- largest wetland
- largest settlement area



KEY:	
	wetland
	settlement area

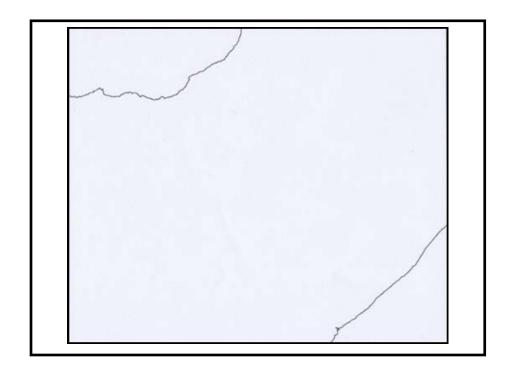
Skill level 1				
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Skill le	Skill level 1				
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Question 3 Photograph Interpretation

Study the **Photograph** on **Sheet No. 78/1** then answer the questions that follow.

- a. On the precis sketch below, **locate** the:
 - jetty
 - sandy beach



Skill level 1			
1			
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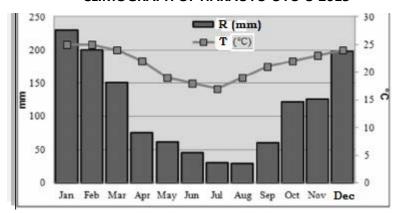
jetty sandy beach

Skill level 1			
1			
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Question 4 Graph Interpretation

Study the **graph** carefully then answer the questions that follow.

CLIMOGRAPH OF HAKAUTU'UTU'U 2015



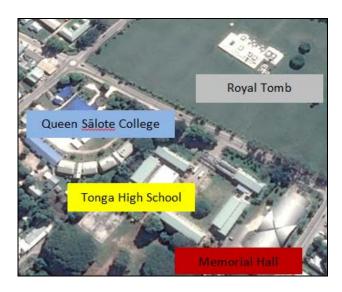
Descril	oe the rela	tionship s	shown on	the clim	ograph	above.		
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Part 2: Geographic Ideas

Question 1 Location, Distance and Accessibility

Photo Interpretation

Study the **photo** carefully then answer the questions that follow.



a. Name **ONE** (1) relative feature that can be used to determine the location of Tonga High School.

Skill level 1					
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Question 2 Patterns and Processes

Map Interpretation

Study the **Topographic Map** of **Niuatoputapu** on **Sheet 78/1** then answer the questions that follow.

		JKIII IC	vci i
a.	Name ONE (1) environmental factor that encourages the pattern of	1	
	settlement in Niuatoputapu.	0	
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b.	Describe ONE (1) cultural process that modifies the western coast of the Government Estate.		
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Question 3 Change

Photo Interpretation

Study the **photo** carefully then answer the questions that follow.



a. State **ONE** (1) change in the physical environment.

Skill level 1	
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b. State **ONE** (1) change in the cultural environment.

Skill level 1	
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c. Name **ONE** (1) main factor which shows that the area is vulnerable to tsunami.

Skill level 1	
1	
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SECTION B: PHYSICAL ENVIRONMENT

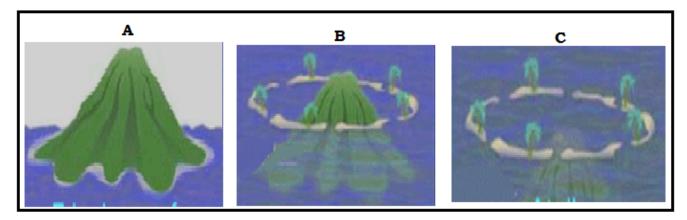
Answer ALL questions in this section. You should spend about 54 minutes in this section.

Part 1: Elements of the Physical Environments

Question 1 Relief

Study the **diagram** carefully then answer the questions that follow.

FORMATION OF CORAL REEFS



a. Name the type of reef formed at **B**.

Skill level 1		
1		
0		
NR		

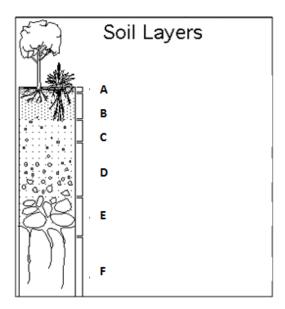
b. Describe the features of reef **C**.

Skill le	vel 2
2	
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NR	

Question 2 Soil

Diagram Study

Study the **diagram** carefully then answer the questions that follow.



a. Name the soil layer \mathbf{F} .

Skill level 1		
1		
0		
NR		

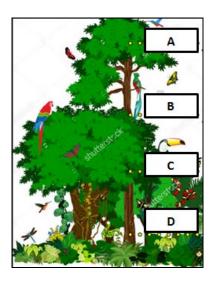
b. Explain **ONE** (1) soil formation factor.

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Skill le	vel 3
3	
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Question 3 Vegetation

Picture Interpretation

Study the **picture** carefully then answer the questions that follow.



a. Name the forest layer **A**.

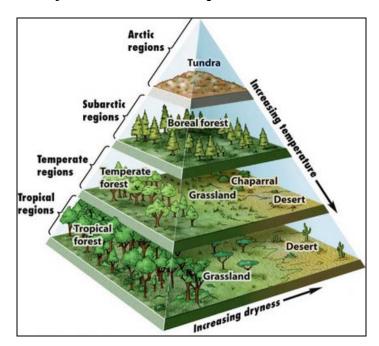
Skill level 1	
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b. Describe **ONE** (1) importance of the vegetation type shown on the diagram above to the environment.

Part 2: Interaction among the Physical Elements

Question 1 Model Interpretation

Study the **Model** carefully then answer the questions that follow.



a. Describe the relationship between vegetation and relief.

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Skill level 2

b. Describe the relationship between climate and vegetation.

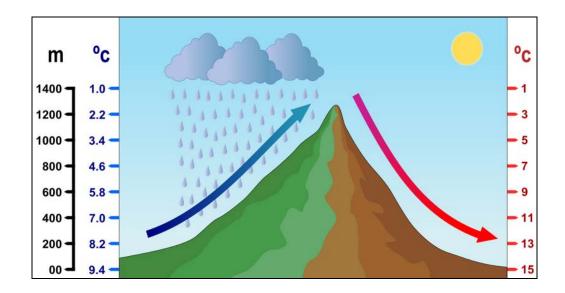
Skill level 2		
2		
1		
 0		
NR		

c. Describe the relationship between soil and vegetation.

Skill level 2		
2		
1		
0		
NR		

Question 2 Diagram Interpretation

Study the **Diagram** carefully then answer the questions that follow.



a. Name the type of rainfall shown on the diagram.

Skill level 1			
1			
0			
NR			

b. Explain the physical elements interacting in the process above.

Skill le	vel 3
3	
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Part 3: Environmental Problems and Conservation Measures

Question 1 Cartoon Interpretation

Study the **cartoon** carefully then answer the questions that follow.



Discuss ONE (,				C		
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Explain the ef	ects of thi	is change	on the (environi	nent.		
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Question 2 Paragraph Writing

With reference to named examples from Tonga:

- i. describe **ONE** (1) main cause of global warming;
- ii. evaluate the effects of global warming.

C	Cause of Global warming		
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Effects of Global warming.		
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SECTION C: CULTURAL ENVIRONMENT

Answer ALL questions in this section. You should spend about 90 minutes on this section.

Part 1: Tourism Studies

Question 1: Map Work

Use the **map** below to answer the questions that follow.

- a. On the map of Tongatapu, locate and name;
 - ONE natural tourist attraction site.
 - ONE cultural tourist attraction site.



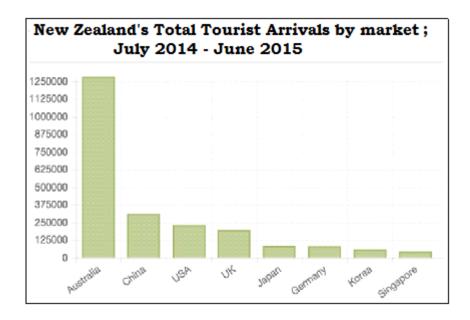
KEY:	
	Natural attraction site
	Cultural attraction site

Skill level 1			
1			
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NR			

Skill level 1				
1				
0				
NR				

Question 2: Graph Analysis

Study the graph carefully then answer the questions that follow.



a. Name New Zealand's largest tourist market.

Skill level 1				
1				
0				
NR				

b. Explain **ONE** (1) factor that determines the number of tourist arrivals to New Zealand.

Skill level 3	
 3	
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Question 3: Paragraph Writing

With reference to named examples from Tonga;

- i. describe **TWO** (2) negative impacts of tourism on the environment
- ii. recommend a strong solution to solve the negative impacts in (i)

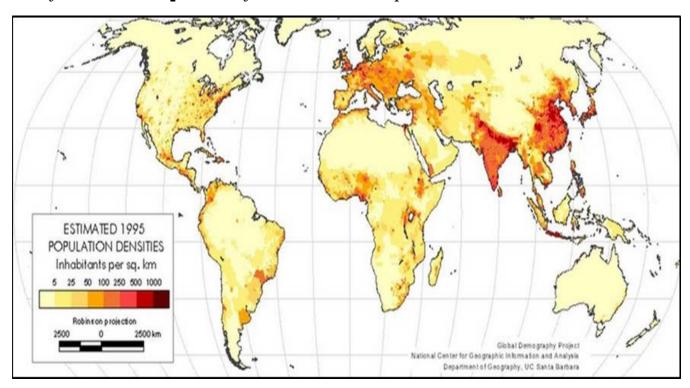
		Skill
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ii.	Recommendation		
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		 Skill lev	vel 4
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Part 2: Population Studies

Question 1: Map Study

Study the **world map** carefully then answer the questions that follow.



a. Circle () India on the map.

Skill le	vel 1
1	
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Skill level 2

b. Describe the population density of India.

Describe the population density of mula.		
Describe the population density of mala.	2	
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Explain TWO (2) impacts of high population growth on the environ	ment.	
		_
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Question 2: Paragraph Writing

With reference to named examples from Tonga;

- i. describe **TWO (2)** solutions used to control population growth.
- ii. evaluate the effectiveness of the solutions.

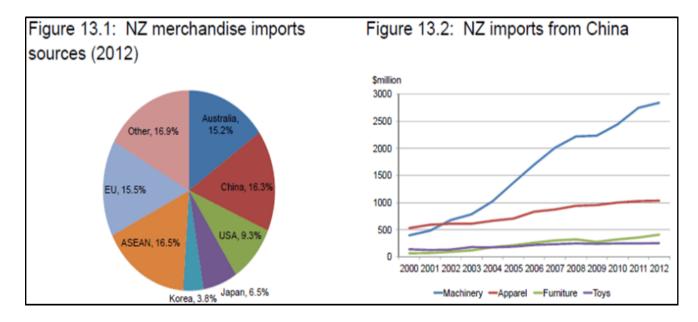
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•	Effectiveness of the solution.		
		Skill le	vel 4
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Part 3: Agriculture

Question 1: Map Interpretation

Study the **picture** carefully then answer the questions that follow.



a. Name the country that provided the least merchandise imports of New Zealand, 2012

Skill lev	vel 1
1	
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NR	

b. Describe the trend of New Zealand's machinery imports from China.

Skill level 2	
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Discuss the importance of agriculture to the economy of New Zealand	l.	
	Skill lev	vel 3
	3	
	2	
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Question 2: Paragraph Writing

With reference to named examples from Tonga:

- i. describe **TWO (2)** agricultural problems
- ii. suggest a solution for each agricultural problem in (i).

i.	Agricultural problems		
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		Skill le	vel 2
		2	
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		NR	

ii.	Solutions		
		Skill lev	vel 4
		3	
		 2	
		 1	
		 0 NR	

Part 4: Industrialization (Manufacturing and trade)

Question 1: Photo Interpretation

Study the **photo** carefully then answer the questions that follow.



a. Name the type of industry shown on the photo.

Skill level 1		
1		
0		
NR		

b. Describe **ONE** (1) factor that hinders the development of industries in Japan

	Skill level 2		
	2		
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c. Discuss the effect of using high technology in Japanese industries as shown in the photo above.

Skill le	vel 3
3	
2	
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Question 2: Paragraph Writing

With reference to named examples from Tonga:

	explain the importance of manufacturing and trade to the economy.		
1	predict future trends of industrial development.		
]	Importance of manufacturing		
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Future trend of industrial development.		
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