TONGA GOVERNMENT
MINISTRY OF EDUCATION AND TRAINING

TONGA SCHOOL CERTIFICATE
2015
GEOGRAPHY

QUESTION AND ANSWER BOOKLET

Time Allowed: 3 Hours plus 10 minutes reading

INSTRUCTIONS
1. Write ALL your answers in this Booklet. Make sure you have the topographic map of NOMUKA ISLAND (No. 78/1).
2. Write your Student Personal Identification Number (SPIN) on the top right hand corner of this page and on page 27.
3. This paper is in THREE sections.

SECTION A: GEOGRAPHIC SKILLS and IDEAS (20 MARKS)
SECTION B: PHYSICAL ENVIRONMENT (32 MARKS)
SECTION C: CULTURAL ENVIRONMENT (48 MARKS)

3. ALL questions are compulsory. Answer the questions in the spaces provided.
4. Extra paper is available from the supervisor if needed. Write your SPIN on each extra sheet, write the number of the question clearly then insert with the question to where it refers to.
5. Check that this booklet contains pages 2-27 in the correct order. Page 26 has been deliberately left blank.

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

TOTAL MARKS 100
SECTION A : GEOGRAPHIC SKILLS and IDEAS (20 MARKS)

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

1. Map Reading (8 Marks)

Study the map of Nomuka Island on Sheet No. 78/1. Use it to answer the questions that follow.

a. Name the feature located at grid reference 310584.  
   ____________________________________________________

b. State the compass direction of standing at Matakalae looking at Matamaka.  
   ____________________________________________________

c. Calculate the distance of the shortest route (road and track) you will take to walk from ‘Ahau to Ha’afota Point.  
   ____________________________________________________

d. Choose and circle the letter of the cross-section that represent line A – B.

[Diagram of cross-sections A and B]
e. Explain what the contour lines on a topographic map represent about an island.
2. Map Drawing (4 Marks)

Study the Topographic Map of Nomuka Island on Sheet No. 78/1. On the précis map below, locate the:

- road
- settlement area
- highest point on western Nomuka
- northern natural tourist attraction

**PRECIS MAP: NOMUKA ISLAND**
3. Photograph Interpretation  (3 Marks)

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

a. On the précis sketch below, locate the:
   - highland area
   - lowland vegetation area
   - area of environmental change at foreground

**Photo Precis Sketch**

<table>
<thead>
<tr>
<th>KEY</th>
<th>3 marks</th>
</tr>
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<tbody>
<tr>
<td>highland</td>
<td>3</td>
</tr>
<tr>
<td>lowland vegetation area</td>
<td>2</td>
</tr>
<tr>
<td>area of environmental change at foreground</td>
<td>1</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>
4. Model Interpretation (5 Marks)

Study model below then answer the questions that follow.

![Demographic Transition Model](image)

a. State ONE natural factor that affect population growth of a country.

b. Shade and name on the model the area that shows natural increase.

c. Describe TWO characteristics of population at Stage 4
   i. ______________________________________________________
   ii. ____________________________________________________

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</table>
1. **Island formation**  (7 Marks)

   Study the **Photo** below then answer the questions that follow.

   ![New Island of Tonga Islands](image)

   a. Name the type of island formed shown in the **photo**.

   ____________________________________________________________

   b. State an evidence from the **photo** for your answer in a. above.

   ____________________________________________________________

   c. Describe the natural event shown in the **photo**.

   ____________________________________________________________

   ____________________________________________________________
d. Use the outline provided below to draw a simple diagram of what caused this natural event to occur. Label clearly TWO processes of this natural event.

Title: __________________________

2. Climate (7 Marks)

Study the Table of statistics below then answer the questions that follow.

<table>
<thead>
<tr>
<th>Climate of Vava’u</th>
<th>Months</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature (°C)</td>
<td></td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>30</td>
<td>29</td>
<td>28</td>
<td>26</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Rainfall (mm)</td>
<td></td>
<td>26</td>
<td>47</td>
<td>133</td>
<td>170</td>
<td>212</td>
<td>146</td>
<td>90</td>
<td>108</td>
<td>241</td>
<td>288</td>
<td>122</td>
<td>33</td>
</tr>
</tbody>
</table>

a. Name the wettest month of Vava’u.

________________________________________________________________________

b. Describe the climate features of Vava’u during July.

________________________________________________________________________

________________________________________________________________________

c. Describe the distribution pattern of rainfall over the year for Vava’u.

________________________________________________________________________

________________________________________________________________________
d. Use the outline provided below to plot in the temperatures for Vava’u’s climate.
3. Relief  (6 Marks)

Study Photographs below then answer the questions that follow.

a. Define relief.

__________________________________________________________________________

b. Compare and contrast by describing the relief features of Photos a. and b.

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__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

b.

__________________________________________________________________________
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c. Explain the interaction between relief and vegetation as shown by the photos.

__________________________________________________________________________

__________________________________________________________________________
4. **Environmental Problems** (7 Marks)

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

![Cartoon Image](image)

**Grandpa stop! That's not a jellyfish! It's a plastic bag!**

a. State the environmental problem shown in the **cartoon**.

   ______________________________________________________

b. Describe the natural resources to be conserved as shown in the **cartoon**.

   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

(c. Explain why the plastic bag is bad for the turtle.

   ______________________________________________________
   ______________________________________________________

(d. Explain the effect of plastic bag on the environment.

   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
5. **Paragraph Writing**  **(5 Marks)**

With reference to named examples from Tonga,

i. describe the distinctive physical features of a coral island;

ii. explain the formation of this island type.

i. Distinctive physical features of coral island

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2 marks

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</tr>
</tbody>
</table>
ii. Island formation.
1. TOURISM (12 MARKS)

A. Map Study (6 Marks)

Study the map below then use it to answer the questions that follow.

Map: Source Countries for Tourism in New Zealand.

i. Rank the source countries with the least to the highest number of tourists to New Zealand in 2030 by locating the names on the continuum below.

| Least | | | | | | Highest |
|-------|---|---|---|---|---|
| 3     | 2 | 1 | 0 | NR |

3 marks
ii. Compare the distribution patterns of source countries of 2011 and 2030.

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

B. Paragraph Writing (6 Marks)

With reference to named examples from Tonga,

i. describe the tourism type.

ii. explain the importance of tourism to the economy.

i. Nature of tourism.

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____________________________________________________________________________________
ii. Importance of tourism to the economy.
2. POPULATION STUDIES (12 MARKS)

A. Statistical Analysis (7 Marks)

Study the statistics below then use it to answer the questions that follow.

<table>
<thead>
<tr>
<th>Population Balancesheet (in crore)</th>
<th>2011</th>
<th>2001</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>121.01</td>
<td>102.8</td>
<td>18.15 (17.64)</td>
</tr>
<tr>
<td>(a) Male</td>
<td>62.37</td>
<td>53.22</td>
<td>9.15 (17.19)</td>
</tr>
<tr>
<td>(b) Female</td>
<td>58.64</td>
<td>49.65</td>
<td>8.99 (18.12)</td>
</tr>
<tr>
<td>Sex Ratio*</td>
<td>940.27</td>
<td>932.91</td>
<td>7.36</td>
</tr>
<tr>
<td>Population Density+</td>
<td>382</td>
<td>325</td>
<td>57</td>
</tr>
<tr>
<td>0-6 years population</td>
<td>15.88</td>
<td>16.38</td>
<td>-0.50 (-3.08)</td>
</tr>
<tr>
<td>(a) Male</td>
<td>8.29</td>
<td>8.5</td>
<td>-0.20 (-2.42)</td>
</tr>
<tr>
<td>(b) Female</td>
<td>7.58</td>
<td>7.88</td>
<td>-0.29 (-3.80)</td>
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<tr>
<td>Child Sex Ratio*</td>
<td>914.23</td>
<td>927.31</td>
<td>13.08</td>
</tr>
<tr>
<td>Literacy rate (%)</td>
<td>74.04</td>
<td>64.83</td>
<td>9.21</td>
</tr>
<tr>
<td>(a) Male</td>
<td>82.14</td>
<td>75.26</td>
<td>6.88</td>
</tr>
<tr>
<td>(b) Female</td>
<td>65.46</td>
<td>53.67</td>
<td>11.79</td>
</tr>
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</table>

Note: Figures in brackets indicate percentage increase; *Females per 1,000 males; +Number of persons/sq.km.

i. Define population density.

________________________________________________________________________

ii. Draw a line graph to show the trend of the literacy rate. Use an appropriate title.

Title: ________________________________________________________________
iii. Analyse the statistics for the population 0 – 6 years between 2001 and 2011 shown in the Statistical Table.

B. Paragraph Writing (6 Marks)

With reference to named examples from Tonga,

i. explain THREE factors that influence population distribution pattern;

ii. analyse the problems associated with the distribution pattern.

i. Factors that influence population distribution pattern.

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ii. Problems associated with the distribution pattern described in part I (page 18).
3. AGRICULTURE

A. Photograph Interpretation (6 Marks)

Study the **Photo** below then answer the questions that follow.

**FARMING in HA’APAI**

![Photo of farmers working in a field](image_url)

i. Name the farming type shown in the photo.

____________________________________________________________________

ii. Fill in the agricultural system below using the information from the photo given.

<table>
<thead>
<tr>
<th>Title: ________________________________</th>
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<tbody>
<tr>
<td><strong>Input</strong></td>
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</tbody>
</table>
iii. Identify ONE traditional method of planting crops that is shown in the photo.

____________________________________________________________

iv. Explain ONE advantage of the traditional method of planting crops you stated in iii. above.

___________________________________________________________________________

____________________________________________________________________________

B. Paragraph Writing (6 Marks)

With reference to named examples from New Zealand,

i. explain the agricultural changes in ONE type of agriculture.

ii. analyse the importance of this type of agriculture on the economy.

i. Changes in ONE type of agriculture.

___________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________
ii. Importance of this type of agriculture on the economy.
4. INDUSTRIALISATION (Manufacturing & Trade) (12 MARKS)

A. Graph Analysis (6 Marks)

Study the graph below then answer the questions that follow.

i. State the period where the industry’s share was the highest shown in the graph.

ii. Describe what the graph is showing about the Industry share of the GDP.

B. Paragraph Writing (6 Marks)

With reference to named examples from Japan,

i. explain the factors that contribute to the growth of ONE type of manufacturing industry.

ii. analyse the importance of this manufacturing industry to the economy.

i. Factors that contribute to the growth of ONE type of manufacturing industry.
ii. Importance of this type of manufacturing industry to the economy.
## TONGA SCHOOL CERTIFICATE
### 2015
### GEOGRAPHY

(for marker’s use only)

<table>
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<tr>
<th>SECTIONS</th>
<th>MARK</th>
<th>CHECK MARK</th>
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<tbody>
<tr>
<td><strong>A</strong> Geographic Skills and Ideas</td>
<td>20</td>
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<tr>
<td><strong>B</strong> Physical Environment</td>
<td>32</td>
<td></td>
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<tr>
<td><strong>C</strong> Cultural Environment</td>
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<td>Q.1</td>
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<tr>
<td>Q.2</td>
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<tr>
<td>Q.3</td>
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<tr>
<td>Q.4</td>
<td>12</td>
<td>48</td>
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<td><strong>TOTAL</strong></td>
<td>100</td>
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</tbody>
</table>

Student Personal Identification Number (SPIN)

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This is a sample geography test from the Tonga School Certificate for 2015. The test is divided into three sections: A, B, and C. Section A tests geographic skills and ideas, Section B tests the physical environment, and Section C tests the cultural environment. The total marks are distributed as follows: A = 20, B = 32, C = 48 (summing up to 100 for total).