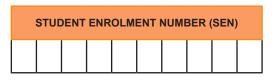
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TONGA SCHOOL CERTIFICATE

2021

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 **THREE SECTIONS** and is out of 70 weighted scores. Answer **SECTION A**, **SECTION B** and **TWO QUESTIONS** only from **SECTION C**.

| QUESTION | | STRANDS | TOTAL SKILL LEVEL |
|------------|------------------|-----------------------------|----------------------|
| A | | GEOGRAPHIC SKILLS AND IDEAS | 17 |
| В | | PHYSICAL GEOGRAPHY | 31 |
| C | Please ✓ choice | OPTIONAL QUESTION | N |
| | | CULTURAL GEOGRAPHY | 22 |
| QUESTION 1 | | TOURISM STUDIES | 11 |
| QUESTION 2 | | POPULATION STUDIES | 11 |
| QUESTION 3 | | AGRICULTURAL STUDIES | 11 |
| QUESTION 4 | | INDUSTRIALIZATION | 11 |
| | | 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 space 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 33 35 have been deliberately left blank.

GEOGRAPHIC SKILLS AND IDEAS

ALL QUESTIONS IN THIS SECTION ARE COMPULSORY

QUESTION 1: GEOGRAPHIC SKILLS

A. MAPPING SKILLS

Use the map of Ha'afeva Island in Figure 1 to help answer the questions that follow.

Figure 1: Map of Ha'afeva Island



| REFERENCE | | | | | | | | | | | |
|-----------|-------------------|---|-------------|-------------------------------|-----|---------------------------|-------------------|-----|----------------|----|------------|
| ٠ | Health Center | | Contour B | athy Type | | Built-up area | Cropland | | Mangrove | | Water body |
| | Spot Height | _ | Wharf Small | Deep water | 1 | Coconut-cropland | Estuarine muditat | 367 | Rock | | Wedland |
| ě | School | _ | Reef | Land | | Coconut-grassland | Estuary | | Saline wetland | 22 | Woodland |
| £ | Evacuation Centre | _ | Road | Shallow water | 137 | Coconut-scrub | Grassland | 130 | Sand | | |
| | WaterTanks | | Buildings | Broadleaved Forest Plantation | | Conifer Forest Plantation | Landfill | | Scrub | | |

Source: LGIS Unit, MLNF 2021 ©

1. Name the **type of vegetation** highly found in the Western coastal areas of Ha'afeva.

| Skill l | evel 1 |
|---------|--------|
| 1 | |
| 0 | |
| NR | |

2. Identify the type of scale used on the map.

| Skill level 1 | |
|---------------|--|
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3. Which side of the island do people highly use for settlement?

Circle the **LETTER** of the best answer

- A. North West
- B. North East
- C. South East
- D. South West

| Skill level 1 | |
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4. Measure the **distance** between point **A** and point **B** on the map of Ha'afeva.

| | Skill l | evel 2 |
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5. Name the type of map used to show Ha'afeva island on page 2.

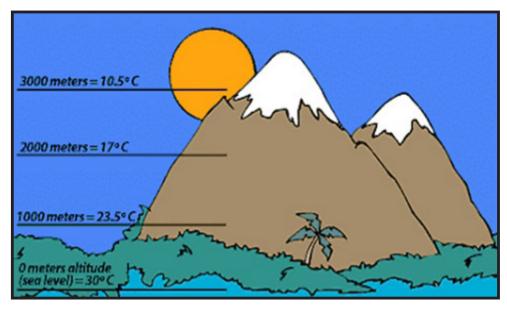
| Skill l | evel 1 |
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B. DIAGRAM INTERPRETATION

6.

Use **Figure 2** to answer the questions that follow.

Figure 2: Temperatures on higher altitude



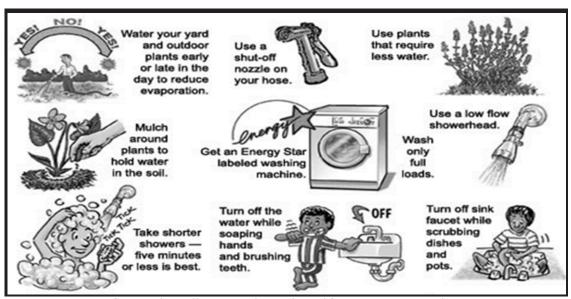
Source: http://claesjohnson.blogspot.com/2010/09/lapse-rate-vs-radiative-forcing.html

| Analyze the relationships between altitude and temperature. | | |
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C. OTHER GEOGRAPHIC ILLUSTRATIONS

Study **Figure 3** then answer the questions that follow.

Figure 3: How to wisely use water



Source: https://www.google.com/search?q=water+conservation

| 7. | Describe the message displayed in Figure 3 above. | | |
|----|--|---------|--------|
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QUESTION 2: GEOGRAPHIC IDEAS

A. **DEFINITIONS**

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| Describe one effect of the interaction between fertile soil and growth of plan | nts. |
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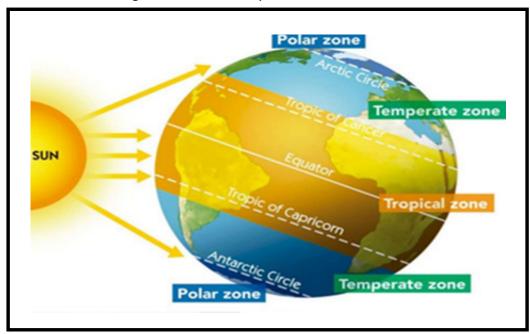
PHYSICAL GEOGRAPHY

ALL QUESTIONS IN THIS SECTION ARE COMPULSORY

QUESTION 1: CLIMATE

Study Figure 4 to answer the questions that follow.

Figure 4: World's Major Climatic Zone



Source: www.google.com

| Explain how latitude lines determine the world's climatic zones. | | |
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2. Every day in Tonga a weather forecast is issued. Two important elements of the weather forecast are temperature and wind. Define the terms:

| 1. | Temperature | | | |
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| ii. | Wind | | | |
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Study Figure 5 then answer the question that follow.

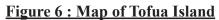
Solar radiation Moisture transport Transpiration Evaporation Surface Percolation Soil moisture runoff Water table Ocean Groundwater to lakes and streams Groundwater to ocean Deep seepage Source: https://www.researchgate.net/figure/The-hydrological-cycle_fig1_227365036

Figure 5: Processes in Water Cycle

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QUESTION 2: RELIEF

Study **Figure 6** to answer the questions that follow.





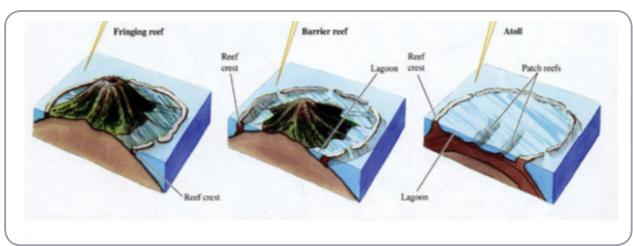
Source: https://www.pinterest.com/pin/348043877446283544/

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| Explain how volcanic islands are being formed. | |
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Study Figure 7 to help answer the questions that follow.

Figure 7: Formation of coral atolls



Skill level 1

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4. Describe a distinctive feature of low coral island.

Skill level 2
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QUESTION 3: SOIL

Study Figure 8 to answer the questions that follow.

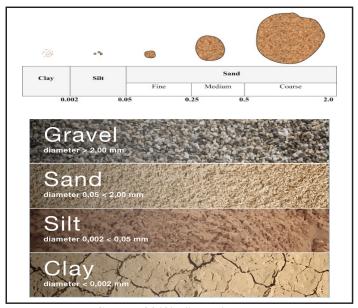
Figure 8: Agents of weathering



| Source: http://player.discoveryeducation.com | | |
|--|---------|----------|
| Define the term weathering. | | |
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| Relate how the agents of weathering are important for the formation of soil. | | |
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Study Figure 9 to answer the questions that follow.

Figure 9: Soil texture and particle sizes



Source: 2018italianowine.com

| Define soil texture. | | | |
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| tiate sandy soil from clay soil in terms of their capacity to hold water | | |
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QUESTION 4: INTERACTIONS OF PHYSICAL ELEMENTS OF NATURE

Study Figure 10 then answer the questions that follow.

Figure 10: Changes in vegetation

| 3000 m | |
|-----------------|---------------------------------------|
| | permanent snow and bare rock |
| Į. | alpine tundra |
| | high meadows |
| | shrubs |
| | coniferous forest |
| | broad-leaved forest |
| 1000 m grass | sland |
| | Source: North America by D Wayah 1984 |

| st any TWO (2) elements of nature that are interacting in the above diagram. Sk Sk Sk Sk Sk Sk Sk Sk Sk S | any TWO (2) elements of nature that are interacting in the above diagram. | |
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CULTURAL GEOGRAPHY

You must answer ONLY TWO QUESTIONS from this section.

QUESTION 1: TOURISM STUDIES TONGA AND NEW ZEALAND

- A. TONGA. Use the Map of Tonga in Figure 11 to:
 - Circle ONE (1) named island group where whale watching highly promotes growth of tourism.

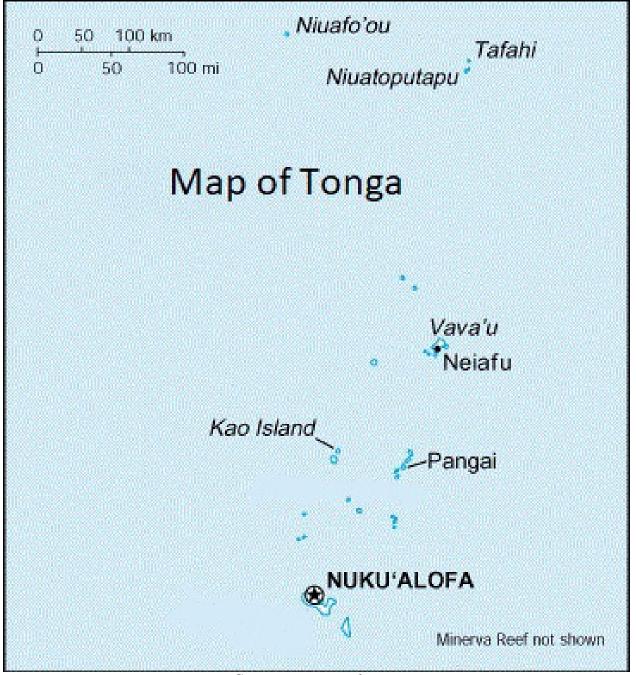
| | to an ioni. | | _ | | |
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| 2 | Logata with an V the | vith an X the island of Tongatapu | | Skill level 1 | |
| ۷. | Locate with an A the i | stand of Tongatapu | _ 1 | L | |
| | | Figure 11: Map of Tonga | С |) | |
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Skill level 1

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Source: www.google.com

3.

| Explain why tourism is important to the | economy of Tonga. | | |
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B. NEW ZEALAND

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| With named examples, recommend solutions to solve the negative impacts of tourism on the environment of New Zealand. | 1 |
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QUESTION 2: POPULATION STUDIES TONGA AND INDIA

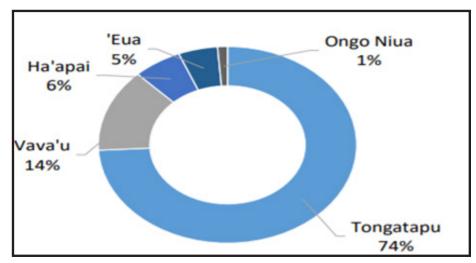
A. INDIA

| Rea | d the questions carefully, then answer the questions in the spaces provided | Skill le | evel 1 |
|-----|---|--------------|--------|
| 1. | Name a city in India with a very high population density. | 1 0 NR | |
| 2. | Define the term decentralization . | Skill le | evel 1 |
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| | | NR | |
| 3. | Describe a problem associated with high population growth in India. | | |
| | | Skill le | evel 2 |
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B. TONGA

4. Study **Figure 12** to explain factors that contribute to the population distribution of Tonga in 2016.

Figure 12: Tonga Population Distribution by division % 2016



Source: https://tongastats.gov.to/census/population-statistics/#22-60-wpfd-2016-1498707296

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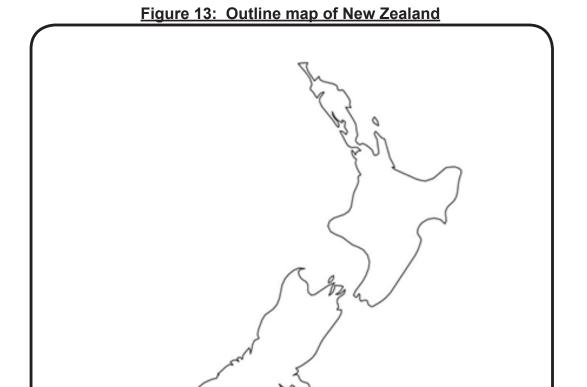
QUESTION 3: AGRICULTURAL STUDIES

A. NEW ZEALAND

2.

Use the outline map of New Zealand in Figure 13 to;

1. Locate and name **ONE** (1) famous dairy farming area in the South island.



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| Skill l | evel 1 |
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Source: www.google.com

| Describe ONE (1) modern agricultural method used in New Zealand. | | |
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B. TONGA

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| Explain how ONE (1) ch farmers. | ange in ag | riculture has been an advantage to cash crop | | |
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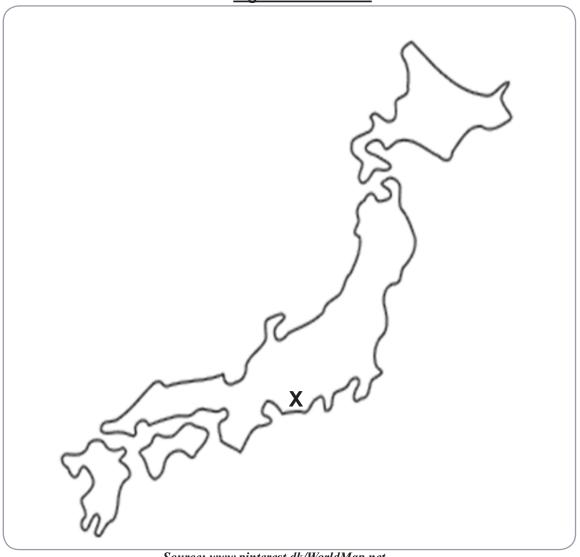
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TONGA AND JAPAN

A. **JAPAN**

Use the outline map of Japan in Figure 14 to answer questions 1. and 2.

Figure 14: JAPAN



Source: www.pinterest.dk/WorldMap.net

1. Locate on the map the industrial area of Kitakyushu.

| Skill l | Skill level 1 | | | |
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| 2. | Name the type of industry practiced in this area X . |
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B. TONGA

Study the photos in **Figure 15** to help answer the questions that follow.

Figure 15: Manufacturing and Businesses in Tonga



4. List **TWO (2)** importance of manufacturing and trading to the general economy of Tonga.

| i. | Skill level 2 | |
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| 1 | Explain ONE (1) factor that hinders the development of industries in Tonga. | | |
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