No. 106/3









Scoring Rubric 2022

# South Pacific Form Seven Certificate

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				Stud	lent Response Level		
Question Number	Skill Band	Evidence	Weak/ Pre- Structural The answer does not relate to the question. 0	Unistructural Only one bit of information mentioned 1	Multistructural Several ideas are mentioned, either described, or listed but disconnected 2	Relational Several ideas are mentioned and are also related to one another. Give examples. 3	Extended Abstract Several ideas are mentioned and related to each other. Students 4
STRAN	ID 1						
1.1	1	Natural Processes are processes that affect Earth's oceans and land and include among others Geomorphological, Geological, Climatological, Hydrological, Bio geographical and Pedological processes	Incorrect definition or example of a natural process provided	Provides the correct definition of natural process.			
1.2	1	Hydrological Process Elements- Precipitation, climate, topography, geology, gravity, soil, vegetation. Oceans, lakes, rivers, streams	Incorrect element of the natural process mentioned	Correct element of the natural process mentioned from Resource 1.			
1.3	1	Evaporation, Condensation, Transpiration, evapotranspiration Surface runoff, discharge, infiltration, precipitation	Incorrect interacting natural process mentioned	Correct interacting natural process mentioned from Resource 1.			
1.4	1	B. temporal variation	Incorrect response.	B. temporal variation			
1.5	1	D. local spatial variation Local spatial variations refer to the way in which processes are different within different parts of the <b>geographic environment</b> , e.g. stronger, going in different directions, more magnitude, different speeds or rates, different geology, different slope, different patterns	Incorrect option	Provides the correct option chosen - D			
1.6a	2	Sketch map showing the elements of any interacting natural process.	Sketch map DOES NOT show elements of any interacting natural process	Sketch map shows ONE element of any interacting natural process	Sketch map clearly shows the TWO elements of any interacting natural process		



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1.6b	1	Draw the key for the sketch in 1.6a Coastal plain <i>(as castern N.3.)</i> Flood plain <i>(Mississippi valley)</i> Alluvial fans, Conoplain (Southern Cuesta land <i>(Paris basin)</i>	California)	Symbols and colours used do not complement those used in the sketch	Symbols and colours used complement those used in the sketch			
1.7	2	Elements of the Interacting natural processes         Tectonic processes cause volcanic         eruption         Coastal processes create landforms         Climate/Soil influences biome         distribution         Hydrological processes determine         climate	CharacteristicsMountains, trenches, students can namedifferent types of volcanic landforms – cindercones, composite volcanoes, calderasfeatures of coastal erosion – headlands,caves, arches, stacks, stumpDeposition – spits, bars, tombolos,Adaptive features of vegetation tocomplement climate and soilDecomposition - humificationHumidity, cloud cover, precipitation(frequency, intensity)	Incorrect description given	Students state one specific characteristic of the element of the interacting natural processes. (1 idea only)	Students describe in detail specific characteristics of the element of the interacting natural processes. (2 or more independent ideas)		

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1.8	3	Natural	How it affects the distribution of phenomena	No relevant idea is	One appropriate	Two or more	Two or more	
		process Coastal	<ul> <li>The three main coastal environment processes that operate are Coastal Erosion, Coastal Transportation and Coastal Deposition.</li> <li>The elements that interact to produce natural processes are wind, waves and tides. Each phenomenon at coastal geographic environment has been produced by interaction.</li> <li>Coastal Erosion is a process that gradually wears away the rock particles of the earth's surface, transporting them to another location. There are many types of processes that cause erosion such as wave erosion, wind erosion and wave refraction. Coastal Erosion operates at different rates and different times. Limestone rock is eroded slower than sedimentary rock. The types of wave erosion that caused this are -</li> <li>Hydraulic Action, when waves hit the cliff, air is forced into cracks, and then as the wave retreats this air expands explosively. Over time the cracks enlarge, weakening the base of the cliff causing erosion.</li> <li>Attrition is the breakdown of rock particles when they hit Otakamiro point and each other causing the base of the combined with the limestone produces a weak chemical solution, which erodes the base of the cliff and produces a pitted effect.</li> <li>Chemical Weathering is when water weakens the structure of the rock and Mechanical Weathering is where water seeps into the rock face causing fragments of rock to break off. These types of erosion have caused the formation of several phenomena such as caves.</li> <li>Coastal Poposition is the third main natural process occurring at geographic environment.</li> <li>It is the process of sediment being deposited to form natural features. This is when the rock fragments are ripped away by waves, broken down by attrition and transported along the coast where they are deposited as beaches and sand dunes. The movement of the material is called Longshore Drift; the direction of the deposit depends on the direction of</li> </ul>	provided	idea how on the natural process has affected the distribution of phenomena operating in their environment with no mention of the case study.	relevant ideas are provided about how the natural process has affected the distribution of phenomena operating in their environment without any reference to the case study.	appropriate ideas provided about how the natural process has affected the distribution of phenomena operating in their environment with reference to the case study. (linkage / relationship between the ideas are clear)	
			the winds.					
		Fluvial	channels of rivers and streams. Such processes play an essential and conspicuous role in the denudation of land surfaces and the transport of					

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		Tectonic	rock detritus from higher to lower levels. Erosion of landscape, including the reduction of mountains and the building of plains, is brought about by the flow of water. As the rain falls and collects in watercourses, the process of erosion not only degrades the land, but the products of erosion themselves become the tools with which the rivers carve the valleys in which they flow. Sediment materials eroded from one location are transported and deposited in another, only to be eroded and re- deposited time and again before reaching the ocean. At successive locations, the riverine plain and the river channel itself are products of the interaction of a water channel's flow with the sediments brought down from the drainage basin above. The velocity of a river's flow depends mainly upon the slope and the roughness of its channel. A steeper slope causes higher flow velocity, but a rougher channel decreases it. Plate motions cause mountains to rise where plates push together, or converge, and continents to fracture and oceans to form where plates pull apart, or diverge. The continents are embedded in the plates and drift passively with them, which over millions of years results in significant changes in Earth's geography. Earth's surface layer, 50 to 100 km (30 to 60 miles) thick, is rigid and is composed of a set of large and small plates. Together, these plates constitute the lithosphere and the lithosphere rests on and slides over an underlying partially molten rock known as the asthenosphere, meaning "weak." Plate movement is possible because the lithosphere- asthenosphere boundary is a zone of detachment. As the lithosphere- asthenosphere do ther. While the interiors of the plates are presumed to remain essentially under formed, plate boundaries are the sites of many of the principal processes that shape the terrestrial surface, including earthquakes, volcanism, and orogeny (that is, formation of mountain ranges). Movement of tectonic plates can be convergence, divergence, passive. A volcano is a mountain that					

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		Geomorphic	the air with lava fragments. Eruptions can cause lateral blasts, lava flows, hot ash flows, mudslides, avalanches, falling ash and floods. Volcano eruptions have been known to knock down entire forests. An erupting volcano can trigger tsunamis, flash floods, earthquakes, mudflows and rock falls. Geomorphology is the study of the nature and origin of landforms, particularly of the formative processes of weathering and erosion that occur in the atmosphere and hydrosphere. These processes continually shape the Earth's surface, and generate the sediments that circulate in the Rock Cycle. Landforms are the result of the interactions among the geosphere, atmosphere and hydrosphere. Weathering is the alteration and breakdown of rock minerals and rock masses when they are exposed to the atmosphere. Weathering processes occur in situ, that is, in the same place, with no major movement of rock materials involved. The greenhouse effect is the name given to the natural process that causes the Earth to be warmer than it would be in the absence of an atmosphere. Greenhouse gases are produced naturally and trap heat in the Earth's atmosphere, like a blanket. Water vapour is the largest contributor, responsible for 98 per cent of the natural greenhouse effect. Global warming is attributed to the enhanced greenhouse gases, such as carbon dioxide, methane and fluorocarbons. When fossil fuels are burned in power stations, vehicles, industry or homes, greenhouse gases enter the atmosphere. Although these gases have always been present in the world's atmosphere their concentration is increasing as more and more fossil fuels are burned. Hydrology is the science that encompasses the occurrence, distribution, movement and properties of the waters of the earth and their relationship with the environment within each phase of the hydrologic cycle. The water cycle, or hydrologic cycle, is a continuous process by which water is purified by evaporation and transported from the earth's surface (including the oceans) to the atmosphere and bac					

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		involv benea to the	ring water as it travels its various paths in the atmosphere, over and ath the earth's surface and through growing plants, are of interest ose who study the hydrologic cycle.					
1.9	4	ONE natural process Coastal Climate Pedology	Modification by Human ActionDredging - may interfere with sediment transport and flow dynamics in coastal and marine systems.Land reclamation - removal of coastal vegetation makes the coast vulnerable to coastal erosion/inundation, cause salinizationBeach scraping-is the process of reshaping beach and dune landforms with heavy machinery can create dunes, which are used to give property owners some security from beach erosion, severe storms, and winter wash over events. During the summers, the created sandbanks may be bulldozed flat, providing water views to property owners. However, the effects of beach scraping on coastal environments are little known, and this procedure may be harmful to coastal biota and habitat. Infrastructural development Building of seawall Gravel and sand extractionHuman activities (students may give specific examples - burning of fossil fuels, air pollution may contribute to acid rain, climate changeDeforestation - removal of vegetation makes soil vulnerable to erosion, leaching Industrialisation - extractive industry - lead to land scarification, land pollution from mine tailings Careless disposal of (toxic) waste Monoculture Deep ploughing Overcultivation	Provides an inaccurate/unclear explanation of the cause (human action) and effect (how the natural process has been modified) without any mention of the case study	Focuses on one aspect/idea only – either on the human action or on the positive outcome of the human action without any mention of the case study.	Provides two or more human actions that have modified or could modify the chosen geographical environment but does not relate it to the case study. The link between the human actions and the modifications are not clear.	Clearly explains how a cultural process is modified by human beings in the chosen geographic environment, thus the ideas are connected. Uses case study to support the answer.	

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			Mining					
			Agricultural runoff – excessive use of pesticide					
		Biogeography	Deforestation/indiscriminate logging, land reclamation –					
			disturbs the ecological balance/food chain, destroys the natural					
			habitat of organisms.					
			Introduced species - This can negatively affect an ecosystem					
			because the introduced species may out-compete native					
			organisms and displace them.					
			<b>Pollution:</b> Pollution can occur from the runoff or disposal of					
			chemical substances, or from energy sources (noise and light					
			polition).					
			they mine resources and urbanize areas. This is detrimental as it					
			displaces residing species, reducing available habitats and food					
			sources.					

1.10	<ul> <li>Interactions in the natural processes</li> <li>Earth's oceans and land can be affected in constructive ways or destructive ways by natural processes.</li> <li>Constructive Processes—create landforms         <ol> <li>Deposition – floodplains, rills, gullies</li> <li>Landslides*</li> <li>Volcanic Eruptions*- composite cones, cinder cones, caldera, volcanic plugs</li> <li>Floods*- levees, plains, rills, gullies</li> </ol> </li> <li>Destructive Processes—destroy landforms.         <ol> <li>Weathering</li> <li>Erosion</li> <li>Landslides*</li> <li>Volcanic Eruptions*-</li> </ol> </li> </ul>	Provides an inaccurate/unclea r explanation of the Interactions in the natural processes without any mention of the case study	Focuses on one aspect/idea only – on Interactions in the natural processes	Provides two Interactions in the natural processes.	Clearly explains how Interactions in the natural processes can be constructive or destructive. Relates to the area of study/ uses a diagram	Very detailed explanation of interactions in the natural processes and how it is either constructive or destructive. Presents a sustained, logical and cohesive answer using appropriate Geographical information, ideas and issues and relates it comprehensively to the case study area. / diagram
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#### **Interactions in Natural Processes**

Earth's oceans and land can be affected in constructive ways or destructive ways by natural processes.

Constructive Processes—create landforms.

- 5. Deposition
- 6. Landslides\*
- 7. Volcanic Eruptions\*
- 8. Floods\*

Destructive Processes—destroy landforms.

- 7. Weathering
- 8. Erosion
- 9. Landslides\*
- 10. Volcanic Eruptions\*
- 11. Earthquakes
- 12. Floods\*

Natural Processes that affect Earth's oceans and land include:

#### **Weathering**

- Weathering is the process that breaks down rocks at or near the surface of the earth.
- Weathering can be either physical or chemical.
- This process causes the surface to dissolve, decompose, and break into smaller pieces.
- Water is an important cause of weathering.
- Causes of Weathering:
  - Plants cause weathering when roots break apart rock.

- Changes in temperature can break rock, as well as ice forming inside of cracks in the rock causing it to break even more.
- Anything that causes rocks to wear down or break apart is a cause of weathering.

# **Erosion**

• Erosion is the movement of sediments and soil by wind, water, ice, and gravity.

#### **Deposition**

- Deposition is the dropping, or depositing, of sediments by water, wind or ice.
- Deposition builds up new land on Earth's surface, like a delta at the end of river or the pile up of a sand dune in the desert.
- Shells on the beach are deposition by ocean waves.

#### **Landslides**

- Landslides are mass movements of land due to GRAVITY.
- Landslides can cause buildings to fall, or power and lines to break.
- Landslides can even occur on the continental slope in the ocean.

#### **Volcanic Eruptions**

- Volcanoes are mountains with openings in the Earth's crust through which magma, gases, and ash reach Earth's surface.
- Volcanoes can change Earth's surface.
- When the magma erupts from the volcano, the top of the mountain can be changed, either built up or exploded off.
- The lava and ash can destroy forests and bury fields.
- Volcanic eruptions can even change Earth's weather patterns.
- Volcanic eruptions also occur under the oceans; these volcanoes that are built up are called seamounts.
- It the seamount rises above the ocean surface it is called a volcanic island (Hawaii, or Japan)

# **Earthquakes**

- Earthquakes are vibrations on Earth's surface caused by sudden movement in Earth, often along a fault, break in Earth's surface.
- Some earthquakes cause little damage, and some cause a lot of damage.
- Large earthquakes can cause landslides.
- Earthquakes under the ocean can cause huge waves, called tsunamis that destroy land and cause great damage if they come ashore.

# **Floods**

- Floods occur when a large amount of water covers land that is usually dry.
- When the flood occurs, rapid erosion can take place and move soil and sediments away.
- When the flood recedes, new sediment is left behind and can build up rich soil deposits.

You should be able to EXPLAIN the effects natural processes have on the Earth's oceans and land.

You should be able to RECALL what each of the above processes is.

You should be able to COMPARE constructive and destructive processes.

You should be able to ILLUSTRATE with pictures or diagrams the changes that take place with these processes.

You should be able to CLASSIFY the processes as constructive or destructive.

You should be able to GIVE EXAMPLES of ways that the processes affect the land and ocean.

# **OCEANIC LANDFORMS**

The ocean floor contains geologic structures. These features can be illustrated using word descriptions, pictures, or diagrams. These landforms include the following.

# **Continental Shelf**

- The edges of the continents slope down from the shore into the ocean.
- The part of the continent located under the water is known as the continental shelf.
- The width of the continental shelf varies around the edges of the continents.
- In some places the continental shelf is fairly shallow and in other places it becomes very deep, but it is not the deepest part of the ocean.

## **Continental Slope**

- The steep slope where the continental shelf drops to the bottom of the ocean floor is called the continental slope.
- The depth of the ocean water increases greatly here.

## Mid-ocean ridge

- On the bottom of the ocean, there is a central ridge, or mountain range, that divides the ocean floor into two parts.
- These underwater volcanic mountains are known as the *mid-ocean ridge*.
- Volcanic mountains not formed on the mid-ocean ridge are called seamounts.

# Rift Zone

- In the center of the highest part of the mid-ocean ridge there is a narrow trench called a *rift*.
- Underwater volcanic activity that adds mountains to either side of the mid-ocean ridge occurs at the rift-zone.

#### **Trenches**

- There are many steep-sided canyons and deep, narrow valleys on the bottom of the ocean.
- Ocean *trenches* are the deepest part of the ocean basin and are deeper than any valley found on land.

#### Ocean Basin

- Located on either side of the mid-ocean ridge is the ocean basin.
- It is made up of low hills and flat plains.
- The flat area of the ocean basin is called the abyssal plain. Seamounts are generally formed on the ocean basin.

You should be able to ILLUSTRATE geologic landforms of the ocean floor.

You should be able to RECALL information about each landform region and INTERPRET a diagram showing the ocean floor regions.

# COMPARING OCEANIC AND CONTINENTAL LANDFORMS

The Earth is made of solid land. Some of the land is located above Earth's water and some is located below the oceans.

There are similarities and differences between the landforms found on the continents and those found on the ocean floor.

	Continental and Oceanic Landfor	ms
Description	Continental	Oceanic
Low land between hills or	Valley	Rift
mountains		
Deep valley with high steep sides	Canyon	Trench
An opening in the surface from	Volcano	Seamount and Volcanic Islands
which lava flows		
Land which rises high above the	Mountain range	Mid-ocean Ridge
ground		
Wide, flat areas of land	Plains	Abyssal Plains

You should be able to COMPARE continental and oceanic landforms. How are they alike and different? You should be able to IDENTIFY the landform as continental or oceanic OR give examples of a landform based on their location.

# Ocean Shore Zone

The area where the ocean meets the land is called the ocean shore zone. The ocean shore zone has distinct geologic features that can be affected by waves, currents, tides, and storms. Beaches, barrier islands, estuaries, and inlets are all affected by these natural processes.

# **Beaches**

- The shoreline, or coast is the area where the land meets the ocean.
- Some shorelines are rocky. Shorelines made of sand are called beaches.
- Shorelines are always changing because of wind and water.
- Waves can wear away the land and expose a rocky shore or the waves can deposit sand along the shore and form a beach. If the waves reach the beach at an angle, the sand is moved along the coast.
- Currents, called *longshore currents*, along the shoreline can move sand from one location to another.
- Tides can bring in sand, shells, and ocean sediments at high tide and leave them behind when the tide goes out.
- Storms can cause wave action that removes sand from beaches.

# **Barrier Islands**

- Islands are pieces of land surrounded by water on ALL sides. Islands with sandy beaches are called barrier islands.
- These barrier islands are naturally occurring and function to protect the mainland from the effects of waves on its shore.
- As the waves deposit sand on the beaches, the shapes of the barrier islands change.
- Currents can move the sand from one end of the island to the other.

# **Estuaries**

- All rivers flow into the oceans.
- The area where a river meets the ocean is known as an estuary.
- Estuaries have a mixture of freshwater and saltwater.
- Waves can deposit sand in the estuaries.
- At high tide, ocean water brings in sediments and sea life that feed and nourish life in the estuary.

# <u>Inlets</u>

- *Inlets* are the water-filled spaces between the barrier islands.
- As the tides change, the amount of water in the inlet will change.
- Ocean currents and storms can change the shape of an inlet opening.

Large storms, for example hurricanes, can also cause massive construction and destruction of beaches, barrier islands, estuaries, and inlets because they produce high waves, storm surges, and heavy winds.

You should be able to EXPLAIN the effects of waves, currents, tides, and storms on the ocean shore zone. You should be able to RECALL that beaches, barrier islands, estuaries, and inlets are geologic features of the ocean shore zone. You should be able to INFER changes on the ocean shore zone as a result of waves, currents, tides, and storms.

# Waves, Currents, and Tides

Water on Earth can be moved in various ways. Three ways that can be moved are by waves, currents, and tides.

# <u>Waves</u>

- The repeated movement of water is known as a wave.
- All waves have the same parts.
  - The highest part is known as the crest.
  - The lowest part is known as the trough.
- Most ocean waves are caused by winds that are blown across the surface of water.
- A wave changes shape when it reaches the shore.

- As the top of the wave curls over it forms a breaker.
- Sometimes giant sea waves, called *tsunamis*, are caused by underwater earthquakes, volcanic eruptions, or landslides.

## **Currents**

- Flowing streams of water that move continually through the ocean in a specific direction are called *currents*.
- Some currents flow at the ocean's surface, and some are found deeper in the ocean.
- Surface Currents are caused by the movement of Earth and by the force and direction of wind.
- The movement of Earth and winds causes these currents to flow along curved paths.
- Warm water and cold water are moved to different regions on Earth as a result of currents.
- *Warm surface currents* are driven by Earth's rotation from the tropics to higher latitudes.
- Cold surface currents are driven by Earth's rotation from the polar latitudes toward the equator.

# <u>Tides</u>

- Several times during the day, the level of water at the ocean shore changes.
- This regular rise and fall of waters in oceans and seas is called a *tide*.
- Tides are caused by the pull of the Moon's gravity on Earth.
- As the Moon moves in relation to Earth, the water on Earth moves too.
- As Earth spins on its axis, the part of the ocean facing the Moon will bulge.
- *High tide* occurs when the water level is at its highest point.
- Low tide occurs when the water level is at its lowest point.
- Tides rise and fall about twice a day.

You should be able to COMPARE the ways that waves, currents, and tides move water.

You should be able to IDENTIFY a wave, current, or tides based on its description.

You should be able to CLASSIFY a wave, current, or tide by their characteristics.

You should be able to IDENTIFY parts of a wave. You should be able to COMPARE high and low tides and COMPARE warm and cold surface currents.

# **Conservation and Pollution**

Human activities can benefit the land and oceans by preserving the resources that these areas provide.

- Natural Resources are the materials that people can take or use from Earth.
  - Resources may include air, water, trees, rocks and minerals, soil, or coal and oil.

# **Conservation Efforts**

- The wise use of natural resources is called *conservation*.
- Human activities that help to keep the natural resources of Earth available and clear of pollution are conservation efforts.
- Some efforts involve everyone trying to reduce (use less of something), reuse (use something over again), and recycle (make something new from an old product)
- Other efforts involve trying to save the land and oceans through clean-up projects, installing fence lines to prevent dune erosion or jetties along the entrance to harbors or groins along beaches in an effort to keep sand from washing away.
- Beach nourishment projects help to restore sand on beaches.
- Planting trees, bushes, or grass is a way to improve air quality as well as keep erosion from carrying away soil.

# **Pollution**

- Pollution is anything that harms the natural environment.
- When the taking or using of natural resources causes harm to Earth's air, water including oceans, or land, then the human activity has caused pollution.
- Oceans are rich in food, minerals, and other resources and can be easily polluted.
- Human activities can also harm the land and oceans causing resources to be polluted or destroyed.
- Sometimes people may allow materials to be dumped into rivers not thinking that rivers flow into the estuaries and ocean where they are harmful to life there.
- Careless dumping of trash on land or in oceans pollutes those areas; smoke and fumes from burning fuels pollutes the air; oil spills harm the ocean and can cause life there to be killed.
- Careless human activities in agriculture, industry, construction, or mining can cause pollution on the land, in the water, and in the air.

			STRA	ND 2	-	-		
				Student Response Level	Question Number	Skill Band	Evidence	Student Response Level
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2.1a	1	Students locate their P	acific Island Nation Setting.	Incorrect location of Pacific Island nation	Correct location of Pacific Island nation			
2.1b	1	Students locate their O	Iverseas Setting.	Incorrect location of overseas nation	Correct location of overseas nation			
2.2	1	Cultural Process         Migration         Tourism         Agricultural change         Industrialisation         Changing Land use	Definition         Movement from one place to another for different reasons.         The commercial organisation and operation of holidays and visits to places of interest.         Involves all the changes a farmer makes to the existing farming practices for example Mechanisation, intensification, diversification, HYV         The development of industries in a country or region on a wide scale         Is a process by which human activities transform the natural landscape	Incorrect definition of any cultural process chosen	Correct definition of the cultural process chosen.			

2.3 2.4a	1 2	Technology, Modern Met farmer's knowledge and s Students sketch a map to	hods of farming, Hybrid Seeds, mechanisation, capital, labour, skills, fertiliser, market, land, tools, machines show any cultural process that operates within a chosen	Incorrect element of the cultural process mentioned Sketch map does	1 Correct element of the cultural process mentioned from Resource 2. Sketch map shows	2 Correct elements of the cultural process mentioned from Resource 2. Sketch map clearly	
		environment in their over (may include flow chart =	rseas setting. 1)	not show any cultural processes. Or no sketch map drawn	ONE cultural process operating in their area of study.	shows two cultural processes operating in their area of study. (Places to be correctly located and named)	
2.4b	1	Draw a key for the sketch	map.	Symbols and colours used do not complement those used in the sketch	Symbols and colours used complement those used in the sketch		
2.5	2	Describe how the local sp this year in your Pacific Is your case study. Tourism Migration Industrialisation	<ul> <li>batial variations affect the cultural process that you have studied sland setting. You can support your response with examples from</li> <li>Better/Quicker Air Travel- Making Previously Remote areas accessible.</li> <li>More Paid Holidays- People tend to take many small holidays rather than one big one.</li> <li>Increase in amount of Disposable income- People can afford to treat them.</li> <li>Awareness of attractions- People are becoming more aware of travel from travel shows and advertising.</li> <li>2 working parents</li> <li>Smaller families</li> <li>Longer life expectancy</li> <li>Cheaper/ Easier Travel</li> <li>Internet booking/advertising</li> <li>More unusual tourist destinations and attractions/destinations</li> <li>The emergence of new technologies in communications and transport.</li> <li>Globalisation</li> <li>Armed conflict and economic crisis are important drivers of migration</li> <li>The needs of people change over time</li> </ul>	Incorrect description of how the local spatial variations affect the cultural process, no mention of case study	Only one idea given. 1 idea on how the local spatial variation affects the cultural process, there is no mention of case study. OR Mentions case study but does not describe the local spatial variations	Two or more ideas without linkage. 2 or more ideas on how the local spatial variations affect the cultural process; gives a detailed description. There is mention of case study	

Agricultural change	Improved technology     Education and awareness over time			
	Research and surveys.			
Tourism	·			
Accessibility				
Different physical att	ractions			
Different levels of inc	ome/finance available to spend			
• Different levels of de	velopment – emerging digital technologies			
Different individual p	references			
Different needs/want	s			
Migration				
- Different types of emp	loyment in demand at different geographical location			
- The situation is differe	nt in different locations for e.g. war in Syria			
Agricultural Changes				
Demand for certain go	ods			
Soil type and technolo	gical changes in different locations			
Climatic Patterns				

26	2					Describes have t	Detailed	
2.6	3	Cultural process Migration Motivation, Decision, Arrangement, The Journey, Arrival & Adjustment, Establishment Tourism	How it operates in the Overseas SettingPeople migrate because of push & pull factors. Migration can either be voluntary or forced. Several factors determine whether one can migrate or not – availability of money, endorsement of travel documents to name a few. The effects (positive & negative) of migration can be seen in both the host & receiving countries/regions.People have different motivations to travel, have different choices for their destinations which will be influenced by other factors such as the amount of money available to meet their travel needs, their state of health, stability (political & economic) of their destination. There is need for research to gauge present trends and future prospects. The tourism industry has multiplier effects and a high leakage factor –	Incorrect explanation for the chosen cultural process, no mention of case study Totally irrelevant	Mentions one idea - does not mention how the cultural process operates.	Describes how the cultural process operates but fails to mention sequence of events, rate & scale of change, there is mention of case study. Or Listing of how cultural process operates, there is mention of case study. Any two or more ideas without linkage.	Detailed explanation of how cultural process operates, there is mention of sequence of events, rate & scale at which the cultural process occurs, supported by case study evidence. Two or more ideas with the relationship between the ideas shown clearly using case study.	
		Agricultural change	<ul> <li>The level of industrialisation depends on several factors – finance available to purchase items required, technical expertise to develop items. As more industries introduce robotics, people may have to quit their jobs thus causing social problems</li> <li>Government to play a pivotal role in endorsing policies, securing markets to support change in this sector. Adopted by farmers through the assistance (financial/technical) of governments, with the availability of money farmers can buy machines or to hire labourers to make work easier</li> </ul>					
2.7	2	Cultural Pro Migration Tourism	Elements         Internal & external, push & pull factors, voluntary or forced migration         Accommodation, Accessibility, Activities, Amenities, Attractions         Natural – land based (mountains, caves, forests), water-based (coral reefs, rivers, lakes, oceans, kayaking, sailing, green tourism         Cultural/human – material & non-material culture, research, marketing, travel agent         Economic – employment, income, multiplier         effect, leakage factor	No appropriate idea provided on the element of the cultural process chosen	Stating one appropriate idea on the chosen element of the cultural process operating in the Pacific Island Nation Setting	Two or more ideas described in detail.		
			Technology, Modern Methods, Hybrid Seeds					

2.8	2	Factors that brought about of factors)         Tourism       -       Better networking         -       Easier mode of Tr.         -       More awareness of the awareness of	hanges are: (Please accept both Negative and positive ansport such as air transport created about the host countries in tourist markets. cies opment better services such as medical. cash income. hybrid varieties ery and technology posticides and fertilisers s nowledge capital	Irrelevant/incorre ct factor mentioned	Only states the factor with no reference made to their geographic environment. (One idea only)	Describes the factor with reference to their geographic environment. (Two or more ideas without linkage.)		
2.9	2	Tourism Migration Industrialisation Agricultural change	<ul> <li>Cheaper/ Easier Travel over time</li> <li>Internet booking/advertising with changes in time</li> <li>More unusual tourist destinations and attractions/destinations explored</li> <li>The emergence of new technologies in communications and transport.</li> <li>Globalisation</li> <li>Armed conflict and economic crisis are important drivers of migration</li> <li>Improved infrastructure and communication</li> <li>Globalisation</li> <li>The needs of people change over time</li> <li>Hybrid seeds</li> <li>Research and surveys improve over time</li> </ul>	Incorrect description of the temporal variations, no mention of case study.	1 idea only on temporal variation, there is no mention of case study. (One idea only)	2 or more ideas on temporal variations. Or Gives a detailed description of the temporal variation with the case study. (Two or more ideas without linkage)	2 or more ideas on temporal variations explained thoroughly. Or Gives a detailed description on the reasons for the temporal variation with the case study. (Two or more ideas with linkage)	

STRA	STRAND 3									
3.1a	1	<ul> <li>Metallurgy</li> <li>Heavy Industry</li> <li>Food Processing</li> <li>Textiles</li> </ul>	Incorrect activity	Provides one of the correct answers provided.						
3.2a	1	Cultural Feature: Richmond Quarry	Incorrect feature named	Correctly named feature.						
3.2b	1	Area= L×W = 17.5×21 = 375.5cm = 367.5km squared	Incorrect area calculated	Correct area calculated with units. Or Accept some differences due to rounding off and printing variation in the final exam. e.g. with correct working a range of answers could be accepted such as 380.6-385 km <sup>2</sup>						
3.3a	2	TOD TOD TOD TOD TOD TOD TOD TOD	Cross Section is unrealistic in shape and contains none of the required features	Cross Section is realistic in shape and contains only 1 required feature	The cross section is realistic in shape with the 2 required features shown and labelled in Resource 5					

3.3b	1	Draw the key of the cross section drawn in 3.3a	Symbols/colours used do not complement those used in sketch	Symbols/colours used complement those used in cross section		
3.4a	2	There are many explanations to lack of education in our community. Some of them mentioned in the resource are: - poverty and lack of resources. - Some are too lazy to attend school and do not work hard at school - Some are located very far in the remote and maritime areas away from the learning centres. -Lack of/ no assistance/help provided - Lack of government support - family problems (Accept other possible appropriate answers)	Incorrect description to lack of education in our community	Stating one reason for lack of education in our community. (1 idea)	Provides a detailed description for the lack of education in our community and supports the answer with examples. (2 or more ideas)	
3.5a	2	<ul> <li>Ecotourism is now defined as "responsible travel to natural areas that conserve the environment, sustain the well-being of the local people, and involves interpretation and education" (TIES, 2015).</li> <li>Education is meant to be inclusive of both staff and guests.</li> <li>Ecotourism is valuable for people and the Planet.</li> <li>Sustainable tourism is a learning experience for everyone involved.</li> <li>Ecotourism Promotes Economic Stability.</li> <li>We Become More Sensitive Through Ecotourism.</li> <li>Ecotourism Reduces our Carbon Footprint.</li> <li>Animals Suffer When We Don't Travel Sustainably.</li> <li>Policy and Planning</li> <li>Local Community</li> </ul>	Incorrect description of benefits of eco- tourism to our country	States one benefit of eco-tourism to our country. (1 idea)	Describes the benefits of eco-tourism to our country. If possible, provides an example. (2 or more ideas)	

3.6a	2		Incorrect outline or sketch for the précis map.	The outline map is partially correct. It shows part of the beach and not any features. (1 correct idea/features)	The sketch looks like the area of Mullach. The outline is done well. (2 or more correct ideas/ features)		
3.7a	1	19991: 8000 people 2011:10,000 people	Incorrect answer	Provides 1 of the two correct answers	Provides both correct answers.		
3.7b	2	There was an increase in the population from 6000 in 1981 to 8000 in 1991 however, there was a decrease in 1991 from 8000 to 7000 people in 2001 and later increased from 7000 people to 10000 people in 2011. Although the population is fluctuating, there is an overall increase in the population from 1981 to 2011	Does not mention the trend for population change.	One idea provided on the changes in the population of Albania village.	Two or more ideas provided on the changes in the population of Albania village.		
3.7c	3	10,000- 6000= <u>4,000 People</u>	Incorrect answer, no working	Correct working, wrong answer	Correct answer, no working	Correct answer with working	
3.8a	3	It shows the trees are no longer able to take in the air pollution, smokes and fumes given out by vehicles. Air pollution directly injures trees by damaging living tissue, primarily foliage, and impairs photosynthesis and the ability to respirate. Air pollutants also weaken trees, predisposing them to further damage by insects and disease.	Incorrect interpretation of the cartoon	Response includes direct portrayal of the picture without mentioning anything about human action. (1 idea)	Clearly comprehends the cartoon on the increase in air pollution and how it is affecting plants. (2 or more independent ideas)	Clearly explains the cartoon, the increase in air pollution and how it is affecting plants. (2 or more ideas with linkage)	

3.9a	3			Incorrect proportions for	Correct totals for 1- 2 items	Correct totals for 3-4 items	Correct totals for 4-5 items with a	
			Revenue received by Tuvalu from January to May	the 4 items			neat line graph drawn and full title	
			50,000					
		Revenue	30,000					
			20,000					
			0 Jan Feb March April May					
			Months					
3.9b	1	Draw the corre	ect key for the graph drawn in 3.9a.	Symbols and colours used do not complement those used in portions	Symbols and colours used complement those used in portions			
3.10a	4	Unemployme of reasons. Unemployme overall econd	ent can be defined as the state where people are out of jobs due to a variety ent can cause severe negative effects, not only for individuals but also for the omy.	Irrelevant response	States one solution to the issue of unemployment as a global issue.	States two or more solutions to the issue of unemployme	States two or more solutions to the issue of unemployment as a global	Detailed discussion of the solutions to the issue of unemployment as a global issue. Clear
		Solutions for Bett Mot Figh Sup Sup Fisc Fisc	<u>Unemployment</u> ter education vivation programs grams against drug addiction and homelessness at discrimination port programs for mental issues sidies for companies how are reintegrating unemployed persons. cal and monetary measures in a financial crisis situation		(1 idea)	nt as a global issue. (2 or more ideas without linkage)	issue. Showing a clear relationship between the issues and solutions. (2 or more	relationship between the issues and solutions. Uses examples. (2 or more ideas with linkage. Uses examples to justify.)

Better education			
In order to fight unemployment, it is crucial to improve education levels of people so that			
it will be easier for them to find a job.			
This education should start early in school and teachers should pay close attention and			
take care of every child to ensure good educational progress.			
Moreover, children from families that do not care about their education at all should be			
supported by community programs and financial aid so that these children also have a fair			
chance to increase their level of education and find a good job once they turn into adults.			
Motivation programs			
Jobless people who are not willing to work at all have to be incentivized to get a job.			
This could mean that their social security levels may be lowered if they do not take action			
to go back to work.			
It could also mean that these people are forced into programs in which they get taught			
about the advantages of getting out of unemployment so they have a broader perspective			
on the chances of employment and might be more willing to search for a job.			
Programs against drug addiction and homelessness			
Before homeless people and drug addicts are able to get and maintain a job, these people			
often need support from social workers or programs in order to find their way back into			
society.			
These programs should show these people a future perspective so that they are willing to			
take the hard way out of addiction and homelessness and start a new life. By doing so, we			
will be able to bring part of these people back into occupations.			
Fight discrimination			
We should also try to fight all sorts of discrimination as a society.			
This also includes gender inequality. In countries where women are still repressed and not			
seen as equally important as men, governments and celebrities should speak up and show			
the general public that women are as important as men and therefore job discrimination			
due to gender is not a senseful behavior.			
By doing so, the job opportunities for women may improve since the acceptance towards			
them will be increased.			
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	Support programs for mental issues				
	Since mental health issues often prevent people from having a job, it is crucial that these				
	mental problems are treated appropriately so that we can reintegrate these people back				
	into the workforce as soon as possible.				
	People who are working in jobs that are mentally demanding should also take care of				
	themselves in order not to be at risk for burnout.				
	By taking these measures, individual unemployment can be reduced further.				
	Subsidies for companies who are reintegrating unemployed persons.				
	Many companies also refrain from employing unemployed persons, especially if these				
	persons suffer from long-term unemployment.				
	In this case, it might be senseful to provide financial incentives by governments for these				
	firms if they are willing to reintegrate long-term unemployed persons into the workforce				
	by offering them a job.				
	By doing so, these people may be able to get a job and therefore may be able to get out				
	of unemployment.				
	Fiscal and monetary measures in a financial crisis situation				
	In case unemployment is due to a financial crisis, central banks should take appropriate				
	measures in order to get out of this crisis situation by applying fiscal or also monetary				
	policy measures.				
	These measures could help to stabilize the global economy and may prevent a further				
	downward slope which in turn would result in even higher unemployment.				
	Thus, in financial crisis situations, it is crucial that central banks take suitable measures in				
	order to prevent high levels of unemployment.				
	Fight structural unemployment.				
	Structural unemployment is hard to fight and will take a quite long time.				
	It can only be fought if governments take action for a better gualification of workers so				
	that the incentive for companies increases to employ these workers.				
	It also has to be analyzed which kinds of workers are needed in the respective region so				
	that they can be qualified accordingly and are able to get out of unemployment.				
	Create jobs				
	An intuitive measure to fight unemployment is to create jobs				
	Johs can be created in several different ways				
	The creation of jobs often involves raising the incentive for companies to employ people				
	and open branches in weak economic regions				
	This can often be accomplished by giving firms financial incentives like tax advantages or				
	other incentives to offer jobs for the local population.				
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