



# EDUCATIONAL QUALITY AND ASSESSMENT PROGRAMME



## *Scoring Rubric 2019*

# South Pacific Form Seven Certificate



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Item Num	Skill Level	Evidence		Unistructural 1	Multistructural 2	Relational 3	Extended Abstract 4										
<b>STRAND 1</b>																	
1.1	1	Students name interacting processes Coastal processes create landforms		Provides at least one correct interacting natural process.													
1.2	1	<table border="1"> <tr> <td><b>Interacting natural processes</b></td> <td><b>Natural features</b></td> </tr> <tr> <td>Tectonic processes cause volcanic Eruption</td> <td>Mountains, trenches, students can name different types of volcanic landforms – cinder cones, composite volcanoes, calderas.....</td> </tr> <tr> <td>Coastal processes create landforms</td> <td>features of coastal erosion – headlands, caves, arches, stacks, stump Deposition – spits, bars, tombolos,</td> </tr> <tr> <td>Climate/Soil influences biome distribution</td> <td>Adaptive features of vegetation to complement climate and soil Decomposition - humification</td> </tr> <tr> <td>Hydrological processes determine Climate</td> <td>Humidity, cloud cover, precipitation(frequency, intensity)</td> </tr> </table>	<b>Interacting natural processes</b>	<b>Natural features</b>	Tectonic processes cause volcanic Eruption	Mountains, trenches, students can name different types of volcanic landforms – cinder cones, composite volcanoes, calderas.....	Coastal processes create landforms	features of coastal erosion – headlands, caves, arches, stacks, stump Deposition – spits, bars, tombolos,	Climate/Soil influences biome distribution	Adaptive features of vegetation to complement climate and soil Decomposition - humification	Hydrological processes determine Climate	Humidity, cloud cover, precipitation(frequency, intensity)		Provides at least one element of the natural processes operating in their chosen geographic environment.			
<b>Interacting natural processes</b>	<b>Natural features</b>																
Tectonic processes cause volcanic Eruption	Mountains, trenches, students can name different types of volcanic landforms – cinder cones, composite volcanoes, calderas.....																
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1.3	1	<b>Natural process</b>	<b>Elements</b>	Provides at least one natural feature that results from the interacting natural processes.			
		Coastal	Waves, beaches, tides, erosion, deposition				
		Fluvial	Hydrological cycle, drainage pattern, erosion, transportation, deposition				
		Tectonic	Structure of the earth, tectonic plates, plate boundaries and plate movements, convection currents, tectonic hazards				
		Volcanic	Materials, types, landforms				
		Geomorphology	Folding. Faulting & volcanism (earth building processes/initial landforms)				
		Climate	Hydrological cycle, layers of the atmosphere, elements, controls, urban heat island, climate extremes, climate change				
		Hydrology	Hydrological cycle, climate, surface water, groundwater, extremes – too much water, too little water				
		Biogeography	Biome, climate, soil, ecosystem, distribution/dispersal, threatened, endangered, endemic				
		Pedology	Pedogenesis, factors, profile, horizons, classification, degradation & conservation				
1.4	1	Temporal variation refers to change <b>with time/how things change over time</b>		Provides the correct definition temporal variations with key emphasis on time.			
1.5	1	Local spatial variations refers to the way in which processes are different <b>within different parts of the geographic environment</b> , e.g. stronger, going in different directions, more magnitude, different speeds or rates, different geology, different slope, different patterns		Provides the correct definition of local spatial variations with key emphasis on the different environment.			
1.6a	2	Sketch map showing the elements of the interacting natural processes.		Sketch map shows ONE element of the	Sketch map clearly shows the		

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		The sketch map must include the title, key and scale.	Only one natural feature shown.	Distribution of TWO elements of the interacting natural features processes		
<b>1.6b</b>	1	Draw the key for the sketch in 1.6a	Symbols and colours used complement those used in the Sketch			
<b>1.7</b>	2	Local spatial variations refer to the way in which processes are different within different parts of the geographic environment, e.g. stronger, going in different directions, more magnitude, different speeds or rates, different geology, different slope, different patterns.  For example, the rate of coastal erosion is faster at one part of the river due to the slope or river speed compared to another part.	Students describe only about one part of the environment (One location only)	Students choose one natural process and show how is it different in one part of the environment to the other. Comparative analysis and reference to case study.		

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1.8	3	<b>Natural process</b>	<b>Operations</b>	Mention or define a Natural	One Natural case study in sequence No mention of the case study.	One natural process operating in their environment. - Sequence of events - Rate - Scale - Case study evidence  Linkage between the ideas is clear.	
		Coastal	<p>The three main coastal environment processes that operate are Coastal Erosion, Coastal Transportation and Coastal Deposition.</p> <p>The elements that interact to produce natural processes are wind, waves and tides. Each phenomenon at coastal geographic environment has been produced by interaction.</p> <p>Coastal Erosion is a process at 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 -</p> <ul style="list-style-type: none"> <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 headland to erode.</li> <li>• Chemical Erosion/Corrosion occurs due to the content of limestone in the rock face of Otakamiro point. The seawater 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</li> </ul>				

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			<p>erosion have caused the formation of several phenomena such as caves.</p> <p>Coastal Deposition is the third main natural process occurring at geographic environment. It is the process of sediment being deposited to form natural features.</p> <p>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 the winds.</p>				
		Fluvial	<p>Fluvial process, the physical interaction of flowing water and the natural channels of rivers and streams. Such processes play an essential and conspicuous role in the denudation of land surfaces and the transport of 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.</p>				
		Tectonic	<p>Plate motions cause mountains to rise where plates</p>				

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			<p>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.</p> <p>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 (and thus weaker but generally denser) layer of plastic 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 lithospheric plates move across Earth's surface, driven by forces as yet not fully understood, they interact along their boundaries, diverging, converging, or slipping past each other. 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).</p>				
		Volcanic	<p>Movement of tectonic plates can be convergence, divergence, passive A volcano is a mountain that opens downward to a pool of molten rock below the surface of the earth. When pressure builds up, eruptions occur. Gases and rock shoot up through the opening and spill over or fill 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</p>				

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			and rock falls.				
		Geomorphi c	<p>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.</p>				
		Climate	<p>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 effect. This is caused by the increased concentration and effect of 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.</p>				
		Hydrology	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				

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			<p>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 back to the land and oceans. All of the physical, chemical and biological processes involving water as it travels its various paths in the atmosphere, over and beneath the earth's surface and through growing plants, are of interest to those who study the hydrologic cycle.</p>				

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1.9	4	<p>Climate and pedology (soil) have influenced the distribution of biome</p> <p>For example tropical climate and soil have contributed to tropical rainforest vegetation over a period of time. The vegetation may have adaptive features to enable it to thrive in the physical environment. For example plants in dry regions may have long roots to be able to reach groundwater.</p> <p>Tectonic and volcanism – tectonic plates move very slowly over a long period of time, subduction of plates occur, causing friction thus triggering tectonic hazards. Intrusive and extrusive landforms can be created from volcanic eruption.</p> <p>Coastal and hydrology have created both erosional and depositional landforms (students can describe 1 landform)</p>		One appropriate idea about the process operating in the chosen environment and/or the features which are observable is provided	Two or more ideas are provided but not linked to their effects on the distribution of phenomena	<p>The linkage of ideas in the explanation of how the natural process operating in the chosen environment has led to the distribution of features or things which are observable – landforms have been modified</p> <p>Students must mention how the processes have led to formation/ Modification of features or how the transportation/ deposition of materials have created/modified Features</p>	
1.10	3	<p><b>ONE natural process</b></p> <p>Coastal</p>	<p><b>Negative Human action</b></p> <p><b>Dredging</b> - may interfere with sediment transport and flow dynamics in coastal and marine systems.  <b>Land reclamation</b> – removal of coastal vegetation makes the coast vulnerable to coastal erosion/inundation, cause salinization  <b>Beach scraping</b>-is the process of reshaping beach and dune landforms with heavy machinery can</p>	Focuses on one aspect only – either on the negative human action or on the negative outcome of the human action without any mention of the case study.	Provides two or more negative human actions that have modified or could modify the chosen geographical environment but	Clearly explains how a natural process is negatively modified by human beings in the chosen geographic environment, thus the ideas are	Very detailed explanation on the natural processes is negatively modified by human beings. Examples are also provided from their Pacific geographic

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			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 habitats.		does not relate it to the case study.  The link between the human actions and the modifications are not clear.	connected. Presents a sustained, logical and cohesive answer using appropriate Geographical information, ideas and issues.	environment. Ideas are connected. Presents a sustained, logical and cohesive answer using appropriate geographical information, ideas and issues.  <i>Note that an evaluation requires the statement of a value judgement by the student. In this case the student is expected to say whether the negative effect has been to a large extent or not. And then proceed to justify with an explanation, to suit the value judgement.</i>
		Climate	Human activities (students may give specific examples – burning of fossil fuels, air pollution....may contribute to acid rain, climate change				
		Pedology	<b>Deforestation</b> – removal of vegetation makes soil vulnerable to erosion, leaching <b>Overgrazing</b> - makes soil vulnerable to erosion, leaching <b>Industrialisation</b> – extractive industry – lead to land scarification, land pollution from mine tailings <b>Careless disposal of (toxic) waste</b>				
		Biogeography	<b>Deforestation</b> /indiscriminate logging, <b>land reclamation</b> – disturbs the ecological balance/food chain, destroys the natural habitat of organisms <b>Introduced species</b> - 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 pollution). <b>Land-use change</b> : Humans may destroy natural landscapes as they mine resources and urbanize areas. This is detrimental, as it displaces residing species, reducing available habitats and food				

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		sources.				
<b>STRAND 2</b>						
<b>2.1a</b>	1	Students locate and name their Pacific Island Nation Setting.	Correct location and name of Pacific Island nation (If either location or name is incorrect no mark is given)			
<b>2.1b</b>	1	Students locate and name their Overseas Setting.	Correct location and name of overseas nation (If either location or name is incorrect no mark is given)			

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2.2	1	<b>Cultural Process</b>	<b>Elements</b>	Two elements of the Cultural Process correctly named.			
		Migration	Internal & external, push & pull factors, voluntary or forced migration				
		Tourism	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				
		Agricultural change	Mechanisation, intensification, diversification, HYV				
2.3a	2	Sketch map showing the TWO elements of the cultural process operating in chosen Overseas setting. Title and approximate scale are present on the map.		Map shows one element of the interacting cultural processes	Map clearly shows the TWO elements of the interacting cultural processes The sketch map includes the title and scale.		
2.3b	1	Draw the key for the sketch in 2.3a		Symbols and colours used complement those used in the sketch			

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2.4	2	<b>Cultural Process</b>	<b>Elements</b>	Stating one appropriate idea on the chosen element of the cultural process operating in the Pacific Island Nation Setting	One element described in detail with close reference and example with relation to the Pacific Island Nation Setting.		
		Migration	Internal & external, push & pull factors, voluntary or forced migration				
		Tourism	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				
Agricultural change Migration, Tourism, Industrialisation , Agricultural Change and Changing Land use.	Mechanisation, intensification, diversification, HYV						

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2.5	3	<b>Cultural process</b>	<b>How it operates</b>	Vague/weak explanation, no mention of case study OR Explains case study but does not mention how cultural process operates	Explains how cultural process operates but fails to mention sequence of events, rate & scale of change, there is mention of case study = 2 Listing of how cultural process operates, there is mention of case study	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	
		Migration	People 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.				
		Tourism	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 – students to elaborate				
		Industrialisation	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				
		Agricultural change	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				

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2.6	3	<ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Different physical attractions</li> <li>• Different levels of income/finance available to spend</li> <li>• Different levels of development – emerging digital technologies</li> <li>• Different individual preferences</li> <li>• Different needs/wants</li> </ul>	<p>Vague/weak explanation, of 1 reason why local spatial variation exists, there is no mention of case study</p> <p>OR</p> <p>Explains case study but does not explain the reasons for local spatial variations</p>	<p>Identifies reasons for local variations but fails to give a detailed explanation (briefly explains), there is mention of case study</p> <p>OR</p> <p>Listing of how cultural process operates, fails to explain why there are local spatial variations, there is mention of case study</p>	<p>Detailed explanation of why local temporal variations exist in the cultural process chosen, supported with case study</p>	
2.7	2	<p>Factors that brought about changes are:</p> <p>Tourism - Better networking</p> <ul style="list-style-type: none"> <li>- Easier mode of Transport such as air transport</li> <li>- More awareness created about the host countries in tourist markets.</li> </ul> <p>Migration- Infrastructural Development</p> <ul style="list-style-type: none"> <li>- Education</li> <li>- Peoples need for better services such as medical.</li> <li>- People’s need for cash income.</li> <li>- Stable future</li> </ul> <p>Agricultural- More research and hybrid varieties</p> <ul style="list-style-type: none"> <li>- Improved machinery and technology</li> <li>- Increased use of pesticides and fertilisers</li> </ul>	<p>Describe the factor only without explaining the factor.</p>	<p>Describes how the factor has brought about positive and negative changes.</p>		

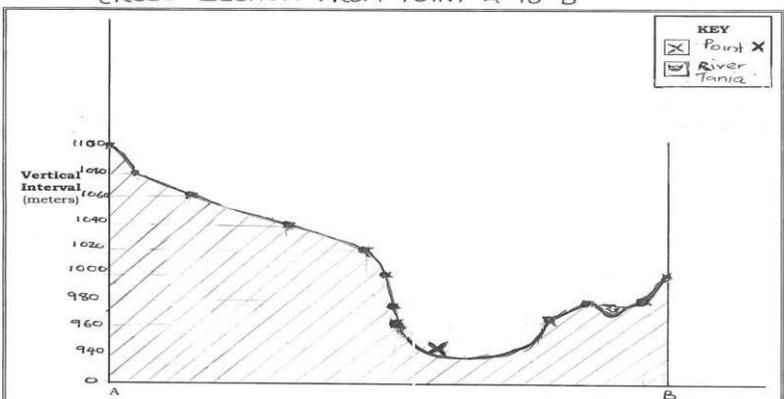
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2.8	4	<p>Cultural</p> <p>Pacific Island Nation</p> <p>Migration Migration has both <b>positive</b> and <b>negative</b> impacts on the destination country.</p> <p>Advantages</p> <p><b>Cheap Labour:</b> Migrants often do many unskilled jobs for a very little wage. Skilled migrants are also often happy to give their services for little salary.</p> <p><b>Skilled Labour:</b> Some immigrants are highly skilled and talented, and they contribute to knowledge and production for the well-being of all in that country.</p> <p><b>Cultural Diversity:</b> Immigrants provide the diversity in many places. Diversity helps cultures and traditions to loosen the grip on racism, discrimination and things like that. Diversity helps people learn about other ways of life and what goes on in other places of the world. It brings variety to almost every part of our ways of life. Diversity helps people to better appreciate humanity and human rights in general.</p> <p>Disadvantages</p> <p><b>Job loss:</b> Immigrants may also cause pressure on job issues as the locals often lose jobs to incoming workers.</p> <p><b>Discrimination/racism:</b></p>	<p>State / mention the impact</p>	<p>Provides the impact of a cultural process on the people in both in the Pacific island nation and the ideas are not connected/linked</p>	<p>Clear explanation on impact of a cultural process on the people in both in the Pacific island nation settings. Examples are also provided but there is no value statement.</p>	<p>Very detailed explanation on the impact of a cultural process on the people in the Pacific island nation. Examples are also provided. Ideas are connected. Presents a sustained, logical and cohesive answer using appropriate geographical information, ideas and issues. Value statement/ recommendation is provided.</p>

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		<p>Immigration can fuel racism and discrimination. Immigrants who cannot speak the local language or do not behave like the locals often find themselves not accepted in their communities, as people prefer not to have anything to do with them.</p> <p><b>Social/Civil Pressure:</b> Housing, health, education and many other facilities may suffer from the pressure of excessive use by more people than it was designed to take. This can force prices of such amenities to go high, causing hardship to all.</p> <p><b>Breakdown of culture and traditions:</b> Traditions and cultures are negatively modified because of diversity. Sometimes healthy ways of lives are lapsed as different people are exposed to different ways of doing things. Sometimes new crime incidents emerge or increase as a result of 'bad' people coming in.</p> <p><b>Diseases:</b> As long as people move from place to place, there is a risk of contagious disease outbreak.</p> <p><b>Tourism</b> Tourism increases employment opportunities. Additional jobs, ranging from low-wage entry-level to high-paying professional positions in management and technical fields, generate income and raise standards of living. Particularly in rural areas, the diversification created by tourism helps communities that are</p>					
			<p>Increases the revenue People get employed</p>				

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		possibly dependent on only one industry. As tourism grows, additional opportunities are created for investment, development, and infrastructure spending. Tourism often induces improvements in public utilities such as water, sewer, sidewalks, lighting, parking, public restrooms, litter control, and landscaping. Such improvements benefit tourists and residents alike. Likewise, tourism encourages improvements in transport infrastructure resulting in upgraded roads, airports, public transportation, and non-traditional transportation (e.g., trails). Tourism encourages new elements to join the retail mix, increasing opportunities for shopping and adding healthy competitiveness. It often increases a community's tax revenues.					
		<b>Industrialisation</b> Industrialization is the process by which an economy moves from primarily agrarian production to mass-produced, technologically advanced goods and services. This phase is characterized by exponential leaps in productivity, shifts from rural to urban labor, and increased standards of living. By typical measurements, such as income per capita or labor productivity, industrialization can be considered the most important economic development in human history.	Migration of workers to urban areas				
		<b>Changing Land use</b> Land use change is a process by which human activities transform the natural	Excessive use of fertilizer thus many health issues.				

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		<p>landscape, referring to how land has been used, usually emphasizing the functional role of land for economic activities. Land use change can have positive effects on both, human well-being and sustainable ecosystem developments. For instance, traditional land use in temperate regions has led to an increase in biodiversity with its associated functions.</p> <p> <b>Agricultural Change</b></p> <p> <b>Agriculture inspires people</b> Farmers have shaped and maintained the unique look of rural areas for millennia. Farms create wonderful variety of landscapes, ranging from beautiful blossoming orchards and vineyards to fields of golden wheat. This way agriculture encourages people to interact with nature in a positive way, inspiring them to conserve it.</p> <p> Agriculture preserves ecosystems Agriculture helps preserve valuable ecosystems. Grasslands provide habitat to a great number of animals and native plants. These areas have been almost entirely wiped out in other countries of Europe due to modern development or intensive agriculture.</p> <p> Agriculture creates habitats Agricultural systems that work in harmony with nature such as organic, permaculture, or biodynamic farming create diverse natural habitats.</p> <p> Agriculture boosts soil fertility One of the key features of sustainable</p>				

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		<p>Agriculture is the focus on the health of soils. Practices such as crop rotation, cover cropping, no-tillage and the application of compost improve soil fertility naturally and can even speed up the process of new topsoil formation.</p> <p>✚ Agriculture has a role in the water cycle Plants and trees in agricultural systems help to retain and add water to underground aquifers. This process is most effective when the crops being grown are perennials that continue to grow every year and have deep, well-established root systems.</p> <p>✚ Agriculture provides food from limited sources Urban agriculture on a small scale can help to localize food production, reducing the overall environmental footprint of our modern food systems. Benefits include lower greenhouse gas emissions, minimal transportation requirements, and reduced energy use for food production.</p>				
<b>STRAND 3</b>						
<b>3.1a</b>	1	<ul style="list-style-type: none"> <li>Meat Packing</li> <li>Cattle Farming</li> </ul>	Provides one of the correct answers provided.			
<b>3.1b</b>	1	<ul style="list-style-type: none"> <li>Flooding - Storm Surge - tsunami</li> <li>Landslides - sea level rise - Salinisation</li> <li>Coastal inundation - coastal erosion</li> <li>Salt water intrusion</li> </ul>	Provides one of the correct answers provided.			
<b>3.1c</b>	1	<ul style="list-style-type: none"> <li>Mathews Ridge - Bartica</li> <li>Tumatumari</li> <li>Mahdia</li> </ul>	Correctly identified the location of the gold mining site.			

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3.2a	1	<b>Natural Feature</b> Ridell Lake	Correctly named feature			
3.2b	1	North West/NW	Correctly direction given			
3.2c	1	A = l x w = 21.8 x 16 = 348.8cm <b>= 348.8km<sup>2</sup></b>	Area correctly given Correct calculation but wrong answer			
3.2d	1	Height in meters- 1338m.	Correct height given (with/without the metric unit)			
3.3a	2	<p>CROSS SECTION FROM POINT A TO B</p> 	<p>Cross Section is realistic in shape and contains 1 only required feature</p> <p>Accept also if the cross section is done correctly without the features labelled</p>	<p>The cross section is realistic in shape with the 2 required features shown and labelled</p> <p>Accept also if the cross section is done correctly (all the points are plotted correctly) with only one feature labelled</p>		
3.3b	1	Draw the key of the cross section drawn in 3.3a	Symbols/colours used complement those used in cross section			
3.4a	1	February and July	Provides 1 of the two correct answers	Provides both correct answers.		
3.4b	2	Generally all the months have a fair amount of Rainfall. There is high rainfall in the beginning of the year. Rainfall decreases in the middle of the year and then increases again from October to December.	Just mentions that the rainfall pattern fluctuates no	Detailed explanation of the pattern –		

Question Number	Skill Level	Evidence	Unistructural 1	Multistructural 2	Relational 3	Extended Abstract 4
			mention of months	mention months with more and less rainfall		
<b>3.4c</b>	3	140 + 190 + 150 + 122 + 100 + 80 + 62 + 90 + 70 + 100 + 130 + 110 = <u>1344 ÷ 12 = 112</u>	Correct working, wrong answer	Correct answer, no working	Correct answer with working	
<b>3.5a</b>	2	Pollution and chemicals are taking over the beauty of our natural environment at a very fast pace. The cartoonist is implying that rate of pollution is happening at a pace whereby the humans cannot even enjoy the beauty of nature.	Response includes the pollution but fails to mention the pace at which it is causing harm to the environment and no effect on the environment.	Response includes the pollution happening at a fast pace in our natural Environment and the effect of it.		

Question Number	Skill Level	Evidence	Unistructural 1	Multistructural 2	Relational 3	Extended Abstract 4																								
3.6a	2	<p style="text-align: center;"><b>Population Growth in Vanuatu from 1965 to 2015</b></p> <table border="1"> <caption>Population Growth in Vanuatu (Estimated Data)</caption> <thead> <tr> <th>Year</th> <th>Population</th> </tr> </thead> <tbody> <tr><td>1965</td><td>75,000</td></tr> <tr><td>1970</td><td>85,000</td></tr> <tr><td>1975</td><td>100,000</td></tr> <tr><td>1980</td><td>115,000</td></tr> <tr><td>1985</td><td>130,000</td></tr> <tr><td>1990</td><td>145,000</td></tr> <tr><td>1995</td><td>165,000</td></tr> <tr><td>2000</td><td>185,000</td></tr> <tr><td>2005</td><td>210,000</td></tr> <tr><td>2010</td><td>235,000</td></tr> <tr><td>2015</td><td>265,000</td></tr> </tbody> </table> <p style="text-align: center;"><b>Key</b></p> <p style="text-align: center;">—■— Population Growth in Vanuatu</p>	Year	Population	1965	75,000	1970	85,000	1975	100,000	1980	115,000	1985	130,000	1990	145,000	1995	165,000	2000	185,000	2005	210,000	2010	235,000	2015	265,000	Correct proportions for 1- 4 years.	Correct proportions for 5 year or more.		
Year	Population																													
1965	75,000																													
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3.6b	1	Draw the correct key for the graph drawn in 3.6a.	Symbols and colours used complement those used in portions																											
3.7a	4	<ul style="list-style-type: none"> <li>The most known consequence of deforestation is its threat to biodiversity. In fact, forests represent some of the most veritable</li> </ul>	Listing of the effects of deforestation on	Vaguely discusses the effects of	Discusses effects of deforestation	Detailed explanation of the effects of deforestation on the soil and on the Natural																								

Question Number	Skill Level	Evidence	Unistructural 1	Multistructural 2	Relational 3	Extended Abstract 4
		<p>hubs of biodiversity. From mammals to birds, insects, amphibians or plants, the forest is home to many rare and fragile species.</p> <p>80% of the Earth’s land animals and plants live in forests. By destroying the natural environments that surround forests, human activities are putting these species at danger and it can have significant consequences on natural balances. Why? For example, in some parts of South America, the gradual reduction of silver gorillas habitat’s, particularly because of deforestation, puts this species in danger.</p> <ul style="list-style-type: none"> <li>• Further effects of deforestation include soil erosion and coastal flooding. Trees also function to retain water and topsoil, which provides the rich nutrients to sustain additional forest life.</li> </ul> <p>Without them, the soil erodes and washes away, causing farmers to move on and perpetuate the cycle. The barren land which is left behind in the wake of these unsustainable agricultural practices is then more susceptible to flooding, specifically in coastal regions. Coastal vegetation lessens the impact of waves and winds associated with a storm surge. Without this vegetation, coastal villages in South America are susceptible to damaging floods.</p>	the soil and the Natural Ecosystem of South America	deforestation on the soil and on the Natural Ecosystem of South America	on the soil and on the Natural Ecosystem of South America No recommendation or value statement provided	Ecosystem of South America Recommendation or value statement provided
3.7b	4	<p>Mitigation measures are those actions that are taken to reduce and curb greenhouse gas emissions, while adaptation measures are based on reducing vulnerability to the effects of climate change. Mitigation, therefore, attends to the causes of climate change, while adaptation addresses its impacts.</p> <p>These are some of the mitigation measures that can be taken to avoid the increase of pollutant emissions:</p> <ul style="list-style-type: none"> <li>✚ Practice Energy efficiency</li> <li>✚ Greater use of renewable energy</li> <li>✚ Electrification of industrial processes</li> <li>✚ Efficient means of transport implementation: electric public transport, bicycle, shared cars</li> </ul> <p>In terms of adaptation measures, there are several actions that help reducing vulnerability to the consequences of climate change:</p>	Listing of the strategies in addressing climate change.	Discusses only one strategy	Discusses the strategies in addressing climate change. No recommendation or value statement provided	Detailed explanation of the strategies in addressing climate change. Recommendation or value statement provided

Question Number	Skill Level	Evidence	Unistructural 1	Multistructural 2	Relational 3	Extended Abstract 4
		<ul style="list-style-type: none"> <li>✚ More secure facility locations and infrastructures</li> <li>✚ Landscape restoration (natural landscape) and reforestation</li> <li>✚ Flexible and diverse cultivation to be prepared for natural catastrophes</li> <li>✚ Research and development on possible catastrophes, temperature behavior, etc.</li> </ul> <p>Preventive and precautionary measures (evacuation plans, health issues, etc.)</p>				

**The End**