EXAMINER'S REPORT

MINISTRY OF EDUCATION

FIJI SCHOOL LEAVING CERTIFICATE EXAMINATION

2011

GEOGRAPHY

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GEOGRAPHY

It is indeed pleasing to note that the number of candidates for Geography continues to increase. The teachers and the Social Science department in all schools are commended for taking up the challenge in making sure that the subject becomes competitive in school. In 2009, candidate registered for Geography were 3029, an increase in 2010 to 3648 and for the year 2011, the number has increased to 3822.

With the increasing number of students, teachers must continue to acquire new teaching strategies for geography lessons in order for students to fully grasp the concepts and the knowledge and skills relevant and applicable to the subject.

For 2011, the mark attained by the candidates' ranges from 4 to 90 and again it reflects the need for improvement and focus on effective teaching and delivery of the subject. For those who performed well did a tremendous work and must be commended and for those who did not must be encouraged to continue working in order to attain the skills and knowledge of the subject.

Several mistakes surfaced during the course of marking and it clearly shows that simple and important things that are the essence and basics for teaching this subject have been overlooked or neglected. These could have contributed to the poor performance of some candidates. In certain areas, there is evidence that skills and content are not taught well and lack of information provided to students. Teachers therefore must take time to read the examiner's report to be able to identify the need and areas for improvement.

Generally, Question 1 is compulsory and is always the challenging part of the paper. As geography teachers, be reminded that the four components that make up the topic cannot be taught independently without each influencing the other. Students must also know and understand how each component interact and influence human activities and the environment. The most attempted essay for Question one was essay (ii) even though some interpreted the question as *"how man exploit the native forest"*. Those who attempted Essay (i) did fairly as some were not clear with the climatic control and climatic elements.

Question 2 and 3 also had some challenging questions which many students found confusing and difficult to attempt. It is important to teach various way of tackling questions and introduce possible question types that can be asked in the exam. However, quite a number showed that they fully understood and have acquired the knowledge and skills related to the two questions. The onus is on the teacher to introduce students to such strategy and technique while encountering such questions during the examination.

For Section B, the most attempted questions were 4, 5 and 6 while the few who attempted Question 7 did quite well. Those who attempted Question 4 really did well which showed that they were well versed with skills and knowledge relating to Agriculture. However, the concept of *"**sustainability**"* has not been fully understood by those who attempted the essay which was reflected in the answer.

Question 5 was the most liked one as majority of the candidates attempted this question. However, many had no idea of the location of and were Tasmania locating places on the Australian map as a whole. The word *"**adverse**"* was not understood by many thus affecting the answers provided which was totally the opposite of what the question was all about. Being the popular topic, teachers are encouraged to find ways and means of gathering as many information as they could whilst teaching the topic. Teachers are therefore encouraged to explore new concepts that can possibly be used in specific topics instead of relying on everyday used concepts. Geography is a dynamic subject and many a times, there are new concepts introduced which as geography teachers must adapt for classroom learning.

One of the main challenges that we have experienced in the past years is the inability of the candidates to correctly locate and name places on the map and identify the correct map that represents a particular country. It cost marks when they lack this knowledge.

The overall results attained by our candidates do suggest the need for improvement in our approach in teaching Geography. Again, to emphasize, Geography is a dynamic subject and teachers need to keep abreast with latest development whether physical, social, cultural, and political or even in skills and concepts.

As facilitators, we also need to constantly inform our students of new information and issues that are related and relevant to the topics we teach. Tourism for instance, many new concepts are introduced and new terms used for certain activities already existing. Children will not be aware of all these if we do not take time to find it out ourselves. For Industrialization, it is also important to know about new policies and government initiatives in developments that are taking place within and outside the country.

For consistency and quality performance, there is definitely a lot we need to do.

Be also reminded that the following mark allocation will be used for essay marking effective 2012;
Relevancy – 4 m; Example – 2 m; Logic – 1 m; Introduction – ½ m; Conclusion – ½ m

Outlined below are areas and issues to be considered in our teachings to ensure better results are attained:

- In mapping, the naming and locating of places. Students will not be able to answer the questions if they do not know the location of these places on the map. In some questions marks were lost due to over shading and under shading. Students must be engaged in more mapping exercises to ensure that they know what is expected, that is, correct locating and labeling, and the use of symbols or color and a key.

- More time should be spent on Fiji maps. It is disappointing to see that students are able to locate features/places on maps of other countries while they have very limited knowledge about the map of Fiji.

- Students should not waste their time constructing their own maps again or illustrating their answers with diagrams.

- There is no mark given for illustration in essay writing. Many students used a lot of time trying to demonstrate their points by drawing.

- For definitions, students should be reminded that marks are not allocated for examples.

- Students must be taught to comprehend, what is being asked. Key words must be identified and explained so that questions are answered appropriately.

- Students must also be reminded not to write comments on exam scripts.

ANALYSIS OF QUESTION TYPE

The following weaknesses were noted:

MAPPING:

- Over shading cost marks for candidates.
- Failure to use key – candidates must be reminded to write the name on the located places and not on the key.
- Candidates still not able to differentiate maps of different countries.
- Drawing maps instead of using the maps provided.
- Many could not name islands and places within the Fiji map.
- Question 1 – the Research Station was wrongly answered by many.

RESOURCE INTERPRETATIONS:

- Most mis-interpreted the questions and failed to score marks.
- The synoptic chart was poorly answered. Very few scored full marks here, hence showing student's lack of knowledge and understanding of a weather map.
- The topographic map was not answered well by majority; many could not identify the fluvial pattern.
- Candidates could not relate the vegetation pattern to changes.
- Model interpretation for Population and Settlement was poorly answered. Candidates many not have understood the diagram at all.
- Candidates need more practical exercises on this area of study.
- Question 2 – B (ii): many candidates misinterpret the question by providing the answers to the causes of death.
- Tourism resource interpretation was not done well as expected.

DEFINITIONS

- Some terms given were poorly defined or not attempted at all.
- Some candidates gave examples instead of defining the term.
- Most of the candidates were confused with *"**stop bank**"*, relating the concept to the banking system.

SHORT ANSWERS

- Most questions were mis-interpreted and so candidates failed to score full marks.

- Some candidates did not answer according to the value of the question.
- In extension of ideas, many stated how those factors affect population or settlement instead of considering both which made them lose marks.
- Traditional method of minimizing the impact of hazards was no well stated as answers demonstrate that students lack the knowledge.
- Those answered were well defined and explained.
- Overall, it seems that candidates are more familiar with the advantage aspect of any topic and less about the disadvantage.

ESSAY

- Candidates failed to write essays according to the marking scheme (RELIC). However, it is encouraging to notice that candidates were providing examples which showed their understanding of the topic and as well as teachers are emphasizing on the importance of example and the use of marking scheme.
- Very poor introduction and conclusions. Many merely repeated the question in both the introduction and conclusion.
- Candidates failed to understand the question, so questions were not fully answered. Many failed to provide specific examples but instead gave too many genelisations. Also partly answered questions were very common especially when there were two parts to the question.
- Lack of understanding key word used in question.
- Some essays were too short.
- Essay choices were not numbered correctly. Few candidates
- Two important concepts, *"**sustainable agriculture**"* (Question 4) and *"**marine ecosystem**"* (Question 7) were not well understood by those who attempted the essays. Sustainability and Ecosystem itself is a concept that must be taught in order to be understood by students so questions can be answered according to the context the concepts were used.
- Candidates that were familiar with the marking criteria, answered the question to the point instead of beating around the bush allowing them to gain full marks in all the essays.

* *A lot of time must be devoted in practising the writing of essays and not confined to examination time only. More practice given to students will better their performance.*

THE END

MARKING SCHEME

2011

SECTION A

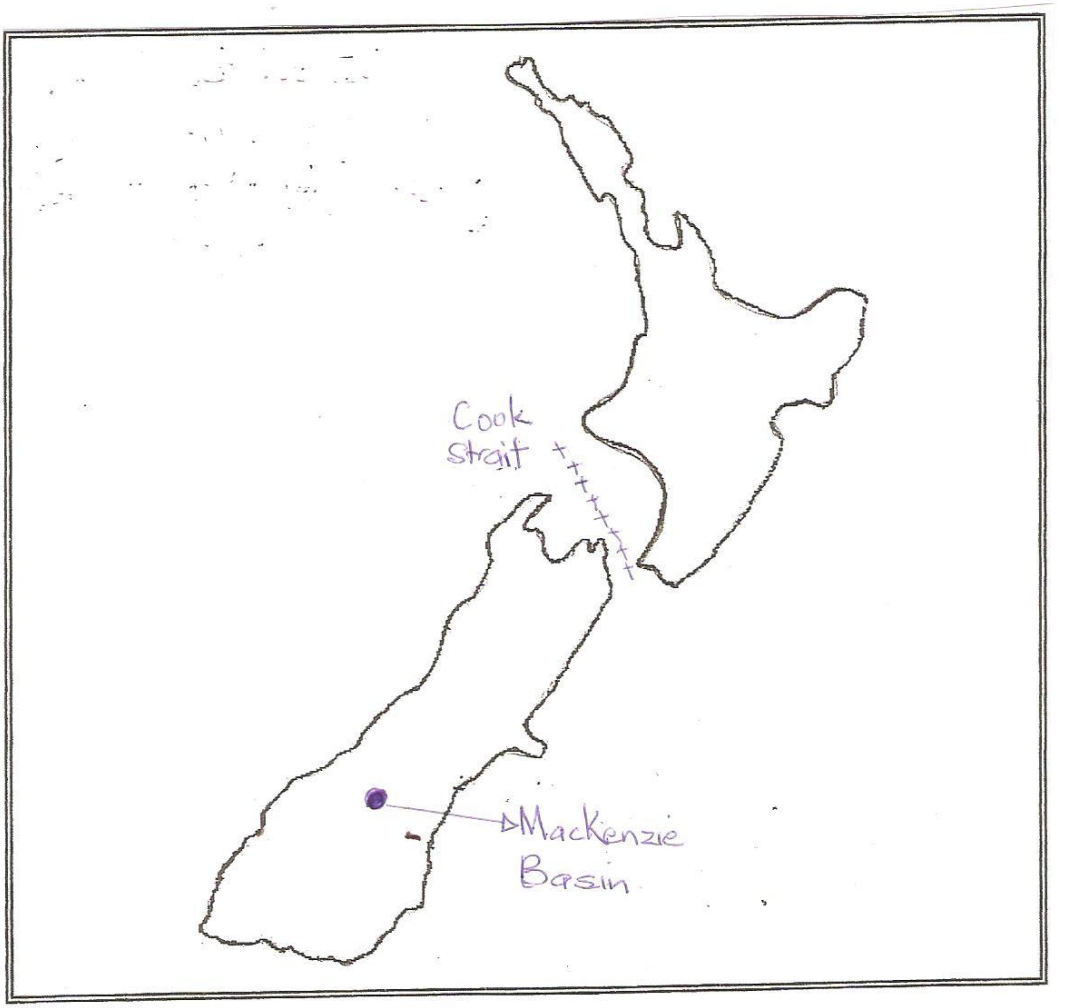
Question 1 **Physical Geography – Fiji and New Zealand**

A. Mapping

(a) (i) Lololo/ Pine
(ii) Nacocolevu
(iii) Alluvial Soil or Alluvium
(iv) Orographic or Relief Rainfall

(1/2m for each correct answer)

(b)



Key: The windiest region

An intermontane basin

(½ m – correct location ½ m – correct name, - ½ m – undershading/overshading/no key
Description is correct, location is incorrect - - ½ m)

B. Resource Interpretation

- Comparatively colder temperature
- thin soil, less vegetation
- the higher the relief, the thinner the vegetation and vice-versa

C. Synoptic Chart Interpretation

(i) Warm air mass

(ii) Low pressure, rainy/wet/strong wind/ depression/developing tropical cyclone

D. Topographic Interpretation

(i) Braided River

(ii) - Numerous tributaries/ streams/ many mountains/ peaks/ numerous trig stations/
- Proximity of the contour lines/ roads/ contour lines/ roads/ highways is restricted to the value of flood plains

E. Diagram Interpretation

Climate – western end of the transect experiences low annual rainfall and high annual temperature resulting in talasiga forest, sugarcane, rice (dry) farming. The eastern end of the transect experiences high annual rainfall and cooler temperature, thus, supporting rice and mixed farming and dense forest.

Soil – the rich alluvial soil on the eastern end of the transect and river valleys support vegetable and mixed farming whereas the talasiga soil on the western end of the transect supports sugarcane farming.

Relief – western end of the transect is more mountainous and has more forests while the eastern end of the transect is dominated by plain landforms and supports rice farming etc. It also supports the agricultural activities carried out.

(1/2 m for correct feature and 1 ½ m for explanation, - ½ m for missing one explanation)

F. Resource Interpretation

(i) The red color is due to the accumulation of nutrients and iron (leaching out of the A- horizon) / Lack of humus present in the B horizon
(1m for 1 correct answer)

(ii) – helps to darken the soil
- Provide nutrients to the soil
- Increase the soil fertility
- Add humus to the soil

1m for 1 correct answer

G. Definitions

(i) **Regolith** – the layer of rock fragments which is found resting on the bedrock resulting from the weathered bedrock

(ii) **Endemic plant** – plants found exclusively in a particular area and not found anywhere else

(iii) **Soil creep** – slow, steady downhill movement of loose rock and soil on a slope

(iv) **Coriolis force** – deflection/ bending of the wind caused by the rotation of the earth

(1m for each correct answer/ no mark for example)

H. Short Answers

(i) – control the flow of water into streams and rivers
- Release water into the atmosphere through transpiration
- Intercepts water (holds it temporarily) and delays runoff

(2marks for 2 correct roles)

(ii) A fast flowing rivers has the ability to produce fluvial erosional landforms such as V- shape valleys and interlocking spurs. A slow flowing river deposited alluvium and build up depositional landforms such as floodplains, leaves, deltas, etc.

(2marks for relationship between river speed and creation of landforms)

I. Essay

Marking Criteria

Relevancy – 3 marks (3 climatic controls)
Example – 3 or more 2 marks, 2 egs 1 ½m, 1 eg 1m
Logic – 2 marks
Introduction – ½ mark
Conclusion – ½ mark

(i) Effects of 3 climatic controls in a water surplus region:

Water surplus region:
Fiji – South eastern Viti Levu ()Suva, Navua, Nausoriu, Namosi)
New Zealand – Westland

- *Relief*
  Acts as a barrier to the most prevailing winds causing orographic rainfall. This gives rise to high rainfall in the windward slopes. E.g. Southern Alps/ Namosi Peaks
- *Prevailing Wind*
  Picks up and transports moisture as it blows over a warm ocean. E.g. westerlies in NZ or South East Trades in Fiji.
- *Large Expanse of warm ocean*
  Source of moisture that fuels orographic rainfall. E.g. Tasman sera – NZ/ Pacific Ocean – Fiji
- *Ocean Current*
  The warm ocean current (e.g. Tasman current) brings a body of warn ocean waters which supplies moisture for prevailing winds.
- *Latitude*
  Fiji's location with the tropics presents it with high temperatures. This encourages the formation of convectional rainfall.

(ii) *Marking criteria*

Relevancy – 3 marks (1 ½ m =3 factors & 1 ½ m = 3 problems)
Example – 2 marks
Logic – 2 marks
Introduction – ½ mark
Conclusion – ½ mark

Three factors which contribute to man's exploitation of native forests:

- Demand for timber
- Road construction
- Farming
- Settlement
- Development of hydro-electric power scheme
- Tourism development
- Increase in market value
- Increase in population

Three resulting problems

- Habitat destruction
- Increase in erosion
- Siltation & sedimentation polluting water sources
- Reduction in local rainfall
- Loss of traditional sources of medicine and livelihood
- Extinction of species
- Loss of flora & fauna - biodiversity
- Reduction in source of oxygen
- Increase in global warming/increase in carbon dioxide (Greenhouse effect)

Question 2 **Natural Hazards – Fiji and Monsoon Asia**

A. Mapping

(a) (i) floods/typhoons/ hurricane/ cyclone

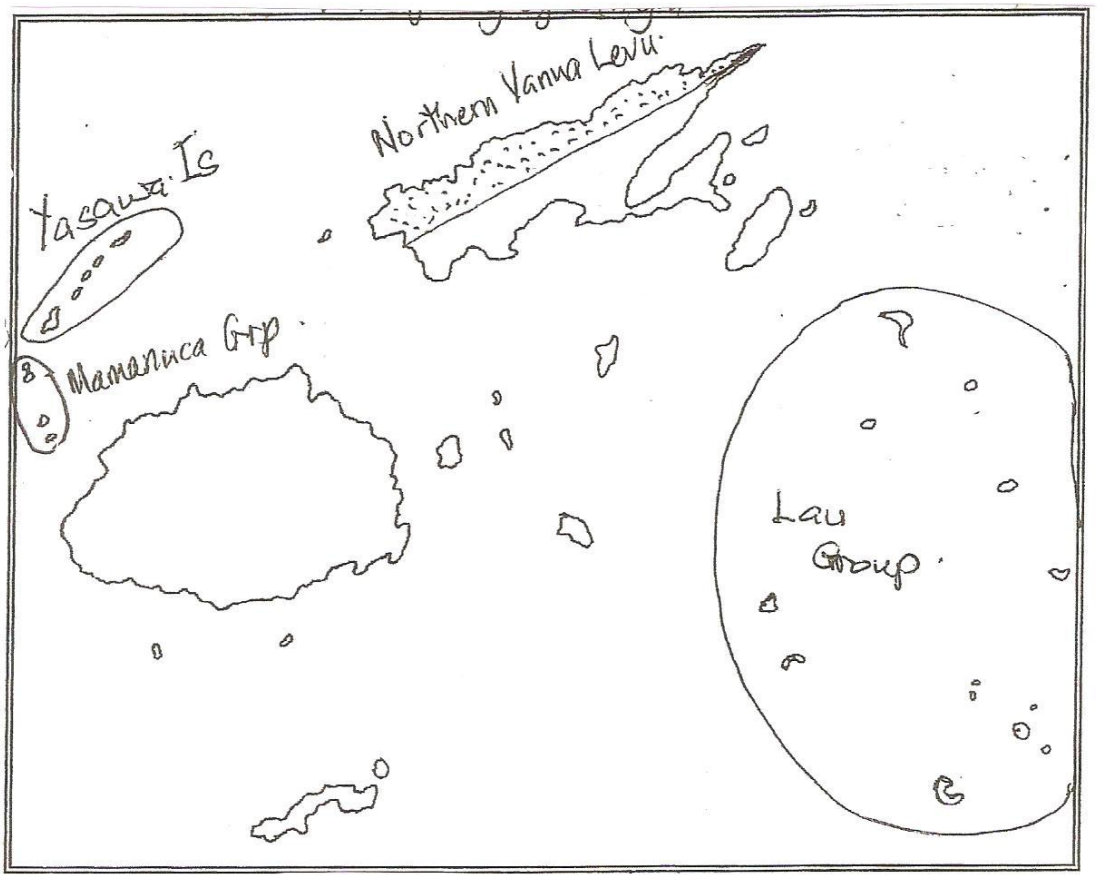
(ii) Philippines

(iii) Japan

(iv) Located on River Delta, coastline/ low-lying/ located along the path of typhoons/ physical location/ apex of the Bay of Bengal

(1/2 m for any correct answer)

(b)



Key: drought prone area in Vanua Levu

Island group which experience water shortage

(½ m correct location, ½ m correct name, - ½ m undershading/overshading/ no key)

B. Graph Interpretation

(i) The number of people affected by disasters over the years has increased and the number of deaths through disasters had decreased over the years.

(2 marks for 1 correct trend)

(ii) Reason for Decline in Death

- Improvement in disaster management and awareness
- Improved building code & standards / infrastructure development
- Increase in awareness programs
- Better planning and controlling measures
- Efficient communication an d transport networks enabling quick response to disasters

Reason for increase in affected population

- Areas affected by disasters are densely populated
- Increase in frequency of disasters
- More people are exposed to disasters
- Not taking warnings seriously

C. Definitions

(i) **Famine** – extreme food shortage due to unfavorable weather conditions such as drought/ flood or crop failure

(ii) **Epicenter** – point on the surface directly above the focus of an earthquake

(iii) **Lapilli** – small droplets of molten or semi molten laval stones ejected from a volcanic eruption.

(iv) **Stop bank** – a raised bank or embankment which prevents flooding.

(2m for 2 correct definitions – no marks for example)

D. Short Answers

(i) High soil fertility which supports farming
Spectacular landscapes are tourist attractions
Igneous rocks are quarried for building & road construction
Generation of geothermal power/ formation of minerals and precious stones which may be used for income generation
Sulphur quarried and used for matchstick product, etc.

(2 advantages for 2 marks)

(ii) Growing famine crops .e.g. yams and nuts/
Fermenting and drying food for preservation
High level of cooperation and family ties
Trimming braches of trees surrounding people's homes
Cutting down cassava branches
House design strengthened through the use of hardwood posts, thatched roofs and bamboo walls

(2m for 2 correct methods)

(iii) Essay

Marking Criteria
Relevancy – 3 marks (1 ½ m =3 economic effects & 1 ½ m = 3 measures)
Example – 2 marks
Logic – 2 marks
Introduction – ½ mark
Conclusion – ½ mark

Economic Effects of Drought

- Water shortage resulting in :
  - Loss of jobs
  - Power cuts
  - Low food production
  - Increase in imported goods
  - Increase in government expenditure
  - Temporary closure of businesses & industries
  - Low crop yielding leading to reduction in exports
  - General decline in government income/ GDP

- **Measures to reduce impacts**
  - Place water restrictions
  - Provision of emergency relief supplies in the form of food, loans, grants, indemnity payments, etc
  - Cloud seeding
  - Develop reservoirs and dams
  - Use of irrigation pumps for farmers (along river valleys) in affected regions
  - Retaining forest cover/ planting more trees
  - Government plan and implementation of drought management programmes

Question 3 **Population and Settlement Patterns - Fiji and India**

A. Mapping

(a) (i) Ba

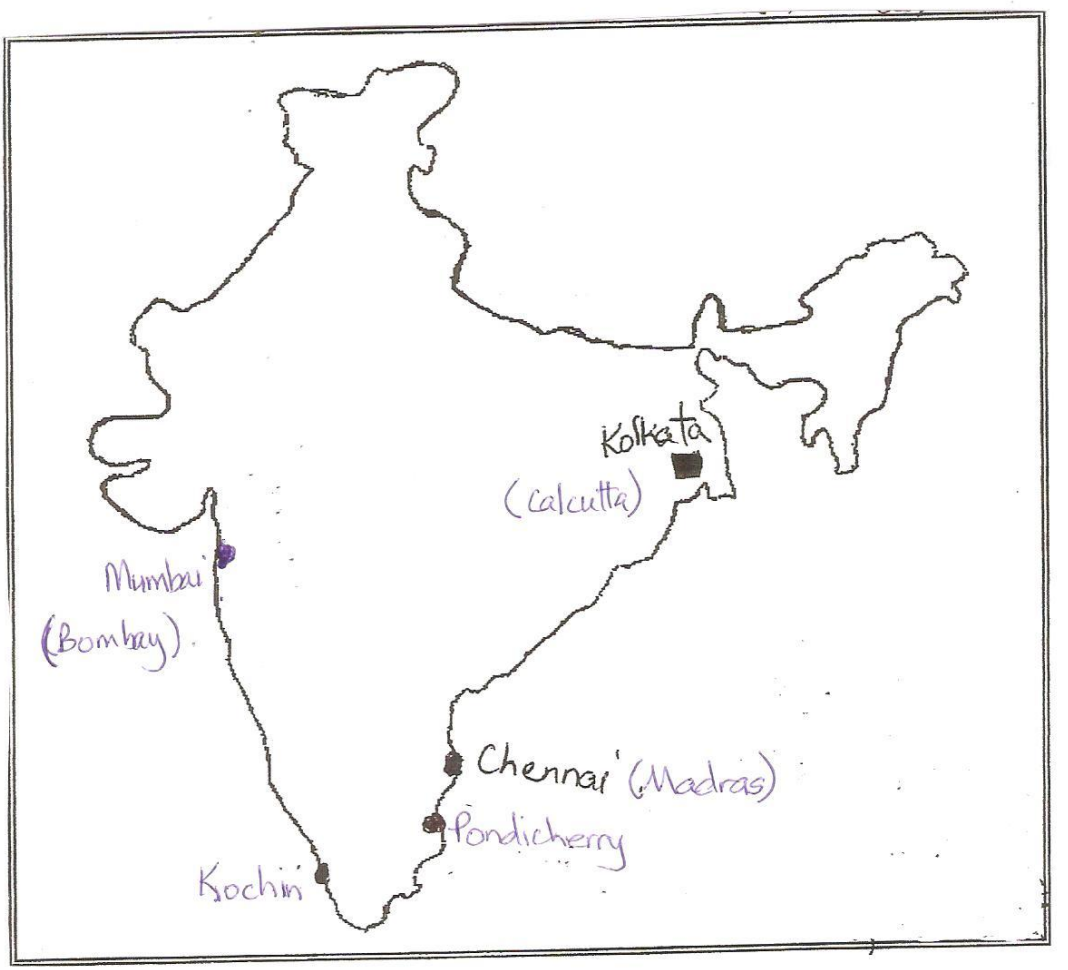
(ii) Nadi

(iii) Macuata

(iv) job opportunities/ education/ improved medical facilities/ modern way of life/ access to essential services/ greater investment opportunities/ better housing/ reliable food supply/ more entertainment

(1/2 m for any correct answer)

(b)



Key:

city along India's coastal plain

Commercial capital of East India

(½ m correct location, ½ m correct name, - ½ m undershading/overshading/ no key

B. Extension of Ideas

(i) **Mechanized farms** – introduction of machines on farms results in fewer jobs, greater rural-urban drift/ rural depopulation

(ii) **Transport & communication link** – enable greater mobility and accessibility to both rural and urban areas

(iii) **Newly established towns** – relieves overpopulated towns and cities/ caused resettlement/ deployment

(iv) **Lack of government investment** – encourages outmigration in source areas & overpopulation of host areas

(2m for 2 correct explanations relating to both population mobility and settlement pattern; - 1/2m if one not discussed)

C. Photograph Interpretation

(i) Rural/ village settlement/ traditional settlement
Farming/ hunting & gathering/ communal life/ subsistence farming

(1m for identifying & 1m for stating means of survival)

(ii) *Problems*: lack of basic amenities & essential services (.e.g. water, electricity, waste/sewerage disposal, etc) / lack of medical facilities/ lack of job opportunities/ remoteness/ poor educational facilities

Benefits: low cost of living/ low land value/ cheap land/ more space/ clean-unpolluted environment/ greater access to healthy food/ strong community spirit

(1m for problem and 1m for benefit)

D. Definitions

(i) **Suburb** – areas immediately outside the edge of the city/ zone of housing around the edge of the city

(ii) **Ethnic groups** – people with similar culture, background and way of life

(iii) **Longevity** – average length of time a person is expected to live from birth

(iv) **Decentralization** – action of moving away from a concentration at a central point/ the relocation of certain urban functions from a centralized location

(2m for 2 correct definitions, no mark for examples)

E. Model Interpretation

(i) - No/ lack of family planning
- High infant mortality rates encourages couples to have more children
- Education amongst women were not widespread/ women were not empowered
- Lack of medical facilities
- Traditional values and beliefs

(1m for 1 correct reason)

(ii) Economic growth
Advancement in science and technology
Improved medical care/ water supply/ sanitation/ education
Better living standard
Government commitment towards reducing high death rates
Increase in food supply ***(1m for 1 correct factor)***

F. Essay

Marking Criteria
Relevancy – 3 marks (1 ½ m =3 problems & 1 ½ m = 3 measures)
Example – 2 marks
Logic – 2 marks
Introduction – ½ mark
Conclusion – ½ mark

Urban Problems:

- Inadequate drainage systems
- Traffic congestion
- Poor living condition in slums/ squatters
- Unemployment
- Increase in squatter settlements/ slums
- Poor sanitation & health conditions due to inadequate & improper drainage
- High level pollution
- Overcrowding
- High crime rate
- Urban poverty
- Pressure on urban resources
- Lack of space

Measures

- Decentralization of urban functions such as education (.e.g. FNU, USP centers in Labasa, Lautoka, Ba), industries, etc
- Resettlement of squatter settlements (.e.g. Suva-Waila)
- To ease traffic congestion, police officers assist in directing traffic during peak hours
- Low cost housing schemes/ projects (.e.g. People's community Network in Lagilagi, Jittu Estate, Suva)
- Provision of social welfare services in assisting urban poor
- Pollution control methods are implemented in Fiji (.e.g Anti- Litter Law)
- Government incentives on agricultural products
- Land reclamation and Vertical expansion
- Government 's initiative on self-employed projects
- Environment Department in collaboration with NGO's (Green Steps) organizes environmental awareness and clean-up campaigns to deal with urban pollution
- Kolkata Metropolitan Development Authority (CMDA) in India was set up to make bustees more habitable by paving allies, digging extra drains & providing more taps and public toilets
- CMDA (in Kolkata) had provided two lane under pass to ease traffic congestion
- Kolkata Government is working towards phasing out old (<15yrs) commercial vehicles to combat air pollution
- Auto emission testing is strictly monitored in Kolkata

SECTION B

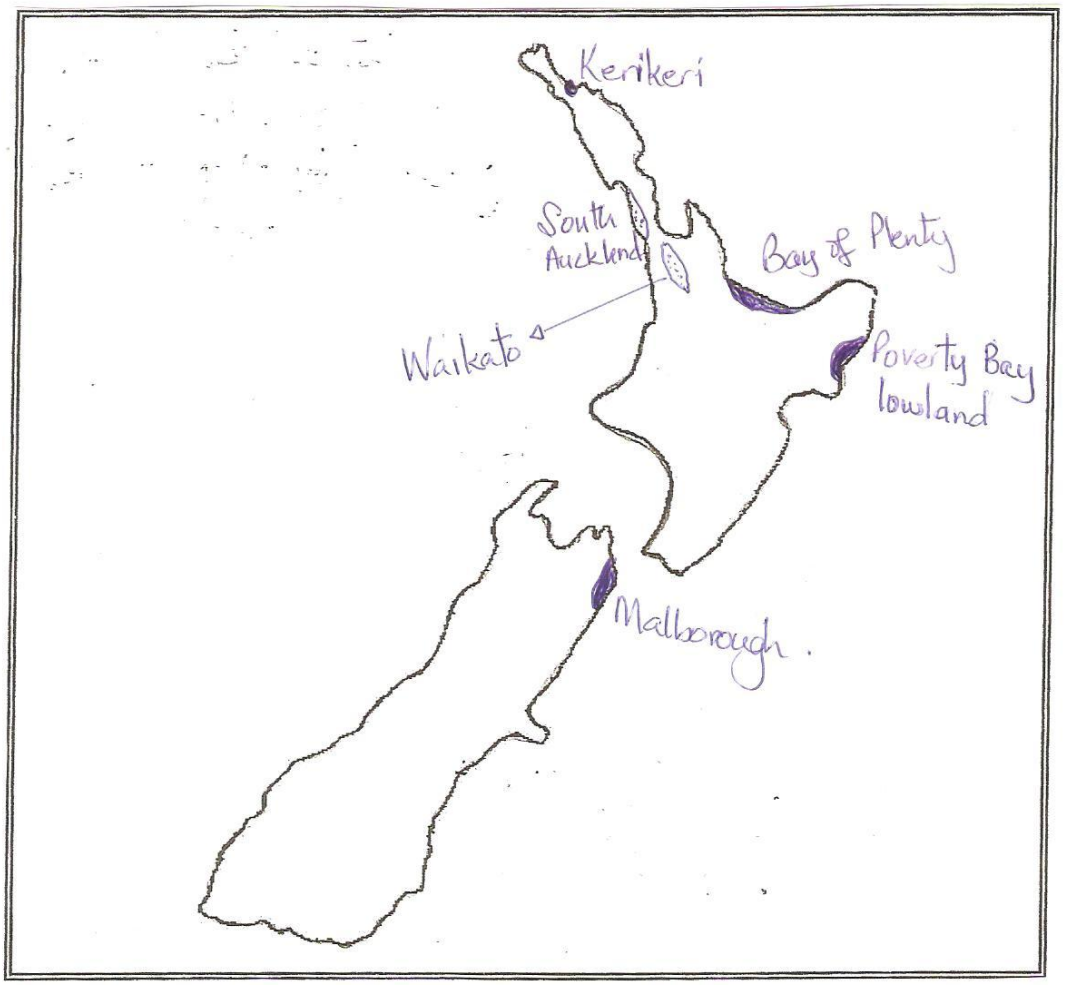
Question 4 **Agriculture and Food Production - Fiji and New Zealand**

A. Mapping

(a) (i) Labasa
(ii) Beef Cattle
(iii) Yaqona, dalo
(iv) Vunidawa/ Serea/ Nabaitavo

(1/2m for any correct answer)

(b)



Key:

a citrus fruit growing area

The largest dairy region with approximately 30% of New Zealand dairy cows

(½ m correct location, ½ m correct name, - ½ m undershading/overshading/ no key)

B. Resource Interpretation

(i) *Activity*: Aerial topdressing
Product: fertilizers, seeds, herbicides

(1m for activity & 1m for product)

(ii) *Advantage:* provide farmers with effective means of improving remote & steep farmland/ better quality of spread across the property increases the productivity of the pasture/ less likelihood of fertilizer becoming wet or unspreadable due to capacity of aircraft to spread up to 5 times more tonnage a day/ no wheel tracks or compaction on the ground/ if rain develops, the aircraft can keep spreading have fertilizer out on the ground where it is of most benefit to the farmer/ fertilizer is tipped in one area as compared to several for ground spread

Disadvantage: expensive exercise which most farmers cannot afford, product incompatibilities may cause problems.

(1m for 1 advantage & 1m for 1 disadvantage)

C. Short Answers

(i) Expiry of cane leases/ lack of confidence in the sugar industry/ decline of sugar industry/ inability of sugar industry/ reduction in the price of sugar

(2m for 2 correct answers)

(ii) *Weather* – inadequate rain & sunshine leads to low crop yields and too much rain and wind & rain results in erosion & low crop yields
Soil – poor soil leads to low crop yields
Technological improvement – more food produced, increases efficiency & transport (effective)
Consumer demand – high consumer demand/ preferences leads to increase in supply

(2m for 2 correct factors)

D. Definitions

(i) **Hydroponic** – growing of plants in water containing dissolve nutrients rather than in soil (process used in soil (process used in Greenhouse for intensive off season production)
(ii) **Herbicide** – any agent or chemical used to destroy plants especially weeds
(iii) **Silviculture** – branch of forestry dealing with the development and care of forest
(iv) **Feed grain** – any of several grains mostly commonly used for livestock or poultry feed, including corn, grain, sorghums, oats, rye and barley.

(1m for 1 correct definition, no mark for examples)

E. Essay

Marking Criteria
Relevancy – 3 marks (1 ½ m =3 roles & 1 ½ m = 3 methods)
Example – 2 marks
Logic – 2 marks
Introduction – ½ mark
Conclusion – ½ mark

Sustainable Agriculture – is an ecologically sound and economically viable, social just and humane agricultural system where soil conservation and integrated pest management are essential for sustainability.

- One that over the long period of time enhances environmental quality and the resource base on which agriculture depends to provide for basic human food and fiber needs; is economically viable and enhances the quality of life for farmers and society as a whole.

Role/ Importance of sustainable agriculture

- Protect resources while ensuring productivity
- Reduce the effect of agricultural practices on the environment
- Minimize off-farm input like fertilizers and pesticides
- Maximize on-farm resources like nitrogen fixation by legumes
- Optimum and profitable yields based on reduced input costs
- Erosion and polluted runoff is reduced, thus enhancing the resource while protecting the environmental quality
- Ensure water and soil management.

Methods to achieve sustainability

- Crop rotation – growing crops in a different location in a systematic sequence
- Conservation tillage – a farming method that provides for seed germination, plant growth and weed control yet maintaining effective ground cover throughout the year and disturb the soil as little as possible.
- Aims to reduce soil loss and energy use while maintaining crop yields and quality
- Cover cropping – growing of crops closer to the ground for the purpose of protecting the soil from soil erosion and for increasing production
- Nutrient management – proper use of nutrients/ fertilizes on the soil
- Crop irrigation
- Rotational grazing
- Grass planting
- Agro-forestry

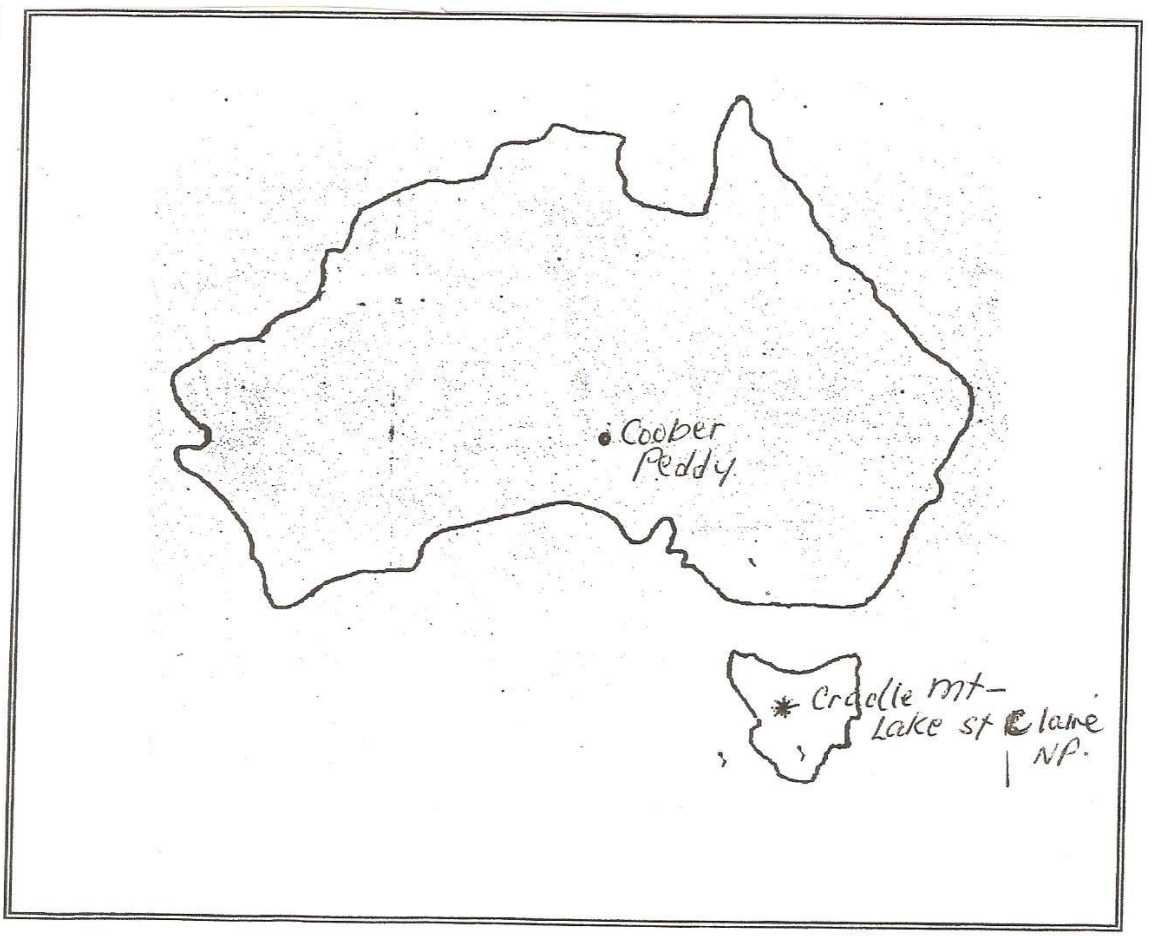
Question 5 **Tourism – Fiji and Australia**

A. Mapping

(a) (i) Navala Village
(ii) Astrolobe Reef
(iii) The Fijian Resort & Spa/ Shangri-La's Fijian Resort
(iv) Mamanuca Group

(1/2m for any correct answer)

(b)



Key: A national park in Tasmania

Australia's biggest and oldest opal mining town

(½ m correct location, ½ m correct name, - ½ m undershading/overshading/ no key)

B. Resource Interpretation

(i) Beach front accommodation, restaurant & bar, jet ski tours, water sports

(2m for 2 products/ services)

(ii) *Target group* – mothers/couples/ business people/ young people/ young at heart
Importance – appeals to a niche market/ provides specialized services and products/ easier to generate interest of potential tourists/ cost effective

(1m for target group, 1m for importance)

C. Short Answers

(i) Illegal activities (.e.g. prostitution, drug trafficking, child labor, pornography, etc)
Overcommercialisation of culture/ loss of cultural species
Soil erosion (esp. in arid regions/areas/landslide
Exploitation of wildlife/ loss of good agricultural land

(2m for 2 impacts)

(ii) Amount of leisure time available
Information and awareness about tourism locations
Appeal or attraction of alternative destinations to the country of residence
Economic conditions of the resident country including the level of disposable income
Cost of transportation
Accessibility

(2m for 2 correct factors)

D. Definitions

(i) **Tour wholesalers** – a company which organizes tours & sells them through tour operators
(ii) **Road shows** – a promotional presentation/ tour by a touring group to attract potential tourists
(iii) **Controlled tourism** - ensuring that traditional values and norms are preserved and enriching cultural rituals, folklores, artifacts, etc.
(iv) **Tourist markets** – countries where tourists come from

(2m for 2 correct definitions, no mark for examples)

E. Essay

Marking Criteria
Relevancy – 3 marks (1 ½ m =3 problems & 1 ½ m = 3 minimizing problems)
Example – 2 marks
Logic – 2 marks
Introduction – ½ mark
Conclusion – ½ mark

Problems

- Hostile environment
- Natural hazard
- Industrial disputes of airline and tourism workers
- Differences between hoteliers and landowners
- Lack of tourism attraction
- Poor infrastructure
- Political instability
- High crime rate

Ways problems could be minimized

- Helpful to visitors
- Respectful and enthusiastic in the visitors company
- Accommodating
- Honest with their dealings
- Be clean and hygienic
- Provide interesting activities
- Provide security to visitors by eliminating criminal elements in the society/ area
- Government to be heavily committed to developing tourism
- Local business entrepreneurs to give affordable costs to services or goods offered to visitors and wide range
- Develop and upgrade local infrastructure to cope with the increase in visitors number
- Develop and upgrade local attractions
- Create a friendly environment

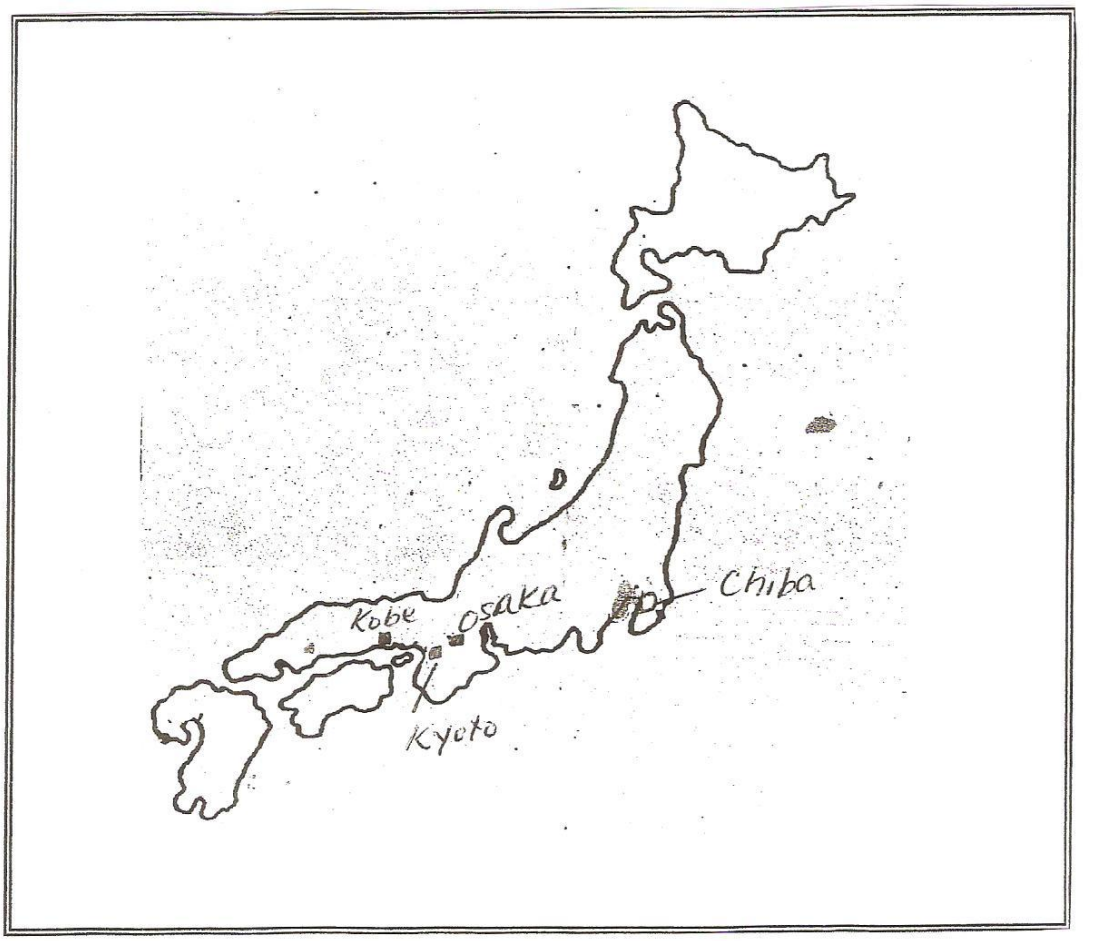
Question 6 **Industrialization – Fiji and Japan**

A. Mapping

(a) (i) Bua
(ii) Pacific Green
(iii) Copper/ forest/ milk
(iv) Fiji Water

(1/2m for each correct answer)

(b)



Key: ○ the Chiba iron and steel industry

■ An industrial city in the Hanshin region

(½ m correct location, ½ m correct name, - ½ m undershading/overshading/ no key)

B. Resource Interpretation

(i) More space/ nearby motorway/ lower overhead cost
Accessibility to raw materials
Cheaper land on urban property
Easier disposal of waste products (into atmosphere and nearby river)
Diversity of enterprise or a wider range of operations can be conducted

(2m for 2 advantages)

(ii) Multiplier effect
Development of infrastructure
Employment opportunities
Accessibility to basic amenities
Improved living standard

(2m for 2 reasons)

C. Short Answers

(i) Leads to growth in GDP
Increase in employment opportunities/ access to external markets
Improvement in standard of living/ efficient allocation of resources
Strengthens productivity

(2m for 2 advantages)

(ii) By increasing access to economic resources/ providing a secure market for export goods/ multiplier effects

(2m for 2 correct answer)

D. Definitions

(i) **Trade deficit** – more imports less exports/ when a country spends more on its imports
(ii) **Spin off effect** – success of one industry leads to growth of other industries
(iii) **Government incentives** - measures taken by a government to attract development of industry in specified areas
(iv) **Comparative advantage** – situation in which a company can produce a good at a lower opportunity cost than a competitor

(2m for 2 correct definitions, no mark for examples)

E. Essay

Marking Criteria
Relevancy – 3 marks (1 ½ m =3 impacts & 1 ½ m = 3 sustainable methods)
Example – 2 marks
Logic – 2 marks
Introduction – ½ mark
Conclusion – ½ mark

Impact of Industrial Development on the Environment

- Vegetation clearance
- Loss of habitat (.e.g. forests, mangroves)
- Coastal erosion
- Water, air & land pollution
- Industrial pollutants in waterways leads to eutrophication
- Factory waste released into the sea kills fish and seabirds
- Air pollutants from factories contribute to global warming
- Siltation and sedimentation due to industrial construction
- Land reclamation
- Global warming and destruction of ozone layers

Sustainable methods industries can adopt

- Reduce, reuse and recycle waste products
- Treat domestic wastes before disposing into sea
- Use manufacturing process and products which require less energy
- Use alternative energy sources (.e.g solar, wind, bio-energy, etc)
- Design impact measures
- Desulphurization of coal energy source

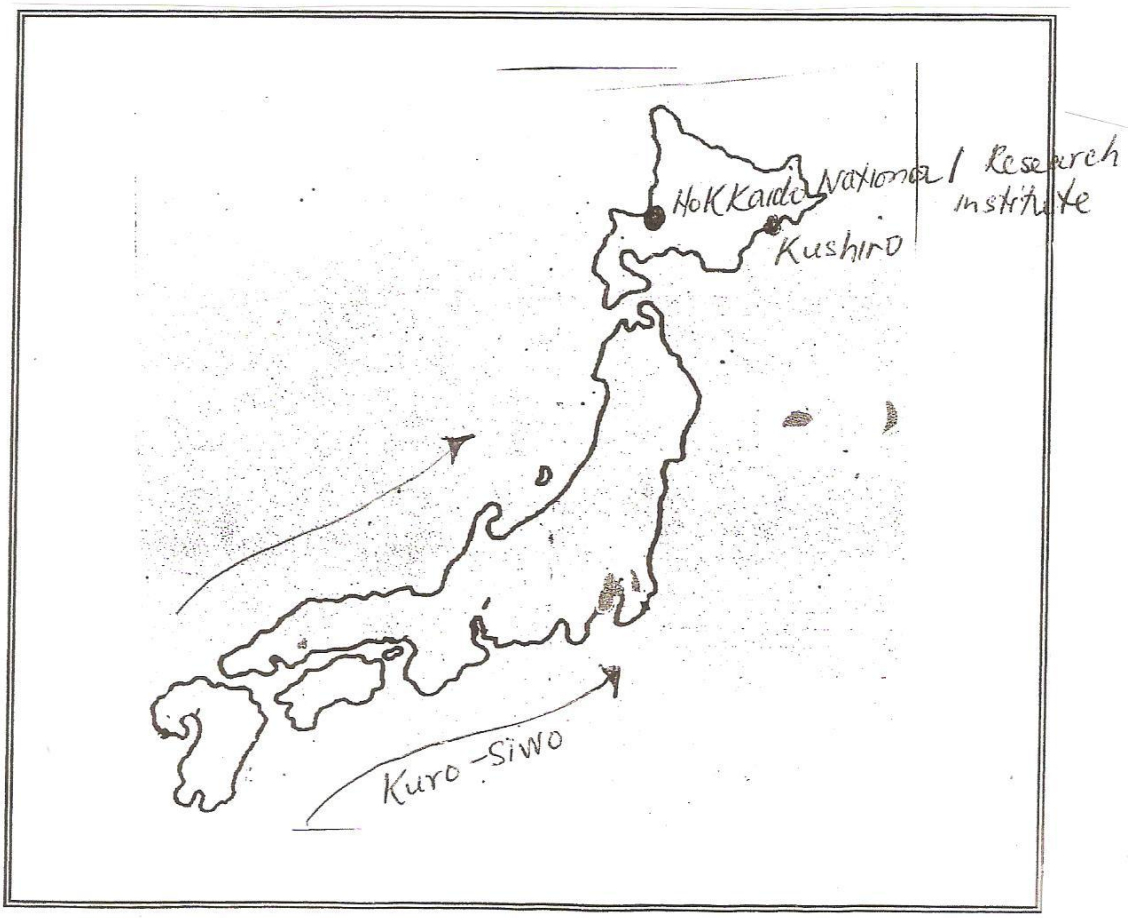
Question 7 **Marine Resources – Fiji and Japan**

A. Mapping

(a) (i) Lautoka/ Queens Wharf
(ii) Pacific Harbor/ Deuba
(iii) Nadurulolou
(v) Pearl

(1/2m for any correct answer)

(b)



Key:

The national fisheries research station on Hokkaido

Direction of warm current that causes upwelling

(½ m correct location, ½ m correct name, - ½ m undershading/overshading/ no key)

B. Resource Interpretation

(i) Tuna – long line, pole & line , purseine

(1m for resource, 1m for fishing method)

(ii) Requires highly sophisticated & expensive gear/ uses large fishing vessels, uses advance technology

(2m for correct explanation)

C. Short Answers

(i) Allows for better management policies & development options/ helps propose improved techniques for the detection and capture of fish/ contribute towards efficient fishing because it helps us become aware of the status of our fishery resources/ help stakeholders become aware of how much fish stock is out there, whether certain resources are overexploited and plan accordingly

(2m for correct explanation)

(ii) Offshore fisheries is fishing conducted within a country's EEZ while distant water fisheries is fishing operated in waters within the EEZ of another country.

(2m for correct explanation)

D. Definitions

(i) **Trawling method** – method of fishing where a large bag shaped net is dragged along the sea bed

(ii) **Endangered species** – species that are at risk of becoming extinct due to reduction in its population

(iii) **Coral bleaching** – phenomenon affecting coral reefs by which they lose their natural color due to high water temperature or pollution

(iv) **Traditional fishing ground** – areas of fishing owned by village mataqali/ clans.

(2m for 2 correct definitions, no mark for .e.g.)

E. Essay

Marking Criteria
Relevancy – 3 marks (1m =description of ecosystem & 2m = 4 reasons for conservation)
Example – 2 marks
Logic – 2 marks
Introduction – ½ mark
Conclusion – ½ mark

Description of marine ecosystem

Mangrove forests

- A group of trees & shrubs which grow along the inter-tidal zone
- They are found in estuaries, sheltered bays and riverine systems influenced by tidal movements
- Mangroves are inundated by tides and are therefore in near constant water-logged state
- Trees are salt tolerant

Coral reefs

- They consist of hundred small animals called polyps
- The polyps live together in a group or colony
- When coral polyps die, new ones grow above the skeletons building the reef upwards & outwards
- Corals grow best in tropical areas due to the presence of warm sea temperatures (at least 20 degrees Celsius), sunlight & clear oxygenated water
- There are 3 types of reefs; fringing, barrier and atolls.

Seagrass beds

- Are various seaweeds that grow underwater in shallow beds
- Provides a protective environment in which young fish can develop
- They grow between the mangrove and coral reef systems

Reasons we need to conserve these ecosystems

Mangroves

- They are a nursery to juvenile fish
- Habitat to many marine organisms, birds, insects, etc
- Prevent coastal erosion'
- Source of food and income
- Source of firewood, medicine housing material, etc.

Coral Reefs

- Help build beaches and shorelines
- Provide coastal protection by acting as a wave breaker
- Provide shelter, nutrition & habitat to the world's fisheries resources
- Provide safe fishing areas for people
- Act as a navigational landmark which help direct ships at sea
- Tourist attractions therefore generating income
- Source of medicine, ornaments, cement, etc.

Seagrass beds

- Stabilizes sediment that would otherwise settle on corals
- Protective nursery for numerous reef fish