Secondary One Express

Geography

2012

1	**Ang Mo Kio Secondary School**	**SA1**
2	**Chij St Joseph's Convent**	**SA1**
3	**First Toa Secondary School**	**SA1**
4	**Riverside Secondary School**	**SA1**

2013

1	**Ang Mo Kio Secondary School**	**SA1**
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3	**Dunman Secondary School**	**SA1**
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5	**Riverside Secondary School**	**SA1**

Click on the above Hyperlinks or open up the Bookmarks for easy navigation

Name	Class	Index No.

ANG MO KIO SECONDARY SCHOOL
MID YEAR EXAMINATION 2012
SECONDARY 1 EXPRESS

GEOGRAPHY

Total Mark: 100 **10th May 2012/ Thursday**

Setter: Miss Linda Soh **1 hr 15 min**

Additional Materials: OTAS Sheet
Writing Paper

INSTRUCTIONS TO CANDIDATES:

1. This paper consists of 3 sections, A, B and C.

   Section A - Multiple-Choice Questions (MCQs) (15 marks)

   Section B - Part 1: Mapwork (15 marks)
   - Part 2: Basic Techniques (10 marks)

   Section C - Structured Questions (30 x 2 = 60 marks)

2. Answer **ALL** the questions in Section A and B.

3. In Section C, you are required to answer **TWO** questions:
   - **Question 19 is a compulsory question**
   - **Choose either Question 20 or Question 21**

4. Answers are to be written as follows:

Section A: MCQ	• on OTAS
Section B: Mapwork	• on writing paper provided
Basic Techniques	• Start **each question** on a fresh side of the writing paper
Section C: Structured Questions	

5. **Submission should be as follows:**
   (1) OTAS sheet (2) Cover Page + Section B + Section C

This document consists of 17 printed pages, including the cover page.

[Turn Over]

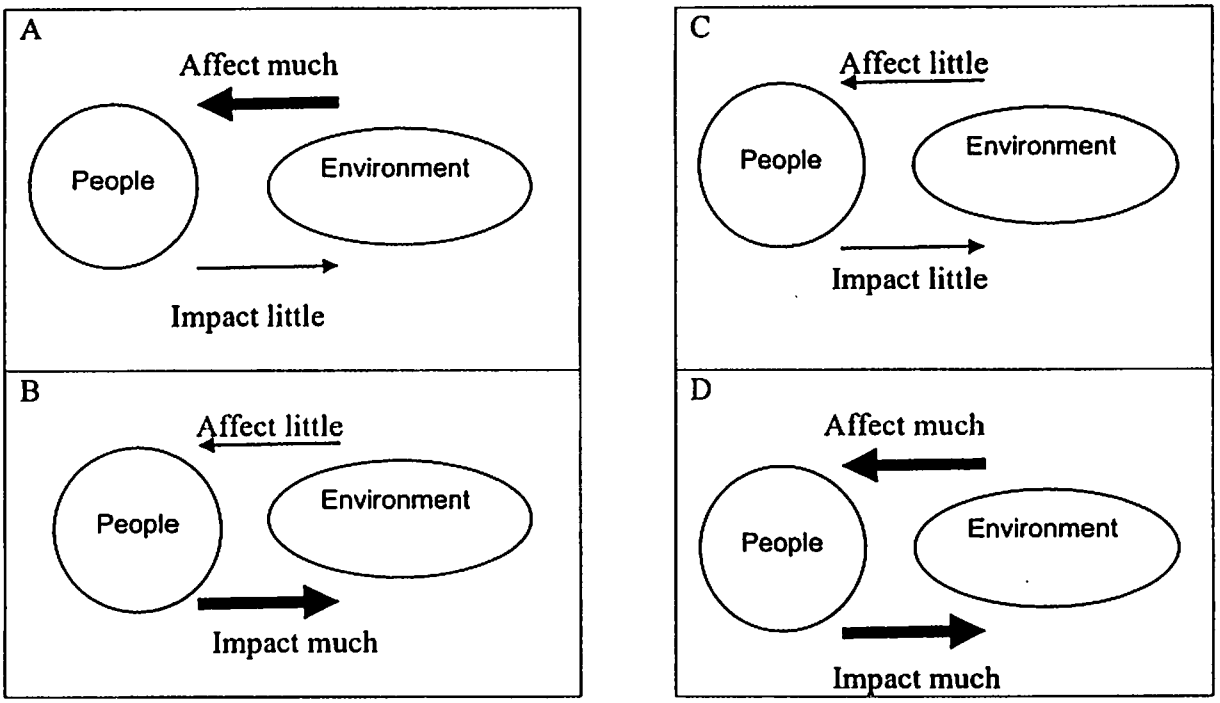
SECTION A: Multiple Choice Questions (15 marks)

Choose the most appropriate answer and shade the correct oval A, B, C or D in the OTAS sheet provided.

1. Which of the following is an example of a physical environment?

   A. Botanic Garden
   B. Colorado River
   C. Marina Bay Sands
   D. Oil palm plantations ( )

2. Which of the following diagram shows the most appropriate inter-relationship between people and the environment?



( )

3. Which of the following is **not** a human activity that causes changes to the physical environment?

   A. Deforestation
   B. Mining
   C. Pollution
   D. Tsunami ( )

4. Which of the following statement about the Earth is correct?

A. Earth has a shorter orbit than Mercury.
B. Earth is much bigger than Jupiter.
C. Earth is the only planet that is able to support life.
D. Earth is the planet that is nearest to Sun ( )

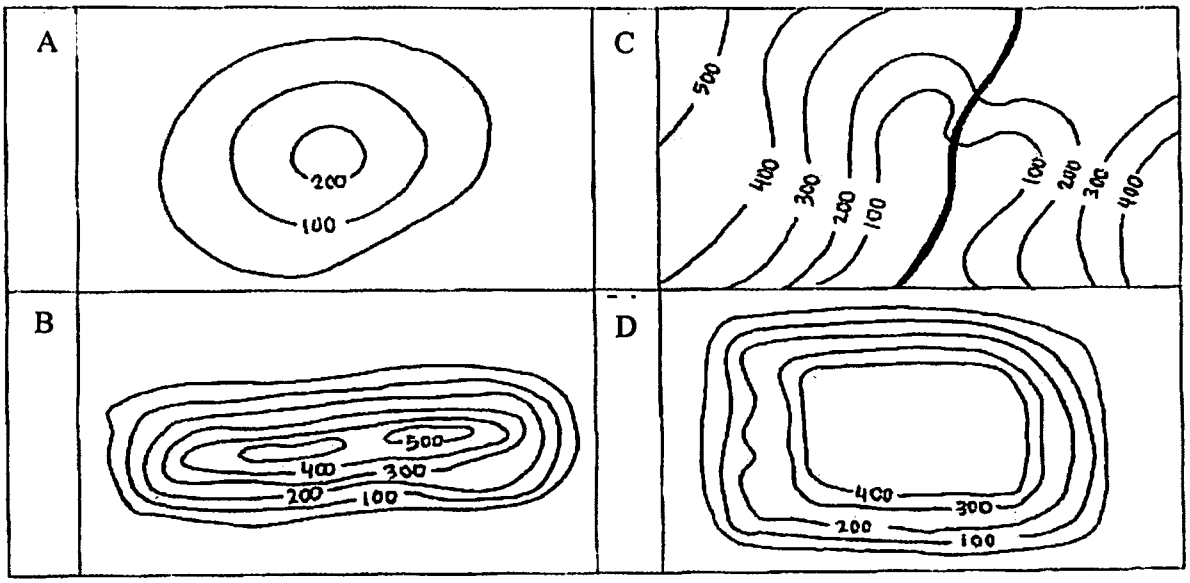
5. Why does the Sun appear to rise in the east and set in the west?

A. It is because the Earth rotates westward.
B. It is because the Earth rotates eastward.
C. It is because the Sun rotates westward.
D. It is because the Sun rotates eastward ( )

6. Contour lines which are close together represent _____.

A. a gentle slope on a map
B. a hill on a map
C. a lowland area on a map
D. a steep slope on a map ( )

7. Which of the following shows a plateau?



( )

8. What is normally used to locate a place in an atlas?

A. grid references
B. letter-number system
C. latitudes and longitudes
D. lengths and widths ( )

9. Which of the following correctly shows 1cm on the map represents 1km on actual ground?

A. 1:100
B. 1:1000
C. 1:10000
D. 1:100000

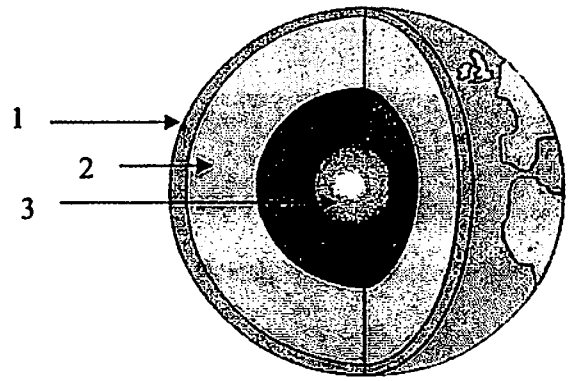
( )

10. Which is the **most** accurate way to locate Singapore on the map?

A. Singapore is located at 1°N, 103°E.
B. Singapore is located at the centre of South-East Asia.
C. Singapore is located in the Northern Hemisphere.
D. Singapore is located to the South of Peninsular Malaysia.

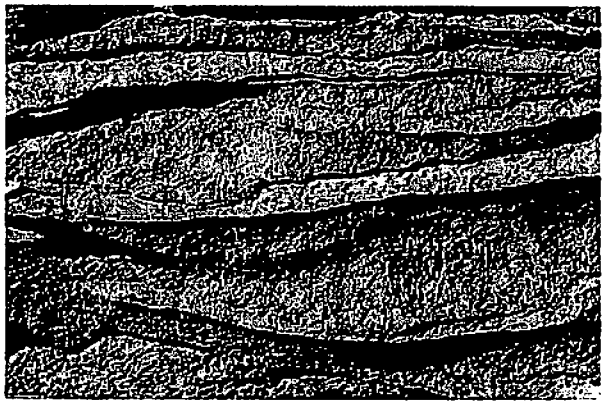
( )

11. Figure below shows the structure of the Earth.



	1	2	3
A.	Crust	Mantle	Core
B.	Core	Crust	Mantle
C.	Mantle	Core	Crust
D.	Mantle	Crust	Core

12. What is the rock type shown in the picture below?



A. Igneous
B. Metamorphic
C. Molten
D. Sedimentary

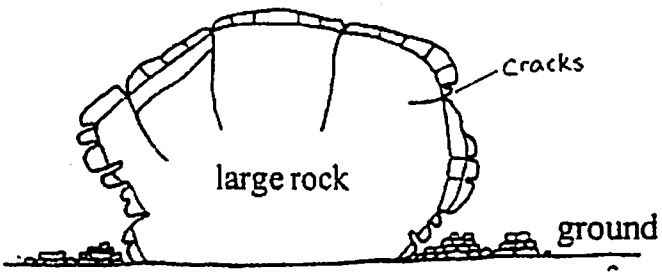
( )

13. Which of the following indicates that movement of the Earth's plates is still going on?

A. Landslides
B. Occurrence of earthquakes
C. Occurrence of storms
D. Weathering of mountains

( )

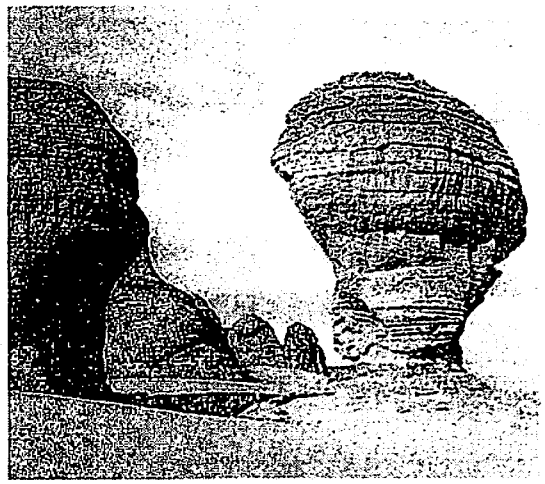
14. The figure below shows a rock being broken down through a weathering process.



Which of the following is a likely location for this weathering process to take place?

A. Antarctica
B. Amazon rainforest
C. Pacific Ocean
D. Sahara Desert ( )

15. The figure below shows a rock found in the desert.



Which of the following best explains why only the base of the rock was eroded?

A. The water level was only high enough to reach the base of the rock
B. The sand is heavy and cannot be blown to a high level in the air.
C. The strength of the wave is too weak to erode other parts of the rock
D. The erosion process is too short for the entire rock to be fully eroded

( )

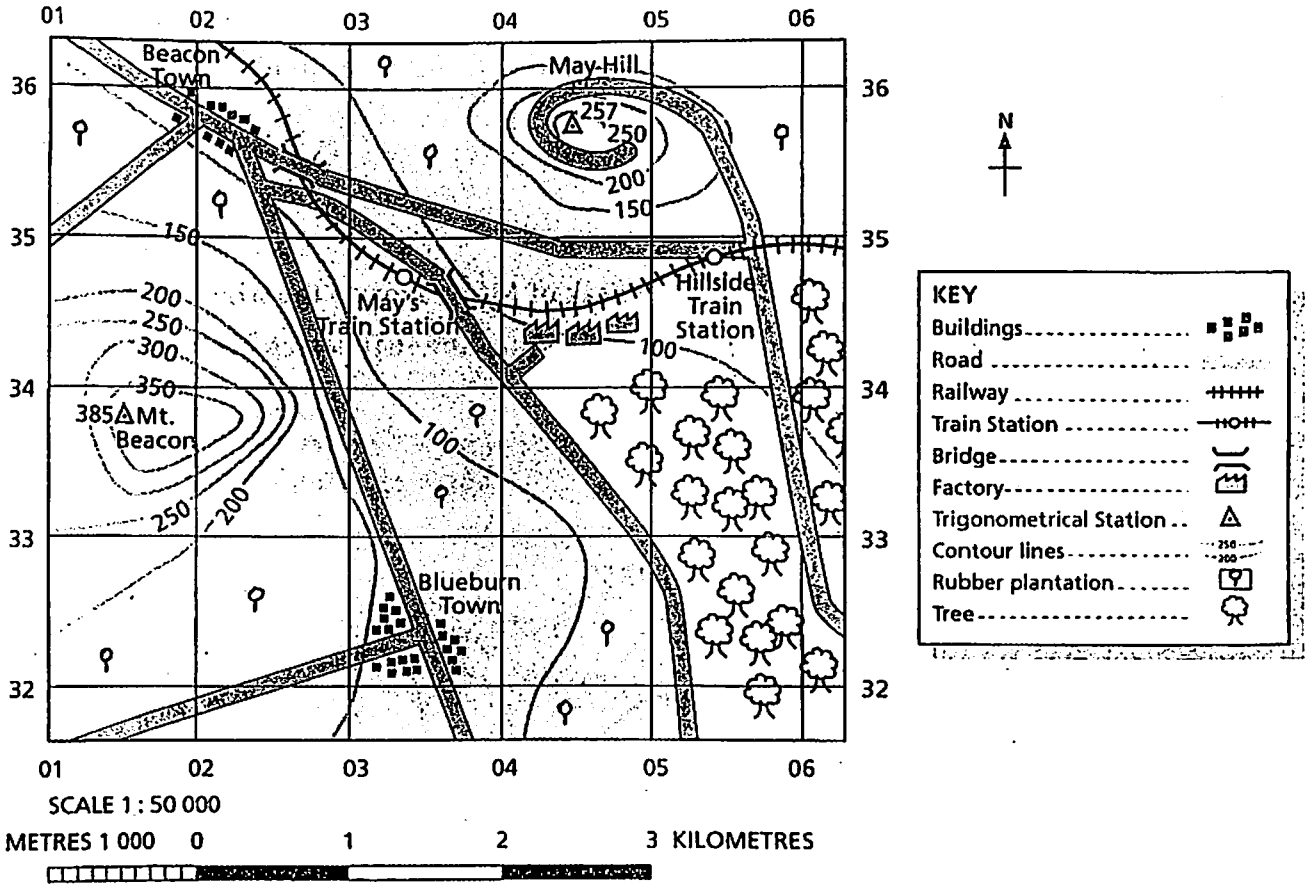
SECTION B: Mapwork and Basic Techniques (25 marks)

Answer Section B on the writing paper provided. Start each question on a fresh side of the writing paper

Part 1: Mapwork (15 marks)

16. Refer to Map 1 below and answer the following questions on the writing paper provided.

Blueburn Town



Map 1

(a) What is the contour interval shown on the map? [1]

(b) What does ++++ represent? [1]

(c) Identify a **physical** and **human** feature on the map. [2]

(d) What is the highest point on the map? [1]

(e) Give the 4-figure grid reference for Hillside train station. [1]

(f) Give the 6-figure grid reference for the trigonometrical station on Mt Beacon [1]

(g) What is the straight line distance from the peak of Mt Beacon to the peak of May Hill? Show your working and show your answer in km. [2]

(h) If you took a train from May's Train station towards Beacon Town, in which general direction would the train be moving? [1]

(i) What is the compass bearing of the trigonometrical station at Mt Beacon from the trigonometrical station at May Hill? [1]

(j) What type of work would probably be carried out in the factories shown on the map? [1]

(k) Why are towns built at intersections of roads? [1]

(l) Why are there no rubber plantations or buildings found at May Hill and Mt.Beacon? [2]

Part 2: Basic Techniques (10 marks)

17. Study Table 1 below which shows the energy resources available in Japan

Resource	% of Japan's energy use	% of resource found in Japan	% imported from other countries	Countries that supply the resources
Coal	15	12	88	U.S.A.
Oil	29	0.2	99.8	Saudi Arabia
Gas	19	0.5	99.5	Indonesia
Uranium	24	0	100	Canada
Hydro-electric	7	100	0	-
Geothermal	5	100	0	-
Solar	1	100	0	-

Table 1

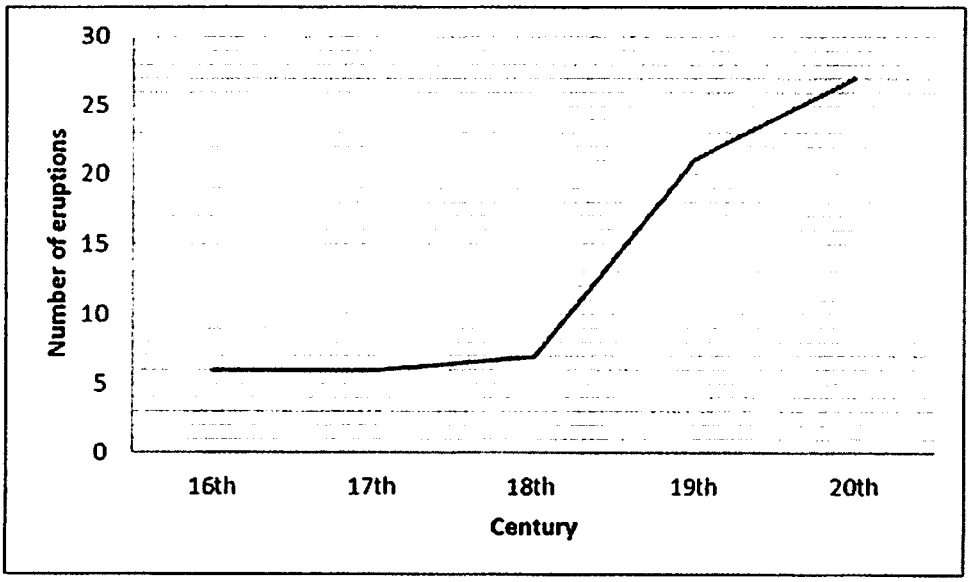
(a) State the resource used most in Japan? Support your answer with value from the table. [1]

(b) State one renewable energy resource found in Japan. [1]

(c) Identify the resource that is the least found and most imported in Japan. [1]

(d) Does Singapore have geothermal energy? Explain your answer. [2]

18. Graph 1 shows the number of eruptions which Mount Merapi experienced from the 16th century to the 20th century.



Graph 1

(a) State the number of eruptions that occurred in 16th century. [1]

(b) In which century were there around 21 eruptions? [1]

(c) Describe the trend for the occurrence of eruptions from 16th to 20th century. Use values from the graph to support your answer. [3]

SECTION C: Structured Questions (30 x 2 = 60 marks)

Answer a total of <u>two</u> questions in this section on the writing paper provided. Start each question on a fresh side of the writing paper

Question 19 is a compulsory question.

Answer either Question 20 <u>or</u> Question 21.

Each question is awarded 15 marks.

19. (a) Figure 1 below shows the distribution of volcanoes in the world.

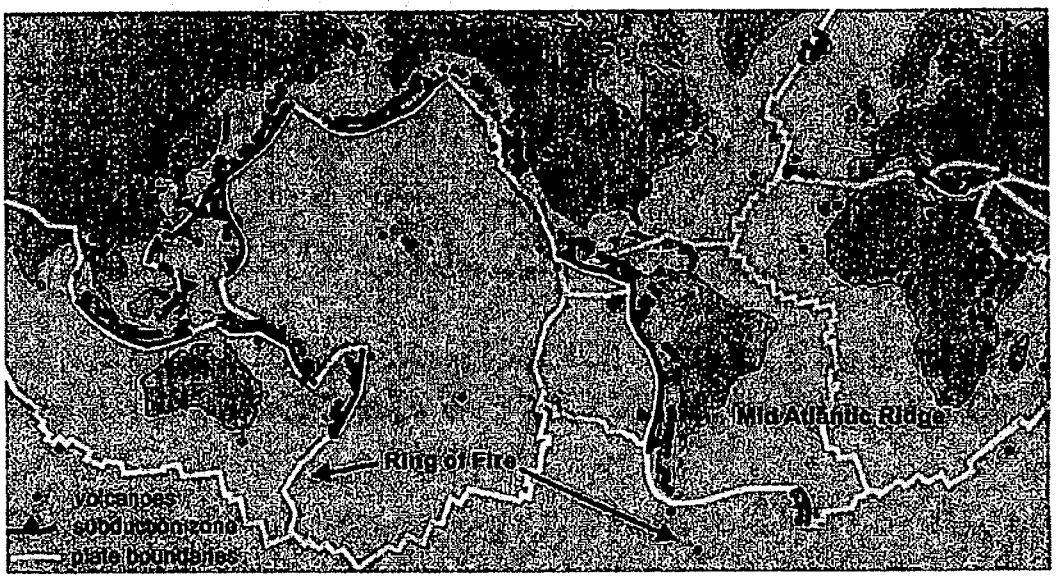


Figure 1

Describe the distribution of volcanoes. [1]

(b) Figure 2 below shows part of a volcano.

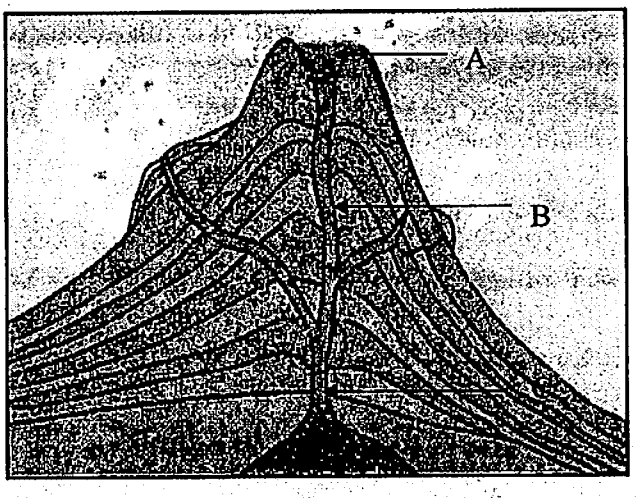


Figure 2

(i) Identify parts of the volcano, A, B and C. [3]

(ii) Explain the formation of a volcano. [5]

(c) Figure 3 is an article extract.

The Town where everyone wears a Mask

The high level of volcanic activity in Miyakejima caused poisonous gas to leak forced the 3,600 island residents to leave in 2000.

Miyakejima was surrounded in ash plumes reaching 10 miles in height, pyroclastic flow (fast flow of superheated gas), and heavy ashes. The disaster also led to high levels of toxic sulfur dioxide regularly leaking up through the ground, making 20% of the land not fit to live in. Therefore, after three months, the government forced a mass evacuation in September.

Regardless of the dangers, locals and tourists are in abundance. Gas mask tourism is an attraction for the region, with disposable masks sold at ferry stations and local stores. The volcanic destruction is also a money spinner, with sight-seeing tours of abandoned houses, flattened cars and a school gym half-destroyed by lava, as well as hot spring baths.

http://all-thats-interesting.tumblr.com/post/9575161609/the-town-where-everyone-wears-a-gas-mask

Figure 3

(i) With reference to Figure 3 and studies made, explain the advantages and disadvantages of living near a volcano. [4]

(ii) With reference to Figure 3 and studies made, explain ways to reduce the problems during a volcanic eruption? [2]

20. (a) Figure 4 shows the !Kung Bushmen who live in the Kalahari Desert of South Africa hunting for food and Figure 5 shows the buildings along Singapore River, an important river to Singaporeans.

Figure 4

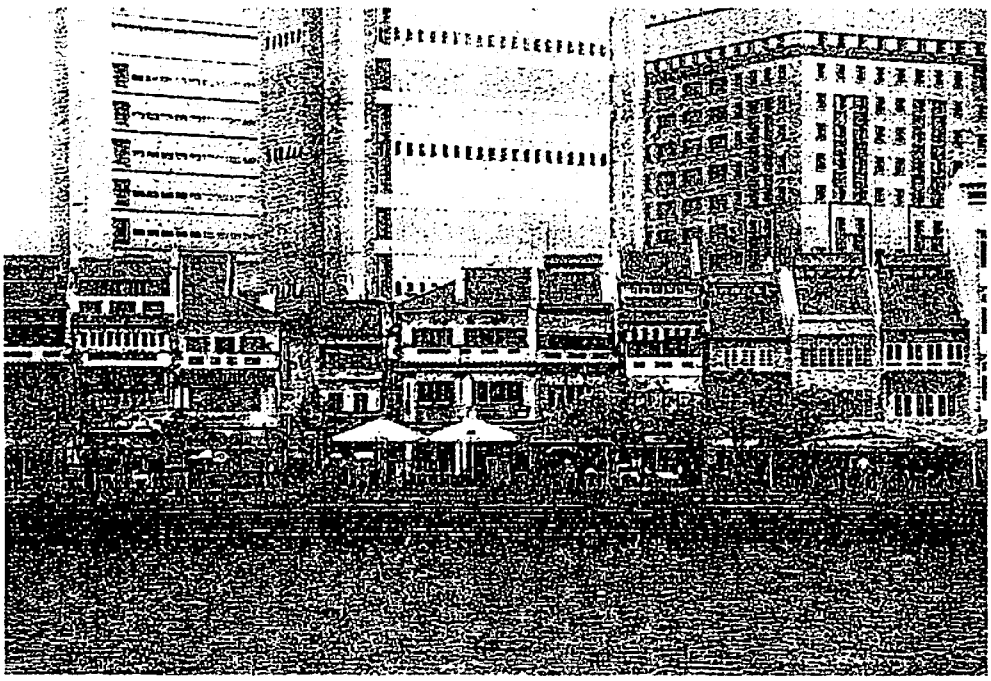


Figure 5

(i) With reference to Figure 4 and 5, compare the environment in Singapore and Kalahari desert. [2]

(ii) Compare the way of life of Singaporeans and !Kung Bushmen. [4]

(b) Figure 6 shows Man cutting down forests (deforestation) and the effects of deforestation.

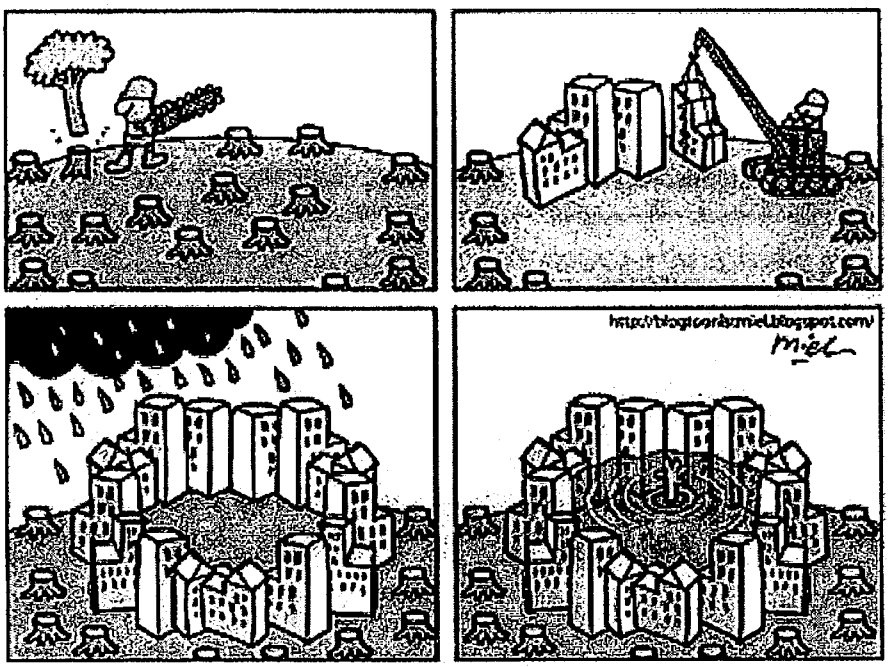


Figure 6

(i) Explain why Man need to carry out deforestation. [3]

(ii) Explain how deforestation affects the environment negatively. [4]

(iii) Describe how you can play a part in taking care of the Earth. [2]

21. (a) Figure 7 below shows a weathering process.

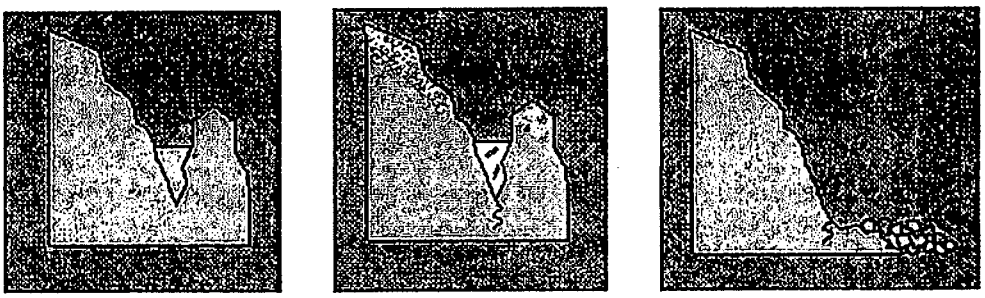


Figure 7

Describe the weathering process shown in Figure 7. [5]

(b) Figure 8 shows a cliff.

Figure 8

Is it possible to build a house on A as shown in Figure 8? Support your answers. [4]

(c) Figure 9 below shows the rock cycle.

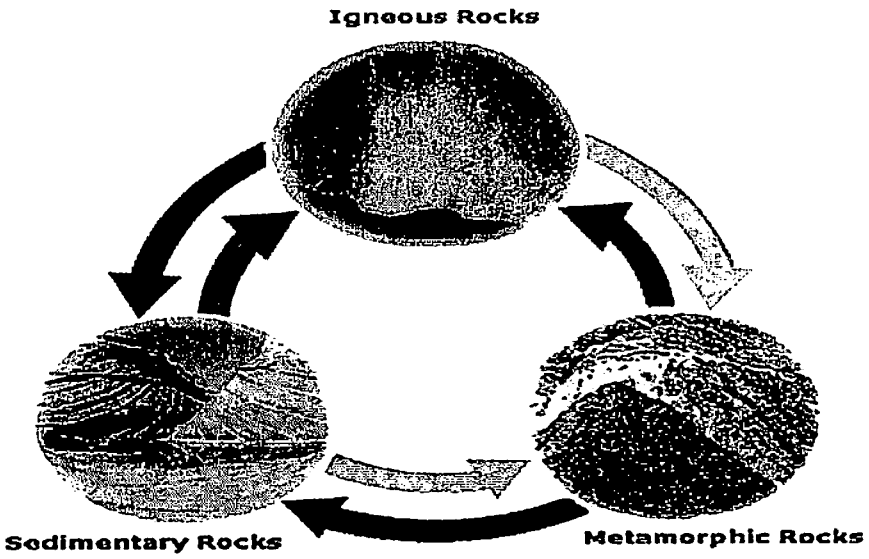


Figure 9

With the aid of Figure 9, explain the rock cycle. [4]

(d) Landforms such as mountains affect people in many ways. Explain **one** positive and **one** negative way in which they affect us. [2]

~ End of Paper ~

Check that you have answered the correct number of questions!

ANG MO KIO SECONDARY SCHOOL
MID YEAR EXAMINATION 2012
SECONDARY 1 EXPRESS

GEOGRAPHY

Total Mark: 100 **10th May 2012 / Thursday**

SECTION A: Multiple Choice Questions (15 marks)

1.	B	6.	D	11.	A
2.	D	7.	D	12.	D
3.	D	8.	C	13.	B
4.	C	9.	D	14.	D
5.	B	10.	A	15.	B

SECTION B: Mapwork and Basic Techniques (25 marks)

Part 1: Mapwork (15 marks)

16. (a) 50m [1]

(b) Railway [1]

(c) Physical feature is Tree/Hill/Mountain
Human feature is roads/railway/factory [1]

(d) 385m [1]

(e) 0534

(f) 015338 [1]

(g) 7/2= [1] [2]
3.5km [1]

(h) Northwest [1]

(i) 238/237/239 [1]

(j) Processing rubber [1]

(k) Highly accessible [1]

(l)
- Hill and mountain are too steep therefore difficult to plant or build buildings [2]

Hill and mountain are too high therefore difficult to travel.

Part 2: Basic Techniques (10 marks)

17.

(a) Oil with 29% [1]

(b) Hydroelectric/ Geothermal/ Solar [1]

(c) Uranium/oil [1]

(d)
- No. [2]
- Singapore does not lie along plate boundaries where there are lots of plate movements.

18. (a) 6 eruptions [1]

(b) 19th Century [1]

(c) From 16th century to 18th century, [3]
there were six to seven eruptions per century. [1]
This number rose sharply in the 19th century to about 21 eruptions,[1]
reaching its peak in the 20th century to about 27 eruptions. [1]

SECTION C: Structured Questions (30 x 2 = 60 marks)

19. (a) Most volcanoes can be found along the pacific plate/ring of fire/ along plate boundaries. [1]

(b) (i) A-crater, B-Pipe, C-Vent [3]

(ii)
- A volcano is a cone-shaped landform formed from the built up of lava that has reached the Earth's surface. [5]
- Magma below the Earth's surface experiences pressure when the plates move towards each other.
- Such movement causes the magma to force its way upwards through the vent in the Earth's crust.
- The lava then cools and solidifies around the vent.

Index Number	Class	Name

CHIJ ST JOSEPH'S CONVENT
SEMESTRAL ASSESSMENT 1

GEOGRAPHY

Secondary 1 Express

Wednesday, 2nd May 2012
1 hour 45 minutes

Additional Materials: Writing Paper

READ THESE INSTRUCTIONS FIRST

Write your index number, class and name on all the work you hand in.
Write in dark blue or black pen.
You may use a soft pencil for any diagrams or rough working
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

At the end of the examination, fasten all your work securely together.
Attach this Cover Page on top of all your answers securely.

The number of marks is given in brackets [ ] at the end of each question or part question.

FOR EXAMINER'S USE	
Section A	10
Section B	5
Section C	45
Total	60

This document consists of 8 printed pages.

Setter: Mr. Caleb Chua

[Turn over

SECTION A: MAPWORK [10 marks]

*Study the following questions in this section carefully. Answer **all** the questions on the writing paper provided.*

1 Figure 1 shows a world map.

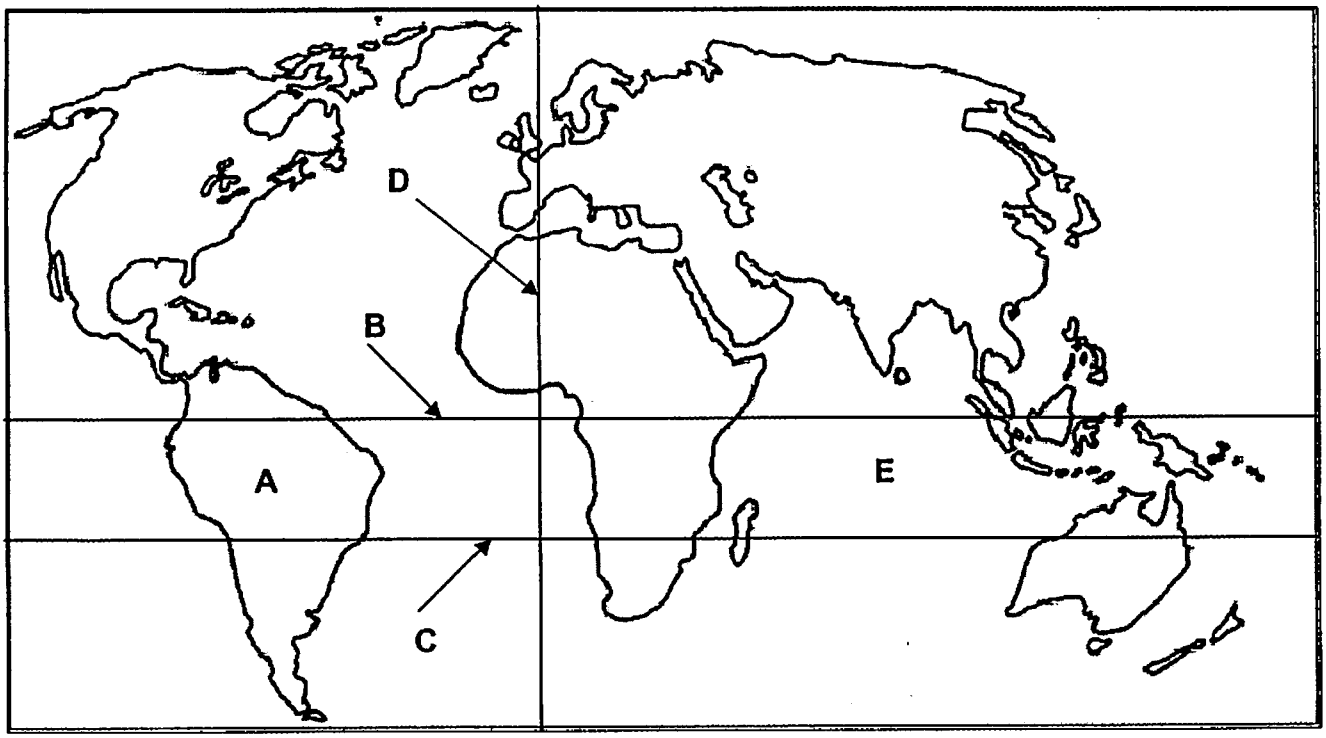


Figure 1

(a) Identify the continent labelled **A**. [1]

(b) Identify the latitude labelled **B**. [1]

(c) Identify the latitude labelled **C**. [1]

(d) Identify the longitude labelled **D**. [1]

(e) Identify the ocean labelled **E**. [1]

2 Study Figure 2 below which shows a coastal area.

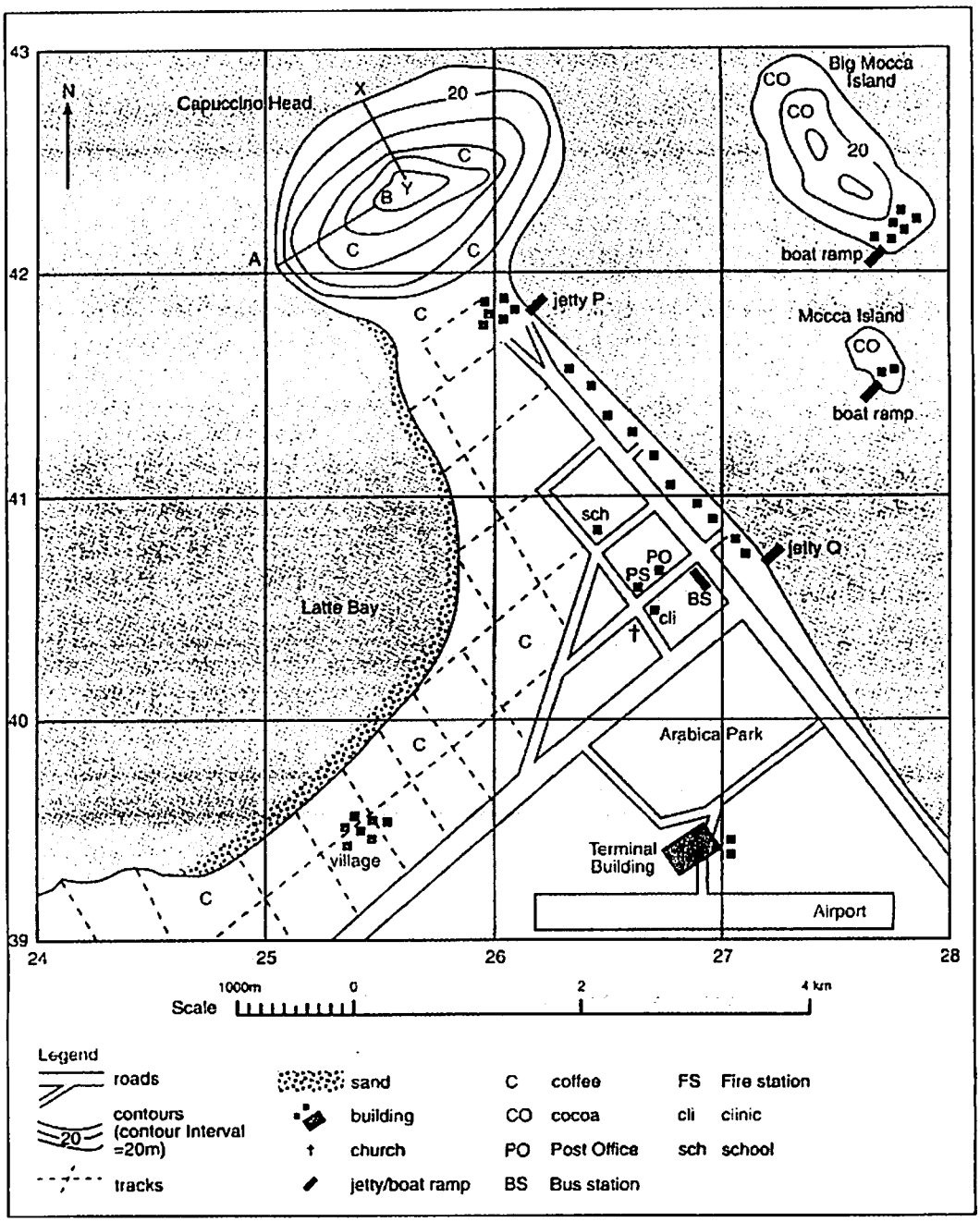


Figure 2

(a) Name the physical feature located in grid square 2741. [1]

(b) What is the 6-figure grid reference of **Y** at Capuccino Head? [1]

(c) Indicate the direction of Capuccino Head from Big Mocca Island. [1]

(d) Measure the bearing of jetty Q from jetty P. [1]

(e) Calculate the distance between jetty Q and jetty P in kilometres. Round up your answer to **TWO** decimal places. [1]

SECTION B: BASIC TECHNIQUES [5 marks]

Study the following questions in this section carefully and write your answers on the writing paper provided.

3 Study Figure 3 which shows the climograph of Country X.

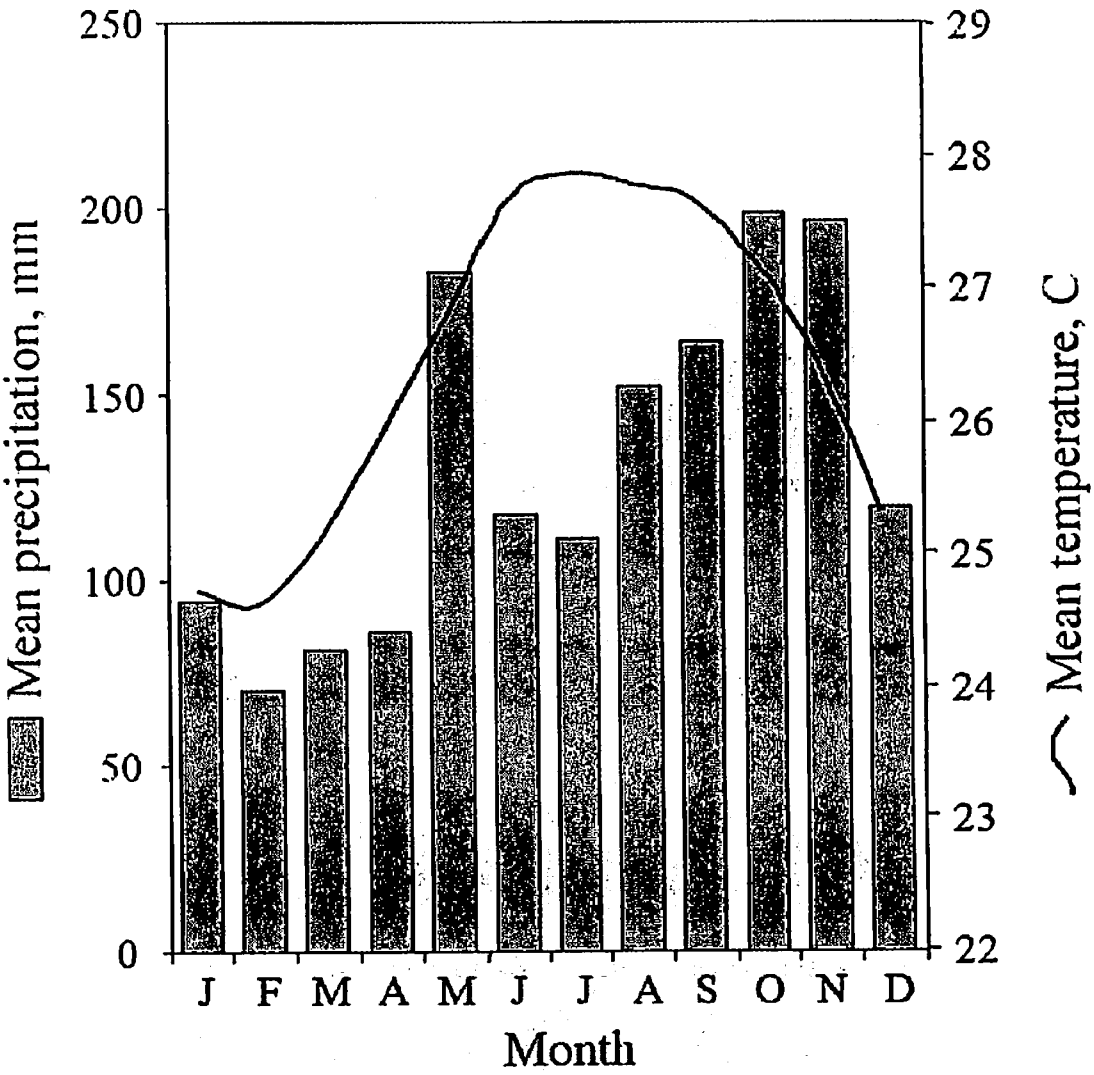


Figure 3

(a) What is the lowest temperature for Country X? [1]

(b) What is the highest temperature for Country X? [1]

(c) Calculate the temperature range for Country X. [1]

(d) In which month did Country X experience the highest rainfall? [1]

(e) What type of climate does Country X have? [1]

,21

SECTION C: STRUCTURED QUESTIONS [45 marks]

*There are three questions in this section. Study the questions carefully and answer **all** of them on the writing paper provided.*

4 (a) Figure 4 and Figure 5 show different environments.

Figure 4

Figure 5

(i) Identify the different environments shown in Figure 4 and Figure 5. [2]

(ii) Use evidence from Figure 4 and Figure 5 to support your answer. [4]

(b) Name **THREE** ways in which humans can destroy the fragile Earth. [3]

(c) If you were lost in the Kalahari Desert and need to live with the !Kung bushmen, how would you adapt your lifestyle to obtain the basic needs of food and shelter? [6]

5 (a) Figure 6 shows a weather instrument.

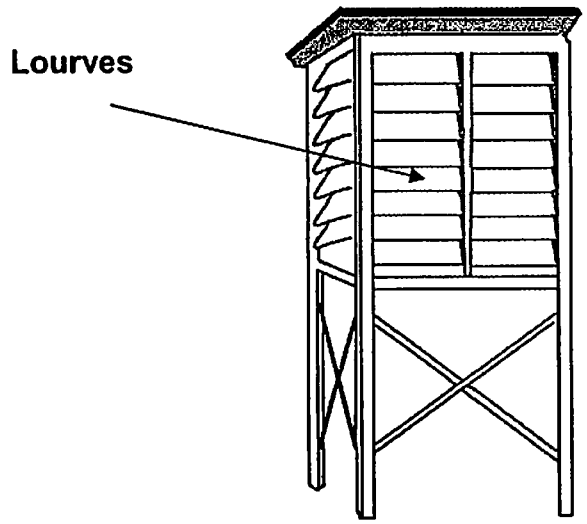


Figure 6

(i) Identify the weather instrument shown in Figure 6. [1]

(ii) List the instruments placed inside this weather instrument. [2]

(iii) Explain the function of the lourves. [2]

(b) (i) Identify the instrument shown in Figure 7. [1]

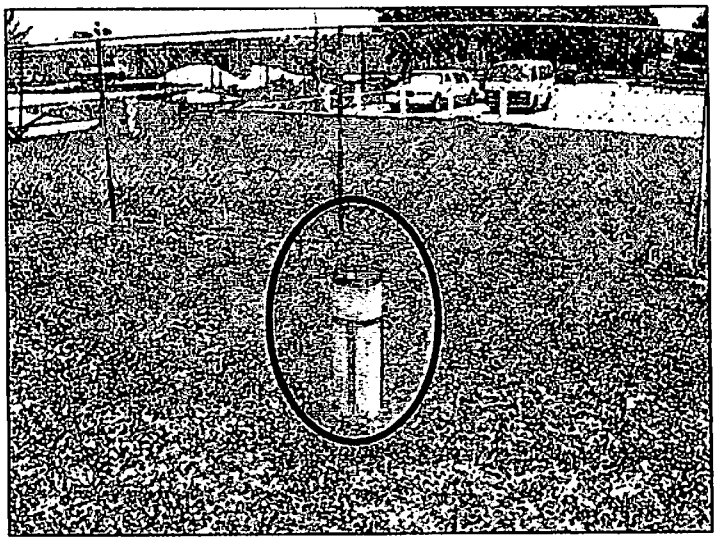


Figure 7

(ii) Explain why the instrument should **NOT** be placed near buildings and trees. [6]

(c) Where should a wind vane be placed? Explain your answer. [3]

123

6 (a) Study Figures 8 and 9 which show two different types of leaves.

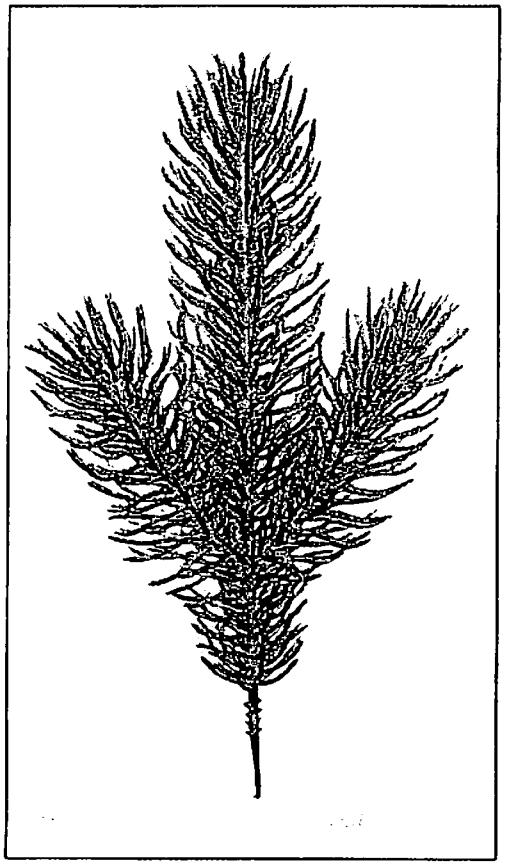


Figure 8

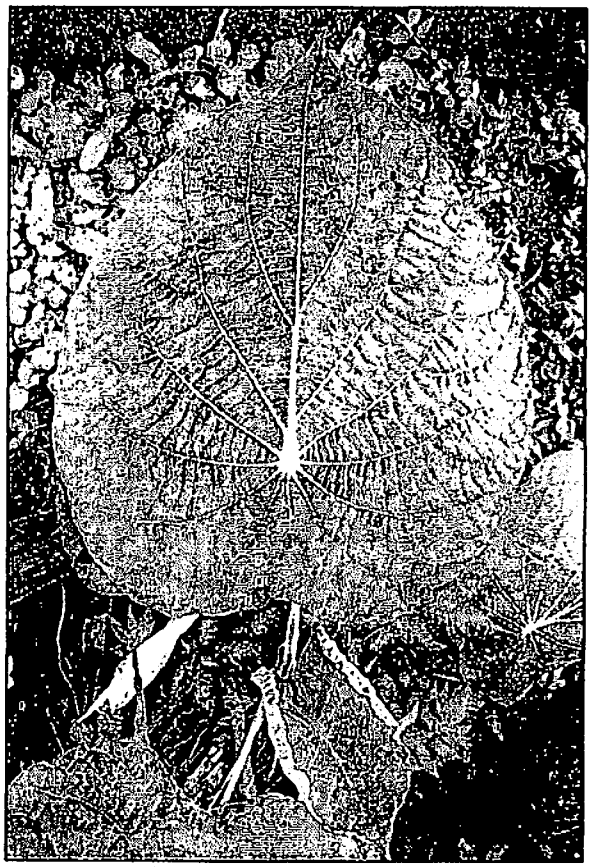


Figure 9

(i) Identify the types of forest in which the leaves in Figures 8 and 9 can be found. [2]

(ii) Describe the differences between the two types of leaves shown in Figures 8 and 9. [4]

(iii) Compare how the trees in the forests identified in a)(i) adapt to their surrounding. [6]

(b) Explain why the tropical rainforest is always dark and moist. [3]

- End of Paper -

Answer

1. Figure 1 shows the world map.

   (a) Identify the continent labelled A. [1]
   South America

   (b) Identify the latitude labelled B. [1]
   Equator

   (c) Identify the latitude labelled C. [1]
   Tropic of Capricorn

   (d) Identify the longitude labelled D. [1]
   Greenwich / Prime meridian

   (e) Identify the ocean labelled E. [1]
   Indian Ocean

2. Study Figure 2 below which shows a coastal area.

   (a) Name the physical feature located in grid square 2741. [1]
   An island / Ridge / Hill

   (b) What is the 6-figure grid reference of Y at Capuccino Head? [1]
   256424

   (c) What is the direction of Capuccino Head from Big Mocca Island? [1]
   West

   (d) What is the bearing of jetty Q from jetty P? [1]
   139^{0} +/- 2^{0}C

   (e) What is the distance between jetty Q and jetty P? Round up your answer to TWO decimal places. [1]
   2-94 to 3.13 km

3. Study Figure 3 which shows the climograph of Country X.

   (a) What is the lowest temperature for Country X? [1]
   $24.5/6^{0}$

   (b) What is the highest temperature for Country X? [1]
   $27.8/9^{0}$

   (c) What is the temperature range for Country X? [1]
   3.2^{0} - 3.4^{0}

   (d) In which month did Country X experiences the highest rainfall? [1]
   October

   (e) What type of climate does Country X have? [1]
   Tropical climate
   Hot & wet

4 (a) Figure 4 and Figure 5 show different environments.

(i) Identify the different environments shown in Figure 4 and Figure 5. [2]
Figure 4 – physical environment [1]
Figure 5 – human environment [1]

(ii) Use evidence from Figure 6 and Figure 7 to support your answer. [4]
Figure 4
It is surrounded by nature features like there is a plateau (any natural features) in the background [1]
In the foreground, it is a plain or flat ground [1]

Figure 5
Man had altered the environment by building roads and buildings [1]
There is sign of traffic or human activities [1]

(b) Name **THREE** ways in which human can destroy the fragile Earth. [3]
Any 3 answers below
- Mining [1]
- Deforestation [1]
- Burning of forest [1]
- Pollution [1]
- Releasing of harmful gases [1]
- Littering [1]

(c) If you were lost in the Kalahari Desert and need to live with the !Kung bushmen, how would you adapt your lifestyle to obtain the basic needs of food and shelter? [6]
Any 3 answer below
- I would have to learn to use simple weapons [1] to hunt for food [1].
- I would have to learn to identify different type of fruits [1] in order to gather food to eat [1].
- I would have to learn to use materials found in the surrounding [1] to build shelter [1]
- I would have to make use of things like ostrich egg [1] as container for water [1]
- Move from places to places to look for food [1]
- Collect twigs to make fire to keep warm [1]

5 (a) Figure 6 shows a weather instrument.

(i) Identify the weather instrument shown in Figure 6. [1]
Stevenson Screen

(ii) List the instruments placed inside this weather instrument. [2]
Any 2 answers below
- Maximum thermometer [1]
- Minimum thermometer [1]
- Wet bulb thermometer [1]
- Dry bulb thermometer [1]
- Barometer [1]

(iii) Explain what is the function of the louvres? [2]
To shelter the thermometers from the direct heat of the Sun [1] and allow air to circulate [1]

(b) (i) Identify the instrument shown in Figure 7. [1]
Rain gauge [1]

(ii) Explain why the instrument should NOT be placed near buildings & trees. [6]
It is because there are no obstructions [1] to block the rain [1]. This also prevent water from collected on the rooftops [1] or leaves of trees [1] from dripping into the rain gauge after a rain [1] which result in inaccurate readings [1].

(c) (i) Where a wind vane should be placed? Explain your answer. [3]
A wind vane is usually place on a high and open place [1]
There is very little obstruction [1] to the flow of wind [1].
Visible to people [1]

6. (a) (i) Identify the type of forest based on the leaves in Figure 8 and 9 can be found. [2]
Figure 8 – Coniferous forest [1] / Temperate forest [1]
Figure 9 – Tropical rainforest [1]

(ii) Describe the differences between the two types of leaves shown in Figures 8 and 9. [4]
Tropical Rainforest
Broad leaves [1] & drip tip [1]

Coniferous Forest
Small [1] & needle-like-shaped leaves [1]

(iii) Compare how the trees in the forests identified in a)(i) adapt to their surrounding. [6]

Tropical Rainforest	Coniferous Forest
Evergreen because the climate that support growth all year round [1]	Evergreen trees Allow photosynthesis all year due to short summer [1]
Broad leaves to absorb maximum sunlight [1]	Needle-like-shaped leaves Reduced surface area to minimizes water loss [1]
Thin bark no need to protect itself from cold & dry climate	Thick bark to protect the trees from the cold winter [1]
Shallow roots to tap water near top layer of soil [1]	Shallow roots to tap water when snow melts [1]
A dense forest with 3 layers [1]	A less dense forest with a single layer [1]
Needle-like leaves to allow snow to slip off to prevent branches from breaking [1]	Drip tip leaves to allow water to drip to prevent the growth of bacteria [1].

(b) Explain why the tropical rainforest is always dark and moist. [3]
The interlocking crowns [1] interlocked to form a continuous layer [1] which block out 70% of the sunlight [1].
The forest is very dense therefore sunlight cannot reach the ground [1]
therefore water cannot evaporate [1]

Class	Candidate Name	Register Number

FIRST TOA PAYOH SECONDARY SCHOOL

MID-YEAR EXAMINATION 2012

Secondary One Express

Geography **?? May 2012** **1 hour 30 mins**

Additional Materials: 1. OTAS (1 sheet)

READ THESE INSTRUCTIONS FIRST

Answer **ALL** questions

Write your name, index number and class in the spaces provided.

Shade your answers for Section A on the Optical Answer Sheet provided.

Write your answers for Section B and Section C on the space provided in the question paper.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.

Section	Examiner's Use
Section A	/15
Section B	/25
Section C	/50
Total	/ 90

Target mark: _____

This question paper consists of 18 printed pages.

[Turn over

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Section A – Multiple Choice Questions (15m)

For each question four suggested answers A, B, C and D are given. Choose the correct answer and shade your answer on the OTAS sheet.

1. Which of the following are components of the physical environment?

   A. Air, land, water, waste
   B. Air, soil, buildings, climate
   C. Air, land, water, living environment
   D. Solar system, temperature, wind, rain

2. With reference to the photograph, which of the following statements is **True**?

   A. The photograph shows a physical environment only.
   B. The photograph shows physical features only.
   C. The photograph shows how human environment is modified by man.
   D. The photograph shows how physical environment is modified by man.

3. Which of the following is an example of a human feature?

   A. Ponds
   B. Rivers
   C. Reservoirs
   D. Sea

4. Which of the following explains why the Earth is fragile?

I: Human activities, like driving a car, release toxic gases which is harmful to life on Earth
II: Many plants and animals are becoming extinct due to deforestation.
III: The Earth is getting hotter because it is moving nearer to the Sun.
IV: The Earth's resources are rapidly used up as population increases.

A. I and II
B. II and III
C. I, II, IV
D. All of the above

5. Which of the following pairs of items are useful natural resources?

A. Motor vehicles and power stations
B. Electricity and fire
C. Fire and electronic gadgets
D. Water and wood

6. Technology is _____.

A. old machinery
B. learning new skills
C. teaching new skills to people
D. understanding the environment

7. The five main oceans on Earth are Atlantic, Pacific,_____.

A. Indian, Arctic and Southern
B. African, Arctic and Southern
C. Indian, African and Southern
D. Indian, Arctic and Antartica

8 Maps have many uses. Which of the following is **not** one of them?

A. Sources of information
B. Proof of human existence
C. Record of changes
D. Tools used in planning

9. All topographical maps have vertical grid lines called _____ and horizontal grid lines called _____.

A. Eastings; Northings
B. Northings; Eastings
C. Latitudes; Longitudes
D. Longitudes; Latitudes

10. Different _____ on maps are used to show sizes and levels of details.

    A. scales
    B. rulers
    C. grid references
    D. arrows

11. When plates meet, _____ mountains are often formed.

    A. rift
    B. block
    C. fold
    D. horst

12. The belt around the Pacific Ocean where a large number of the world's volcanoes are found is called _____.

    A. Pacific Ring of Five
    B. Pacific Ring of Fire
    C. Pacific Ocean of Five
    D. Pacific Ocean of Fire

13. The Earth's crust is made up of several _____ which can slide past, pull apart from or push towards each other.

    A. oceans
    B. internal forces
    C. magma chambers
    D. plates

14. Which of the following is **not** an element of climate?

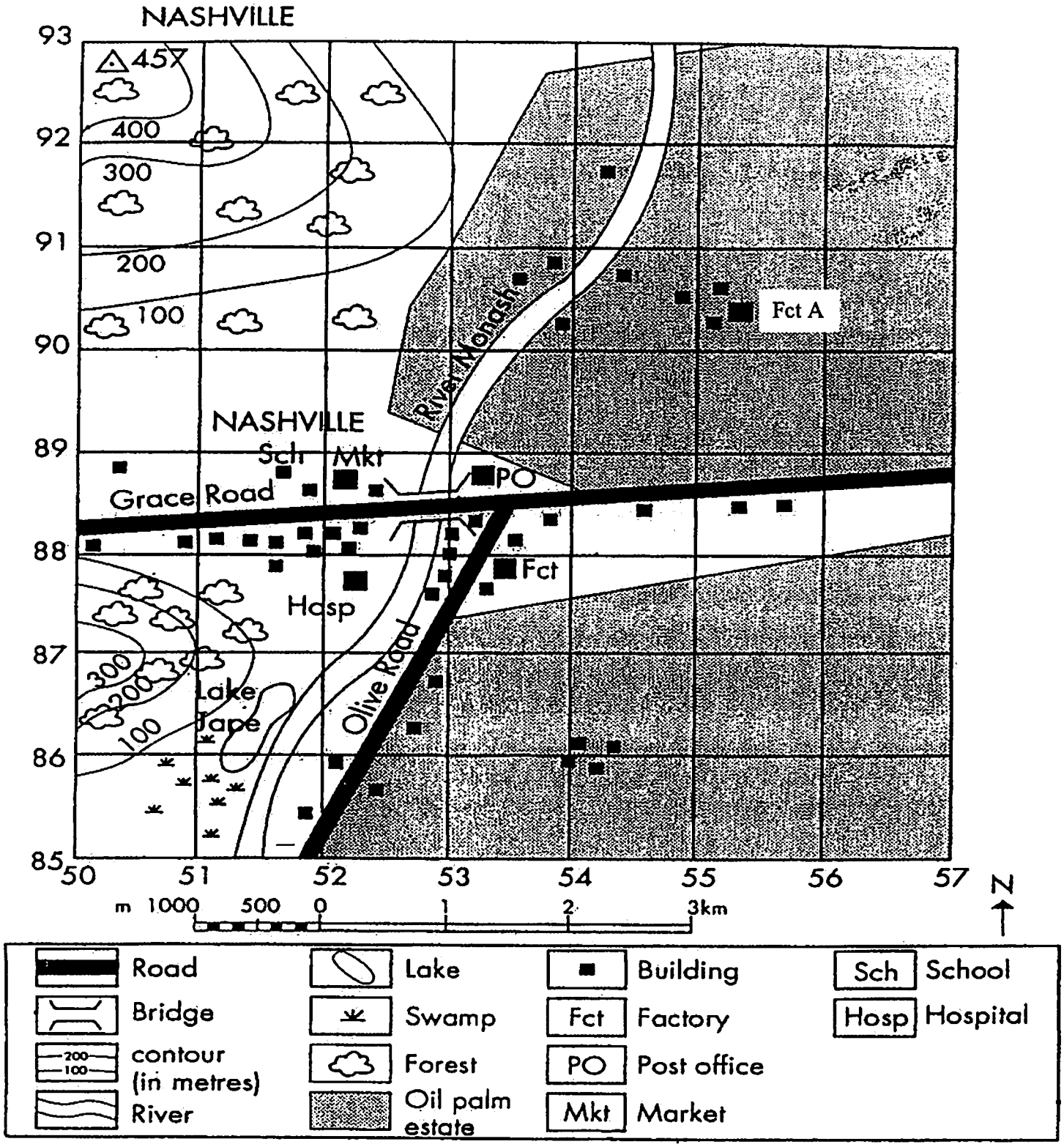
    A. Wind
    B. Air pressure
    C. Temperature
    D. Dust particles

15. The temperate climate experiences _____.

    A. four seasons in a year
    B. high rainfall all year round
    C. high temperature all year round
    D. extreme and harsh conditions all year round

Section B: Part I: Map work (15marks)

Refer to the map of Nashville and answer all the parts of question 1.



1a. Name two natural features shown in the map. [2m]

1b. In which grid square is the Post Office found? [1m]

1c. What is the six-figure grid reference of the Hospital? [1m]

1d. What is the feature that is found in grid square (5186)? [1m]

1e. What is the direction of Factory A from the Hospital? [1m]

1f Measure the straight line distance of Grace Road. Show your workings clearly and give your answer in km. [2m]

1g. Measure the curved distance of River Monash. Show your workings clearly and give your answer in km. [2m]

1h. Find the bearing of the Factory A from the Post Office. [2m]

1i. What is the contour interval in this map? [1m]

1j. What is the highest point shown on this map? [1m]

1k. Other than education and marketing facilities, name one other facility provided for the people in Nashville town. [1m]

Section B: Part II: Basic Techniques (10marks)

Study the weather forecast about the weather in Singapore from 16th- 19th March 2012 and answer the following questions.

Friday Mar 16th	Saturday Mar 17th	Sunday Mar 18th	Monday Mar 19th
			
Mix of Cloud and Sun	Thundershowers	Cloudy	Thundershowers
32°C 25°C	32°C 26°C	32°C 26°C	32°C 25°C

Monday, March 19th, 2012

 Overnight	Temperature: 25°C
 Monday Morning	Temperature: 28°C
 Monday Afternoon	Temperature: 32°C
 Monday Evening	Temperature: 29°C

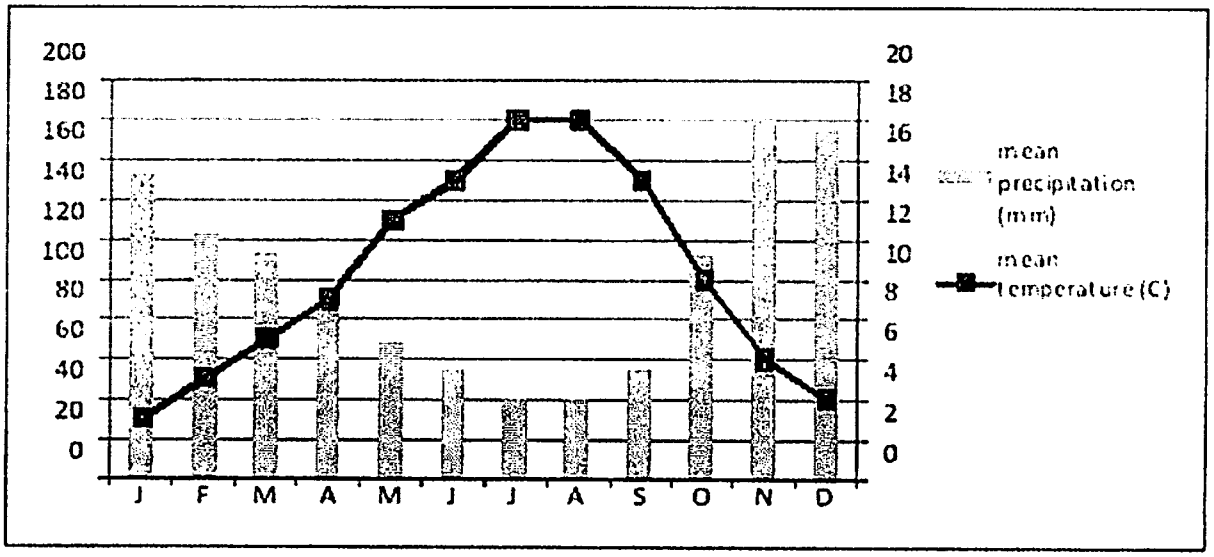
2a. Mary is planning for a picnic with her friends. Suggest a date for her and explain why? [2m]

2b. With this information, calculate the daily temperature range for 16th March 2012. [1m]

2c. Calculate the mean daily temperature for 19th March 2012. [1m]

2d. Using the information given, describe the weather forecasted for 19th March 2012. [2m]

Study the climograph of country A and answer the following questions.



3a. Using information from the climograph, identify and describe the the climate of country A. [3m]

3b. How do you think people adapt to life in country A? [2m]

Section C: Structured Essay Question (50marks)
Answer all the following questions.

1a Define physical environment. [1m]

Study Figures 1 and 2 and answer the following questions

Figure 1

Figure 2

b. Compare and contrast how human beings shown in Figure 1 and 2 interact with the physical environment. [4m]

c. Describe how people have changed the environment as shown in Figure 3 [2m]

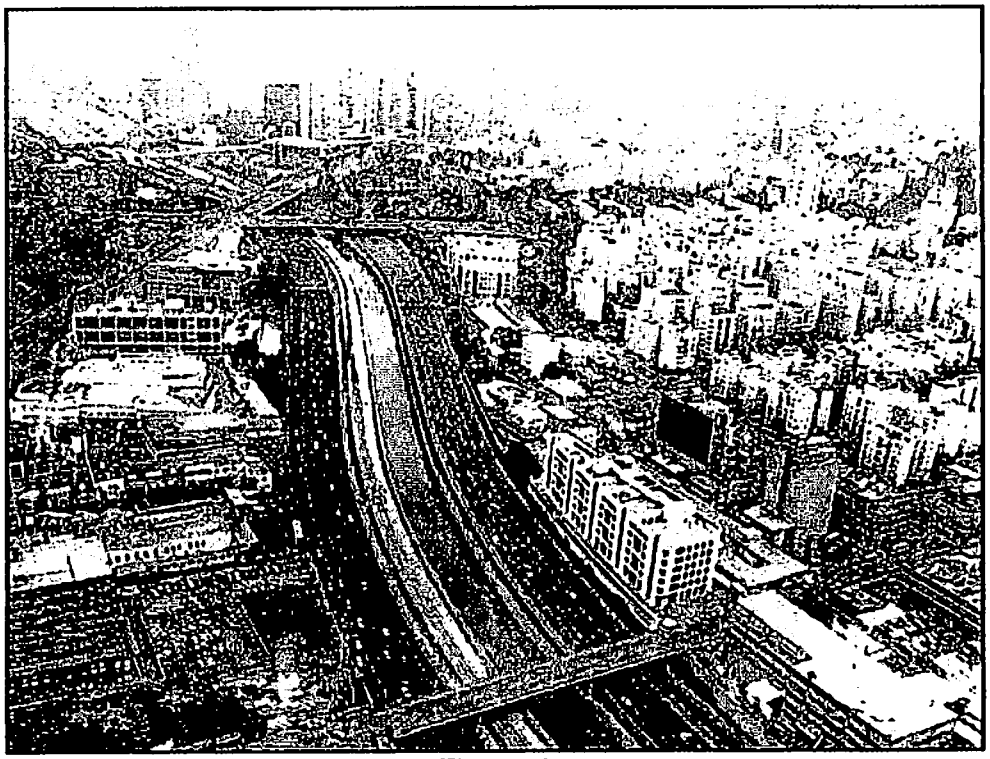


Figure 3

d. Referring to your observations in (d), evaluate the impact of human activities on the environment shown in Figure 3. [3m]

2 Figure 4 below shows a volcano that had just erupted.

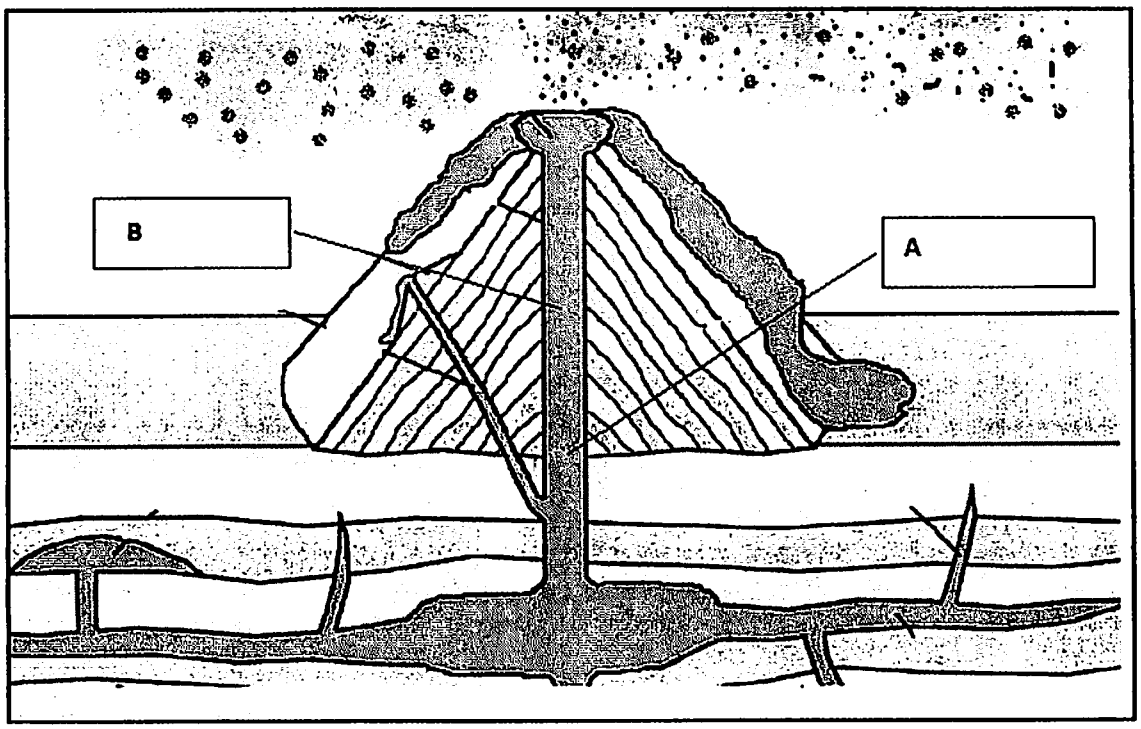


Figure 4

a. Name the parts A and B and state their functions. [4m]

b. Using an example, explain why the volcano is shaped as such in Figure 4. [3m]

c Explain why people still live near volcanoes despite the dangers of eruption. [3m]

3 Study the photographs of Singapore below and answer the questions that follow.

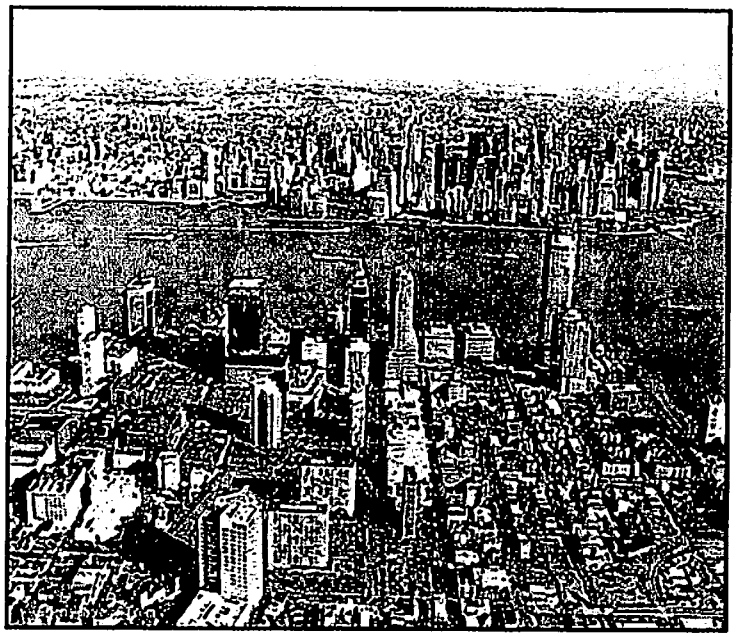


Figure 5

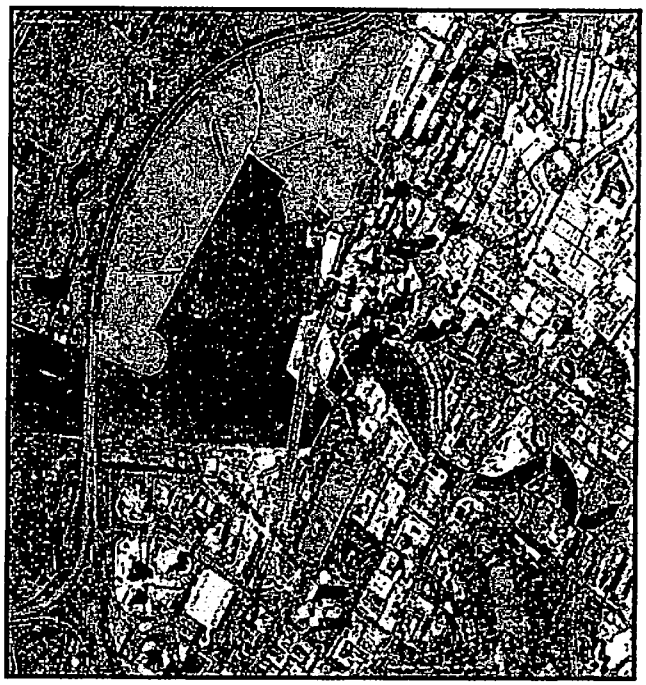


Figure 6

a. Figure 5 and 6 shows two different types of photographs. Identify each type of photograph. [2m]

b. State one strength and one limitation of the photograph type shown in Figure 6. [2m]

c. Which photograph would be more useful in the detection of fires? Briefly explain your choice. [2m]

d. Study Figure 7 which shows the landscape photograph of an area.

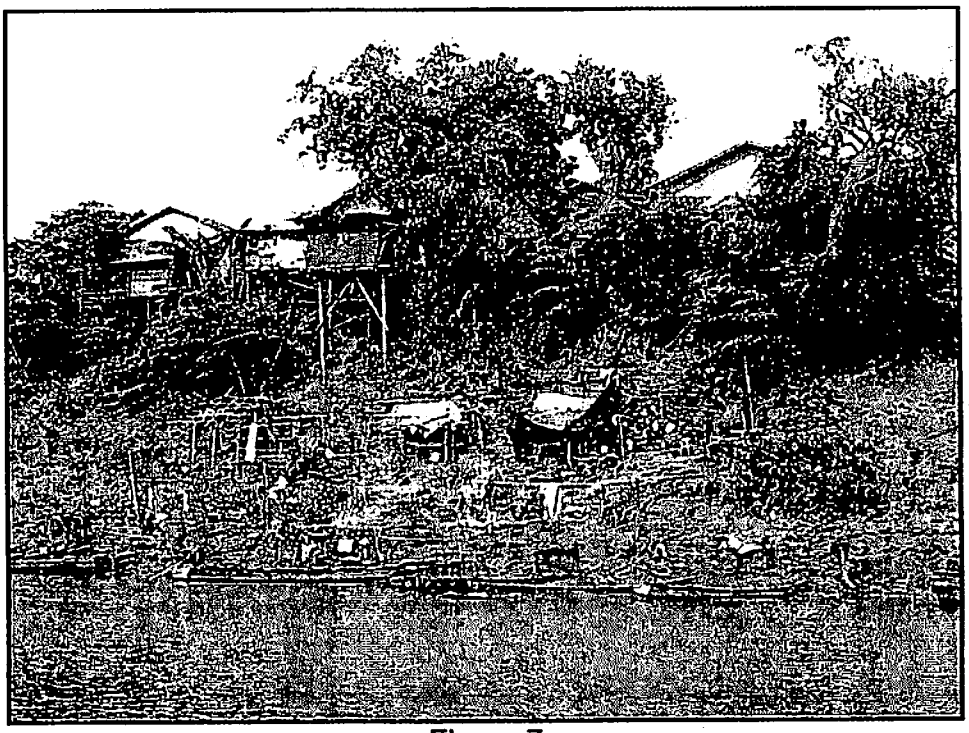


Figure 7

With reference to the landscape photograph, describe the interrelationship between the people and the environment. [4m]

4 Figure 8 shows a simplified map of the major plate boundaries of the world.

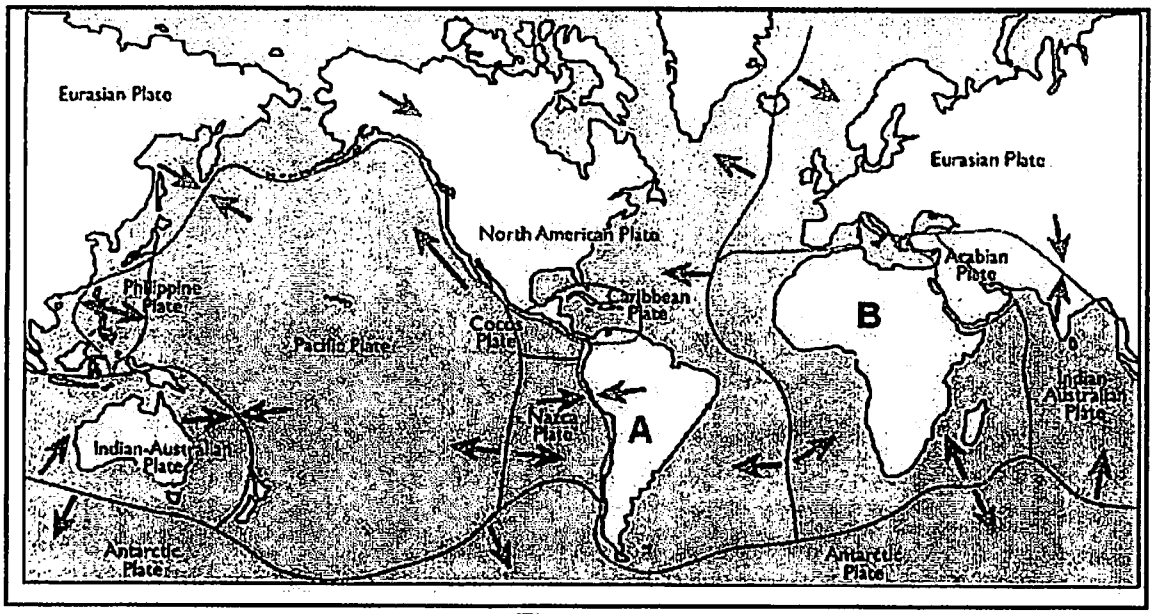


Figure 8

a. Identify plate A and plate B. [2m]

b. Explain how fold mountains are formed as a result of the Earth's internal forces. [3m]

c. Using examples, explain how fold mountains affect the people living near the area. [5m]

5 Study Figure 9 and answer questions 5a and 5b.

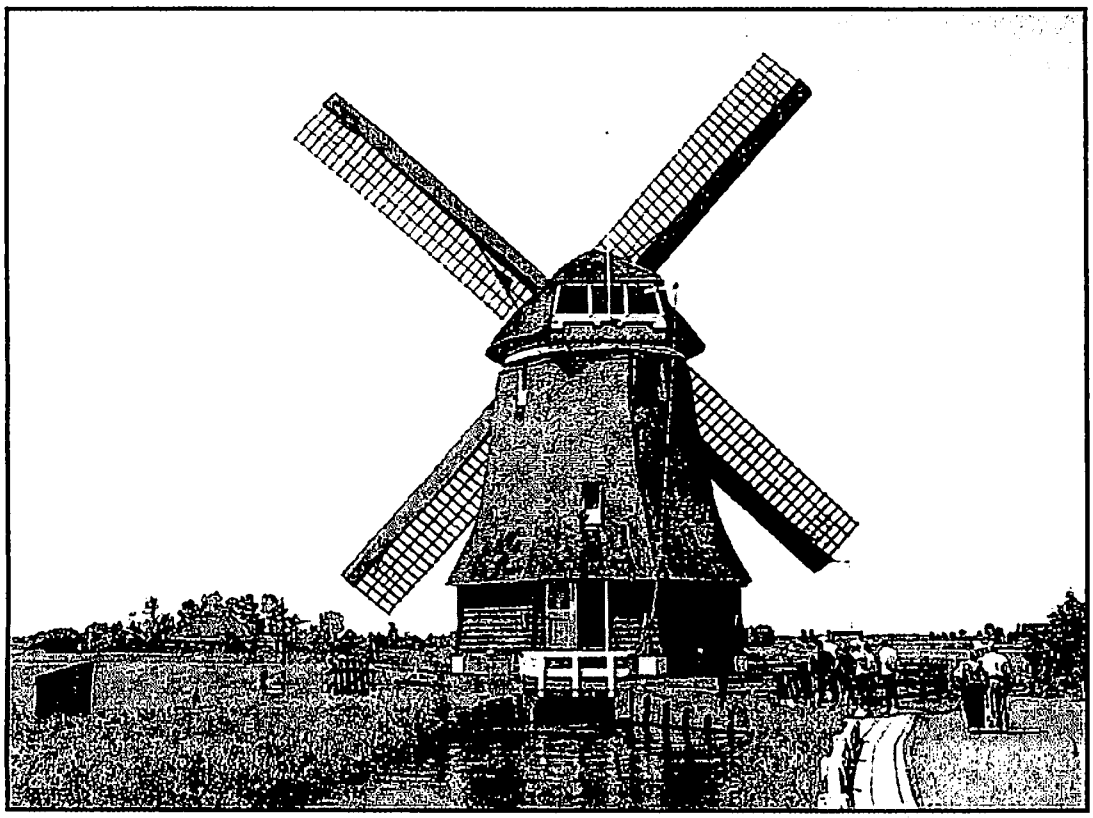


Figure 9

a. State the element of weather that is used to produce energy in Figure 9. [1m]

b. Explain the difference between weather and climate. [2m]

c. With the aid of examples, discuss how weather information is important to the daily human activities. [3m]

d. With the aid of examples, discuss how climate can affect our food and water supplies [4m]

~~~~~End of Paper ~~~~~

Name of Setter: Ms Y.L Liu

Sec 1E GEOG MYE 2012 Answer Scheme

Section A: MCQ (1m each)

1. C	6. B	11. C
2. D	7. A	12. B
3. C	8. B	13. D
4. C	9. A	14. D
5. D	10. A	15. A

Section B: Part I: Mapwork (15m)

1a	Forest, Swamp, Lake Jape 1m each Accept any of the answers above	[2]
1b	5388	[1]
1c	523878 or 519874	[1]
1d	Lake Jape	[1]
1e	NE or Northeast	[1]
1f	15.5cm X 0.5 (1) =7.75km (1) Accept answers between 7.5km to 8km	[2]
1g	17cm X 0.5 (1) =8.5km (1) Accept answers between 8km to 9km	[2]
1h	085 degree (Accept 083 degree to 087degree)	[2]
1i	100m	[1]
1j	Oil Palm	[1]
1k	Medical facilities, Postal services Accept any of the answers above	[1]

Section B: Part II: Basic Techniques (10m)

2a	Friday or Sunday	[1]
2b	$32^0C - 25^0C = 7^0C$	[1]
2c	28.5^0C	[1]
2d	It will be cloudy and sunny from morning till afternoon (1) with possible thunderstorm in the evening. (1)	[2]
3a	Temperate climate (1) It experiences a high temperature range of 14^0C (1). It experiences 4 seasons (1)	[3]
3b	They wear thick clothing during cold months (1) and lighter clothing during the warmer months. (1)	[2]

Section C: Structured Essay Question (50m)

1a	Physical environment consist of physical features that occur naturally on Earth.	[1]
1b	The !Kung Bushmen (1) uses materials such as sticks and dry grass to set a fire to cook their food (1) whereas the modern family have modern technology (1) such as gas stoves, pots and pans to cook food. (1)	[4]
1c	People have cleared the land to build tall buildings to accommodate more people. (1) Expressways are built to improve accessibility from one place to another. (1)	[2]
1d	Clearing of forest to create more land for buildings will lead to global warming.(1) Many natural resources such as wood, rocks have been taken from the physical environment to build the buildings.(1) Increase in number of cars will also cause more air pollution. (1)	[3]

2a	A: Vent (1) B: Pipe (1) A: is an opening in the Earth's surface (1) B: is a channel which allows the magma to rise to the top of the volcano (1)	[4]
2b	The volcano is shaped because the lava flow is very thick. (1) The lava flow slowly forming the shape of the volcano. (1) For example, Mount St Helens (1)	[3]
2c	Volcanic ash contains many minerals (1) which makes the soil very fertile and help crops to grow. (1) Volcanoes also serve as tourist attractions and locals earn money from providing services such as conducting guided tours. (1)	[3]

3a	Figure 5: Aerial photo Figure 6: Satellite photo	[2]
3b	Strength: Able to show a large area of the Earth's surface or Images are readily available on the internet. Limitation: Unable to study the main features in details 1m for strength and 1m for limitation.	[2]
3c	Figure 6 would be more useful in the detection of fire. (1) It is able to provide information quickly and also able to show a very large area. (1)	[2]
3d	The people have built huts in the middle ground. (1) They use the wood from the trees in the middle ground as building materials for the huts. (1) There are fishing boats along the river. (1) The fishermen fish for food from the river in the foreground. (1)	[4]

4a	A: South American Plate (1) B: African Plate (1)	[2]
4b	When two plates collide with each other (1), the layer of rocks which make up the Earth's crust will buckle and form folds. (1) Over time, the amount of folding can be very large, leading to the formation of mountain ranges. (1)	[3]
4c	Steep slopes make it difficult for people to build houses (1) and cultivate crops.(1) However, fold mountains such as Mount Everest (1) attracts tourists and locals can earn money from providing services such as conducting tours to the tourists. (1)	[5]

5a	Wind	[1]
5b	Weather describes the conditions of the atmosphere at a particular time (1) whereas climate refers to the weather pattern of a place over a long period of time, usually 30 years and more. (1)	[2]
5c	Weather information also helps us to plan our daily activities as we know to go outdoors during sunny days (1) and to stay indoors during rainy days. (1) Good weather allows us to enjoy leisure activities such as kite-flying and wind surfing. (1)	[3]
5d	Different crops thrive under different climatic conditions. (1) For example, oil palm and rubber grow well in tropical climate whereas apples and barely grow better in temperate climate. (1) When there is a long period of dry weather, the water levels in rivers and reservoirs will dry up. (1) This will result in inadequate water supply for the people living in the area. (1)	[4]

NAME:	NO:	CLASS:

RIVERSIDE SECONDARY SCHOOL

MID YEAR EXAMINATION 2012

SUBJECT	: GEOGRAPHY
LEVEL/STREAM	: 1 EXPRESS
DATE	: 4 MAY 2012
TIME	: 0815 – 0945 HOURS
DURATION	: 1 HOUR 30 MINUTES

Instruction to candidates:

1. This paper consists of Sections A, B and C.
2. Answer questions in Section A on the **answer sheet** provided.
3. Answer questions in Section B and C on the **writing papers** provided.
4. Fasten **Section A, B and C together** with a string.
5. The total mark for this paper is 60 marks.

This question paper consists of 9 printed pages including this cover page

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Section A: Basic Techniques [10 marks]
Answer all questions for this section in the answer sheet provided.

1. Figure 1 shows the Earth on its tilted axis.

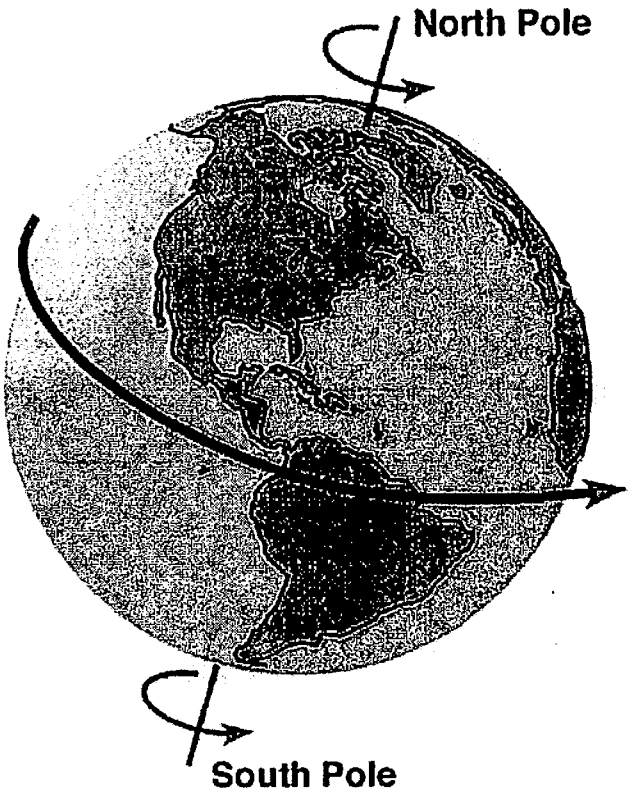


Fig. 1

a. In what direction is the Earth rotating? [1]

b. At what angle is the Earth tilted? [1]

c. What is the effect of Earth's rotation in Fig. 1? [1]

d. What is the imaginary line that divides the Earth into the Northern and Southern Hemisphere? [1]

e. How long does it take Earth to complete one rotation? [1]

2. Table 1 and Figure 2 show a table of information about planets in the Solar System and the Solar System respectively.

Name of Planet	Distance from the Sun (million km)	Diameter of the planet (thousand km)
X	58	4.9
Y	228	6.8
Z	1427	120.7
Uranus	2870	51.1

Table 1

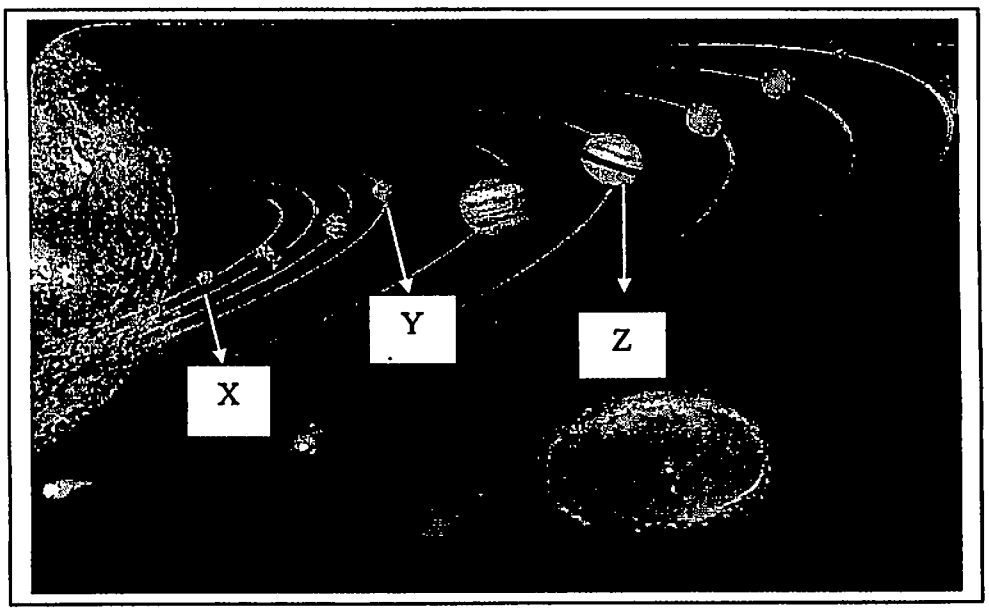


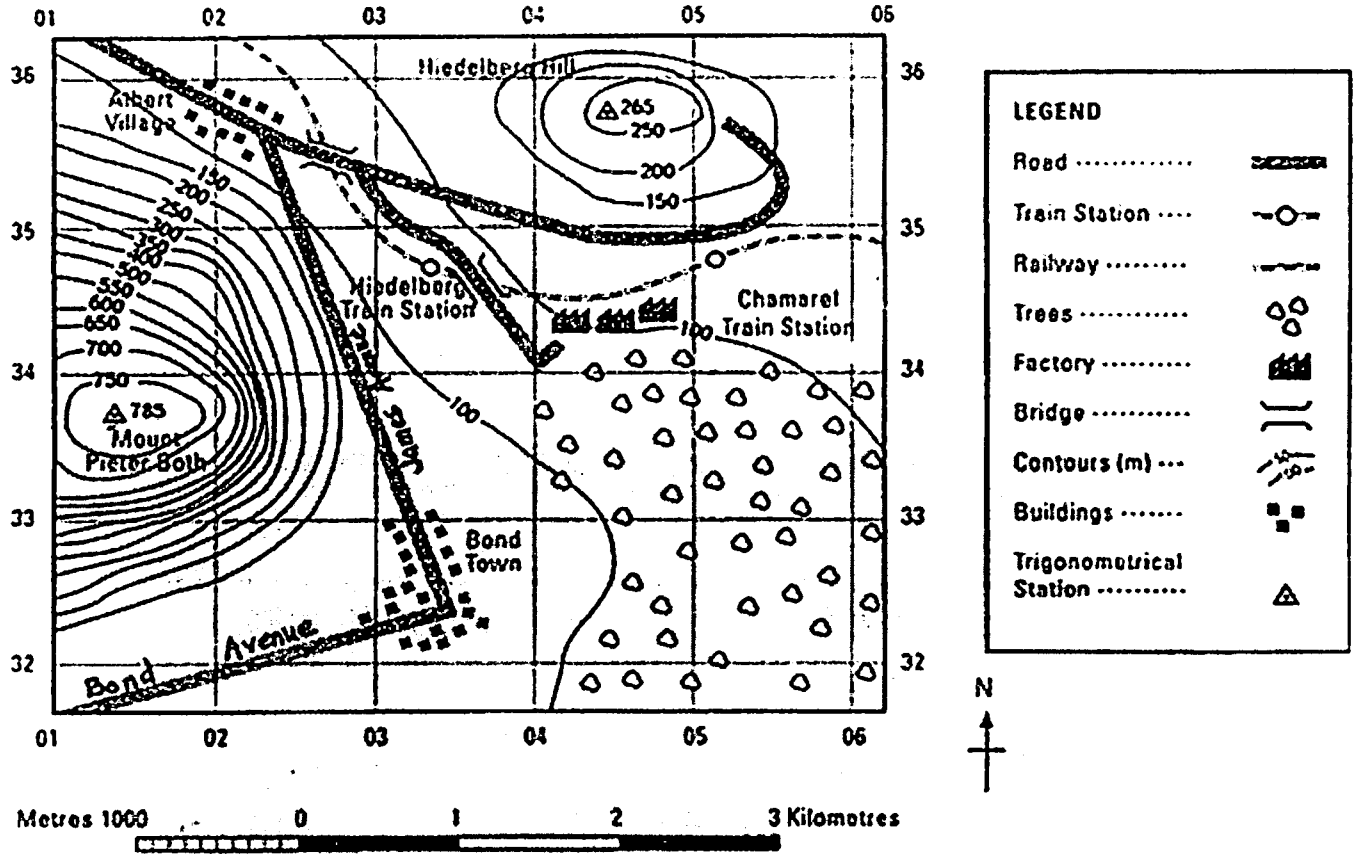
Fig. 2

a. Identify planets X, Y and Z. [3]

b. Describe <u>two</u> characteristics of Planet Uranus. [2]

Section B: Map Reading [20 marks]
Answer all questions on the answer sheet provided.

1. Refer to the topographical map below and answer all the questions that follow in the answer sheet provided.



a. Give the four figure grid reference of Mount Pieter Both on the map. [1]

b. Give the four figure grid reference of the location of the three factories on the map. [1]

c. What is the highest point on the map? Give your answer in height (in metres). [1]

d. Calculate the total distance of Point A to Point B of Bond Avenue and James Avenue. [2]

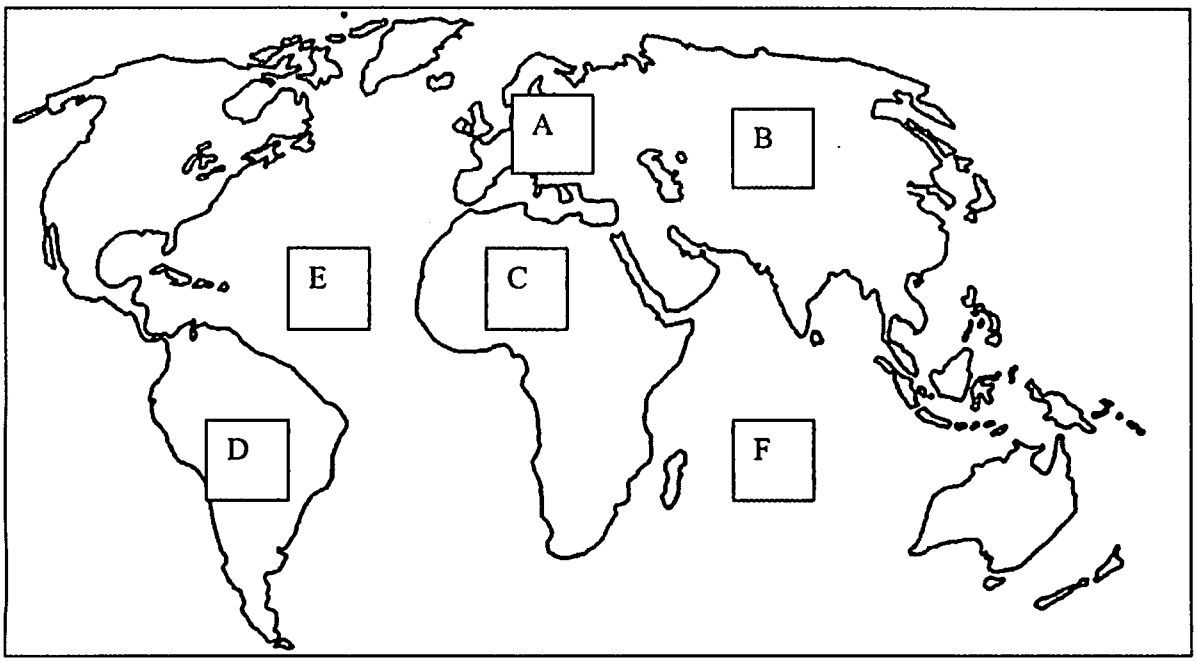
e. Give the six figure grid reference of the trigonometrical station of Hiedelberg Hill. [1]

f. What is the contour interval of the map? [1]

g. If you are heading to Albert Village from Bond Town via James Avenue, in which direction will you be heading? [1]

h. What are the two transportation routes people can take to reach the factories in Hiedelberg Town? [2]

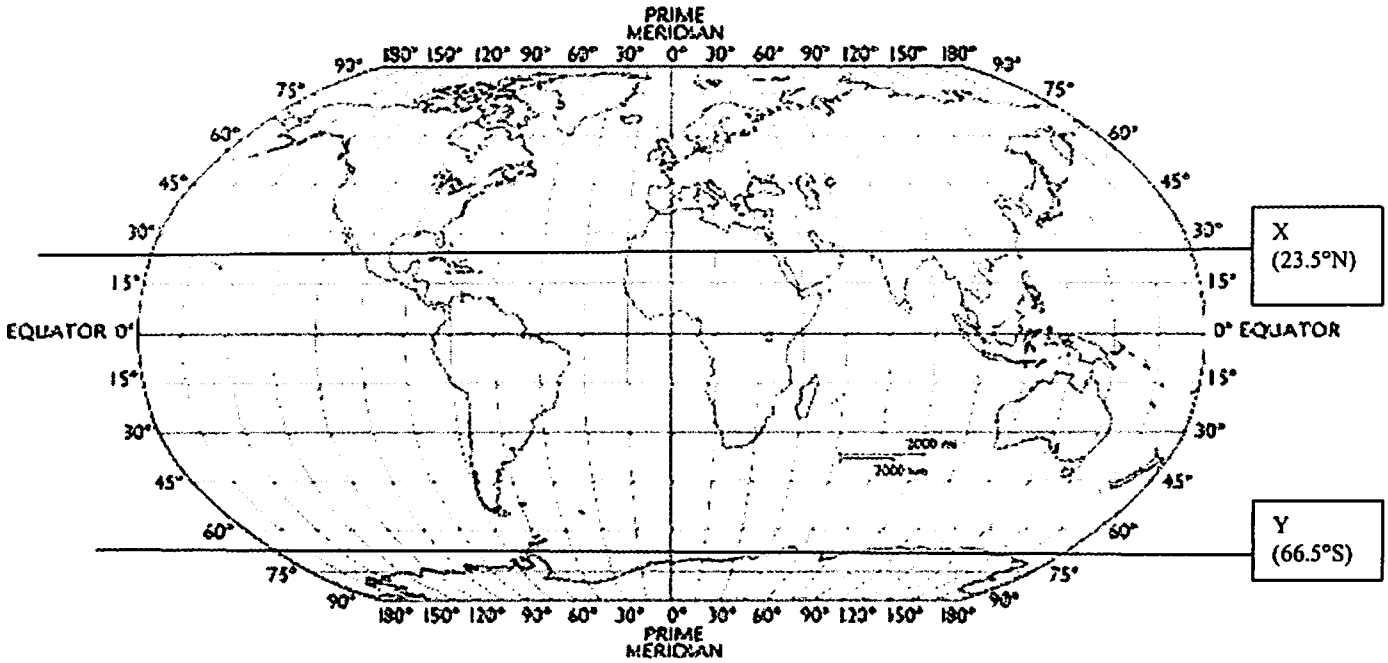
Refer to the world map below and answer all questions in the answer sheet provided.



i. Identify the oceans labeled E and F on the map. [2]

j. Identify continents A, B and C respectively. [4]

Refer to the map below and answer all questions in the answer sheet provided.



k. What is the longitude of Prime Meridian? [1]

l. What is the latitude of the Equator? [1]

m. Name line X on the map. [1]

n. Name line Y on the map. [1]

o. What is another term give to the line of longitude of 180°? [1]

Section C: Structured Essay Questions [30 marks]

1a. Figure 3 shows a picture of various types of natural resources that can be found of Earth's surface.

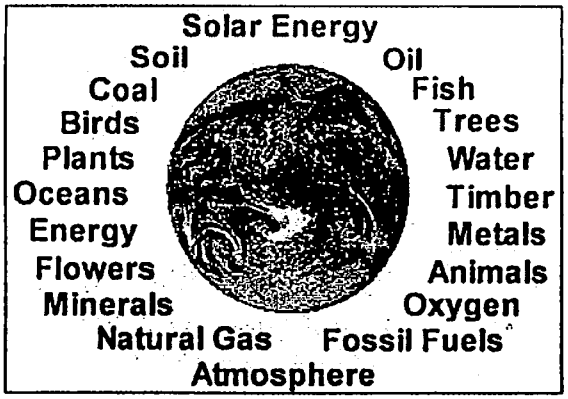


Fig. 3

i. What are 'natural resources'? [2]

ii. Using Fig 3, identify one renewable resource and two non-renewable resources. [3]

iii. Explain two ways how human beings have made use of resources in the environment. [4]

1b. Figure 4 and 5 show two different types of environments.

Fig. 4

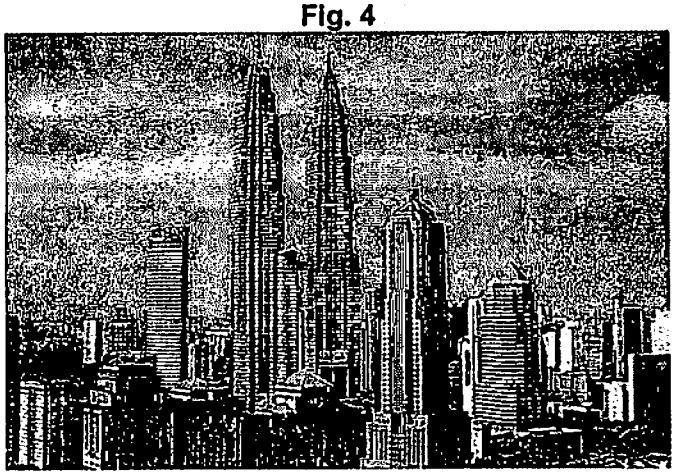


Fig. 5

i. Identify the two types of environments in Fig. 4 and 5. [2]

ii. Explain how the components of weather and natural vegetation in the environment shown in Fig. 4 are interrelated. [4]

2a. Figure 6 shows a picture of !Kung Bushmen in the Kalahari Desert.

Fig. 6

i. In what ways are the !Kung Bushmen able to live in the harsh conditions of the Kalahari Desert? Describe any three ways to show how they adapt to their environment. [3]

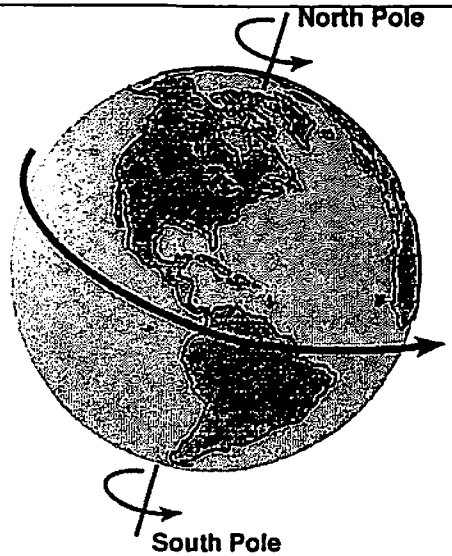
ii. "!Kung Bushmen are living in harmony with the environment." Explain why this is so. [4]

iii. Describe any **two** differences in the way of life between Singaporeans and the !Kung Bushmen. [4]

iv. Explain how the use of technology could affect the lives of the !Kung Bushmen in a positive and negative way. Give examples to support your answer. [4]

End of Paper

Section A: Basic Techniques [10 marks]
Answer all questions in the answer sheet provided.

No.	Question and Answer:	AO1+ 2	AO1 +3
1.	Figure 1 shows the Earth on its titled axis.		
	 **Fig. 1**		
a.	In what direction is the Earth rotating?		[1]
	West to east		
b.	At what angle is the Earth titled?		[1]
	23.5		
c.	What is the effect of Earth's rotation in Fig. 1?		[1]
	The cycle of day and night		
d.	What is the imaginary line that divides the Earth into the Northern and Southern Hemisphere?		[1]
	Equator		
e.	How long does it take Earth to complete one rotation?		[1]
	24 hours		

2.	Table 2 and Figure 2 show a table of information about planets in the Solar System and the Solar System respectively.		

Name of Planet	Distance from the Sun (million km)	Diameter of the planet (thousand km)
X	58	4.9
Y	228	6.8
Z	1427	120.7
Uranus	2870	51.1

Table 1

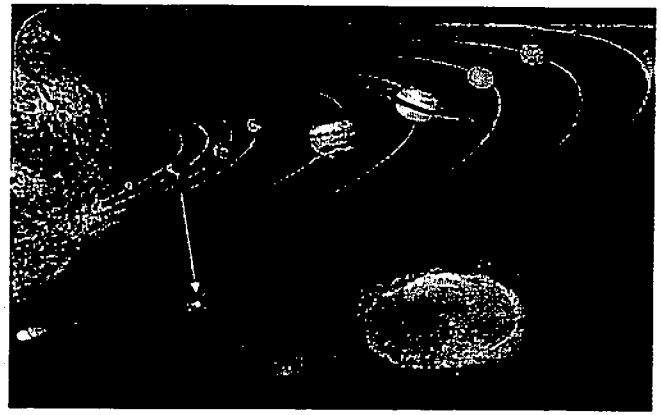
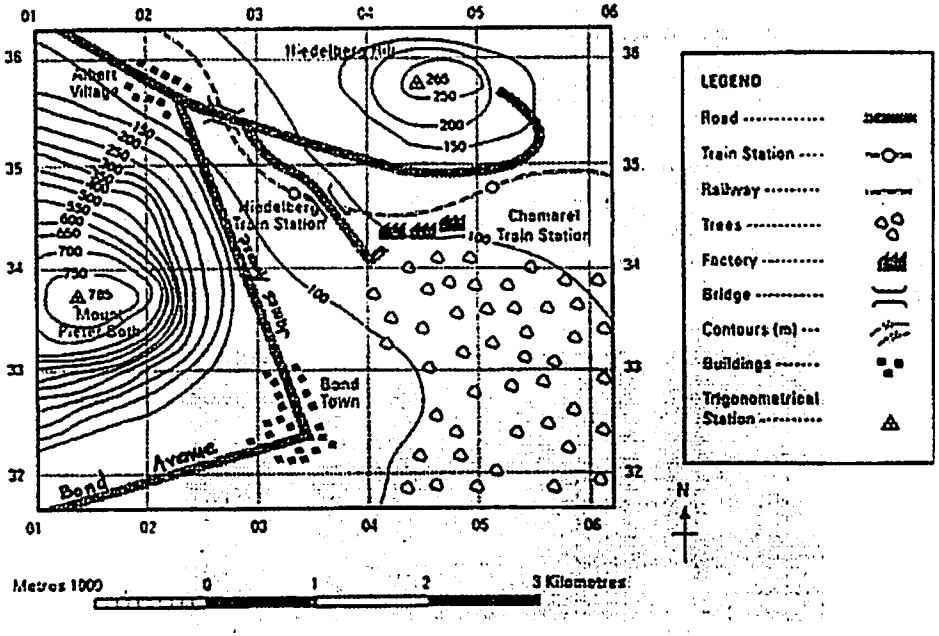


Fig. 2

a.	Idenify Planets X, Y and Z.		[3]
	X,Mercury **Y, Mars** **Z,Sarturn**		
b.	Describe two characterstics of Planet Uranus.		[2]
	Blue-green disk, nine rings encircling it ,second furthest away from sun [any 2]		

Section B: Map Reading [20 marks]
Answer all questions on the answer sheet provided.

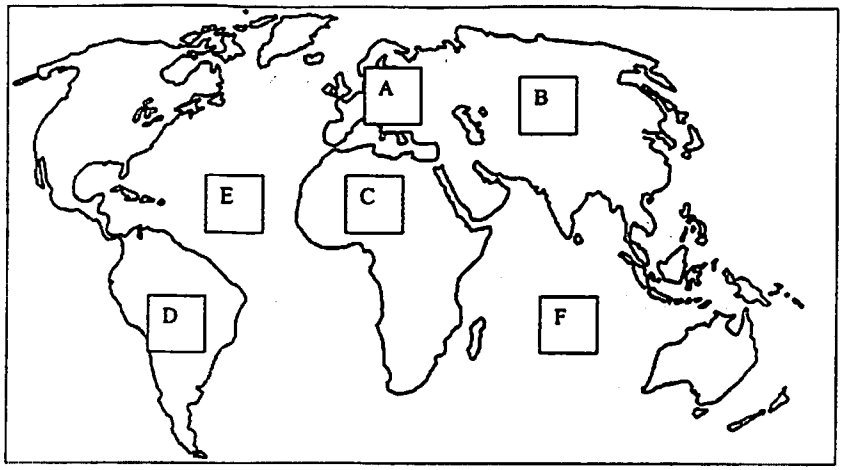
1. Refer to the (insert scale) map below and answer all the questions that follow in the answer sheet provided.



a.	Give the four figure grid reference of Mount Pieter Both on the map.		[1]
	GR0133		
b.	Give the four figure grid reference of the location of the three factories on the map.		[1]
	GR0434		
c.	What is the highest point on the map? Give your answer in height (in metres).		[1]
	785 m		
d.	Calculate the straight line distances of Bond Avenue and James Avenue.		[2]
	Distance on map: 12cm **1km= 2.1 cm** **Answer: 5.71 - 6 km**		
e.	Give the six figure grid reference of the trigonometrical station of Hiedelberg Hill.		[1]

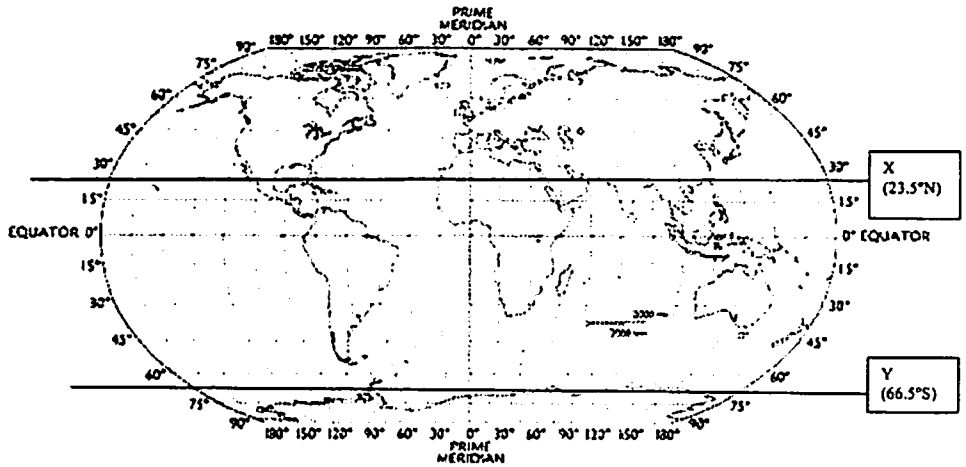
	GR044358(+1)		
f.	What is the contour interval of the map?		[1]
	50m		
h.	If you are heading to Albert Village from Bond Town via James Avenue, in which direction will you be heading? **Northwest / North north west**		[1]
i.	What are the two transportation routes people can take to reach the factories in Hiedelberg Town? **Railway, road**		[2]

Refer to the world map below and answer all questions in the answer sheet provided.



j.	Identify the oceans labeled E and F on the map.		[2]
	E:Atlantic Ocean, F: Indian Ocean		
k.	Identify Continents A, B and Crespectively.		[3]
	A:Europe **B: Asia** **C: Africa**		

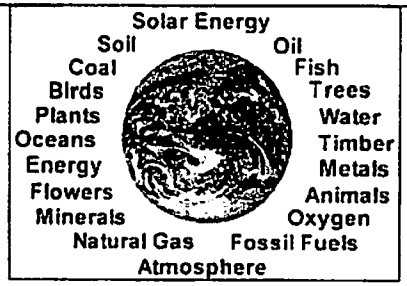
Refer to the map below and answer all questions in the answer sheet provided.

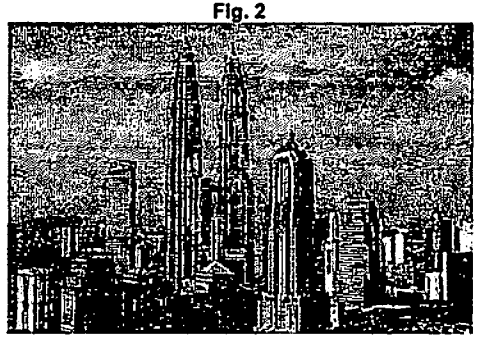


l.	What is the longitude of Prime Meridian?		[1]
	0°		
m.	What is the latitude of the Equator?		[1]
	0°		
n.	Name line X on the map.		[1]
	Tropic of Cancer		
o.	Name line Y on the map.		[1]
	Antarctic Circle		
p.	What is another term give to the line of longitude of 180°?		[1]
	International Date line		

END 1,5

Section C: Structured Essay Questions [30 marks]

No.	Question and Answer	AO1+2	AO1+3
1a.	Figure 1 shows a picture of various types of natural resources that can be found of Earth's surface.		
	 Fig. 1		
i.	What are 'natural resources'?	[2]	
	Natural resources are basic substances that exist naturally [1] in the physically environment that we/ human beings make use of.[1]		
ii.	Using Fig 1, identify one renewable resource and two non-renewable resources.	[3]	
	One renewable resource is water.[trees, timber, oxygen, soil] [any 1] Two non-renewable resources are coal and Fossil Fuels. [oil, metals, natural gas, minerals] any 2.		
iii.	Explain two ways in how human beings have made use of resources in the environment.	[4]	
	Human beings make use of water for drinking, cleaning, cooking and washing. It is also used to cool the machines in factories, irrigate the crops on farmland, and generate hydro electrical power for homes and industries. **The forest (trees) provides us with fresh air, food and materials. It is also a natural habitat for wildlife and plants, including herbs for use in medicines.** **Metals such as iron, copper and other precious stones provide raw materials for manufacturing purposes. Coal, oil and natural gas are important sources of fuel and power. It also helps to provide electricity needed for daily activities. [any 2 ways with detailed explanation]**		

1b.	Figure 2 and 3 show two different types of environments.		
	 Fig. 2  Fig. 3		
i.	Identify the two types of environments in Fig. 2 and 3.		[2]
	Fig. 2: Physical environment Fig. 3: Human environment		
ii.	Explain how the components in the environment shown in Fig. 2 are interrelated?	[4]	
	Weather and climate are influenced by the amount of water vapour and heat contained in air. Water vapour, which comes from rivers, soil and plants may form clouds and rain when cooled. **Natural Vegetation, such as trees, depends on sunlight, air, water and soil to grow. Trees take in water from rain that has fallen on Earth's surface and which collects in rivers and lakes. In return, they give out**		

	water vapour, which affects weather and climate. **Trees also absorb mineral salts and moisture from soil, which is broken down from rocks. When plants die and decay, they add nutrients to the soil.** **[2 points with explanation]**		
2a.	Figure 4 shows a picture of !kung Bushmen in the Kalahari Desert.		
	 **Fig. 4**		
i.	In what ways are !Kung Bushmen able to live in the harsh conditions of the Kalahari Desert. Describe any three ways.	[3]	
	Clothing: they wear clothing made of animal hides and other natural materials which only cover certain parts of their body/which serve them well in the hot and arid climate. **Housing: they do not build permanent shelters because of the constant need to look out for new supplies of water and food/Their houses are made of simple huts made of twigs, branches, leaves and grass.** **Food: As the climate does not favour plant growth, they do not farm the land or keep animals. They gather whatever fruit, berries and roots they they can find in their environment for food.** **[any 3 ways with elaboration, answers must be related to how the adapt to harsh conditions]**		

ii.	!Kung Bushmen are living in harmony with the environment. In what ways are they living in harmony with their environment in the desert?	[4]	
	The people are very much dependent on their physical environment for their survival. [1] **They respect the harsh conditions in the desert and do not try to change it, [1]** **but they adapt to the environment [1]/ do not make changes to their environment.** **and live a simple life which is in harmony with the natural environment. [1]**		
iii.	Describe any <u>two</u> differences in the way of life of Singaporeans and the !Kung Bushmen.	[4]	
	Sources of food and water:Kung bushmen hunt and gather for food while in Singpaore, we buy food and get water from reservoirs and taps. **Clothing:** **Movements:Kung Bushmen reply on their physical strength to do work and to walk around but Singaporeans travel in cars, buses and planes.** **Shelters and settlements:Kung bushmen live in temporary simple huts made of branches and leaves but Singaporeans live in steel and concrete structures that are permanent.** **[do not accept geographical conditions as they do not constitute to way of life:how people live]** **[any 2 differences elaborated]**		
iv.	Explain how the use of technology affect the lives of the !Kung Bushmen in a positive and negative way. Give examples to support your answer. **The use of technology can benefit them positively in terms of making their lives more comfortable [1]For example, the use of vehicles instead of walking from places to places.** **However, the use of technology might give rise to problems like air and noise pollution [1] or and environmental damages to the physical environment such as Deforestation which results in disappearing trees. For example, the cutting down of trees causes more soil erosion and global warming** **[any 2 points covering positive/ negative way with appropriate elaboration and examples; accept any plausible examples]**	[4]	
	Total:	**28**	**30**

Name	Class	Index No.

ANG MO KIO SECONDARY SCHOOL
MID YEAR EXAMINATION 2013
SECONDARY 1 EXPRESS

GEOGRAPHY

Total Mark: 100 **8th May 2013 / Wednesday**

1 hr 15 min

Additional Materials: OTAS Sheet
Writing Paper

INSTRUCTIONS TO CANDIDATES:

1. This paper consists of 3 sections, A, B and C.

   Section A - Multiple-Choice Questions (MCQs) (15 marks)

   Section B - Part 1: Mapwork (20 marks)
   - Part 2: Basic Techniques (5 marks)

   Section C - Structured Questions (30 x 2 = 60 marks)

2. Answer **ALL** the questions in Section A and B.

3. In Section C, you are required to answer **TWO** questions:
   - **Question 19 is a compulsory question**
   - **Choose either Question 20 or Question 21**

4. Answers are to be written as follows:

Section A: MCQ	• on OTAS
Section B: Mapwork Basic Techniques Section C: Structured Questions	• on writing paper provided • Start **each question** on a fresh side of the writing paper

5. **Submission should be as follows:**
   (1) OTAS sheet (2) Cover Page + Section B + Section C

This document consists of 15 printed pages, including the cover page.

[Turn Over]

SECTION A: Multiple Choice Questions (15 marks)
Choose the most appropriate answer and shade the correct oval A, B, C or D in the OTAS sheet provided.

1. Which of the following refers to the physical environment?

   A. Beach
   B. Housing estate
   C. Rubber plantation
   D. Swimming pool ( )

2. Which of the following is a human feature?

   A. Clouds
   B. Road
   C. Soil
   D. Valley ( )

3. Study Figure 1 which shows a house.

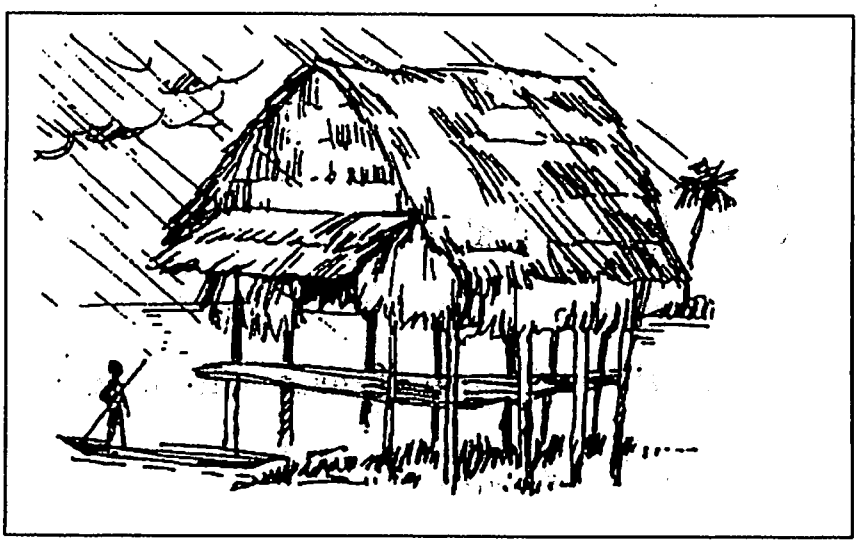


Figure 1

The design of houses in different countries is often influenced by the physical factors. The house shown in Figure 1 is likely to be found in an area which experiences _____

   A. high land and steep slope
   B. high rainfall
   C. high standard of living
   D. low temperature

( )

4. Which of the following is **NOT** a way of life of the !Kung Bushmen?

A. Burning firewood to keep warm
B. Hunting and food-gathering
C. Living in small scattered settlements
D. Wearing clothes made from factories

( )

5. Which one of the following is an example of a natural resource?

A. Granite
B. Plastic
C. Styrofoam
D. Synthetic fiber ( )

6. Which of the following is an example of a small scale map?

A. Street map
B. Topographical map
C. Weather map
D. World map ( )

7. Which of the following is used to mark the standard time zones in different parts of the world?

A. The Equator
B. The International Date Line
C. The Prime Meridian
D. The Tropic of Capricorn ( )

8. Figure 2 shows a map of Japan.

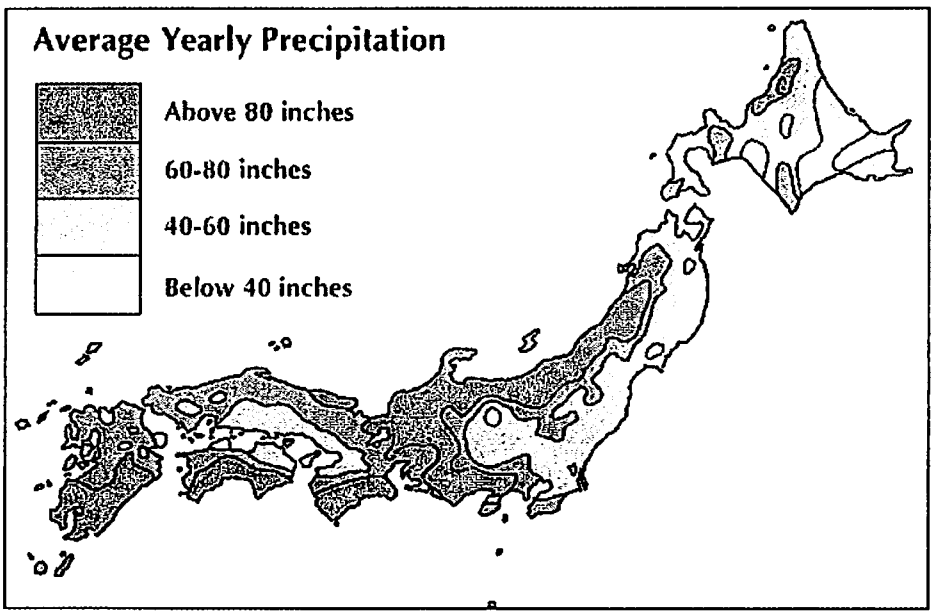


Figure 2

Name the type of map shown above.

A. Geological map
B. Rainfall map
C. Street map
D. Topographical map ( )

9. Which of the following is **NOT** correct about latitudes and longitudes?

A. Latitudes and longitudes help to locate a feature on the Earth's surface accurately.
B. The Greenwich Meridian is the longest longitude.
C. The northern hemisphere is measured from 0° to 90°N.
D. The Equator is an imaginary line separating the Earth into two different hemisphere. ( )

10. Identify the landform as shown below in Figure 3.

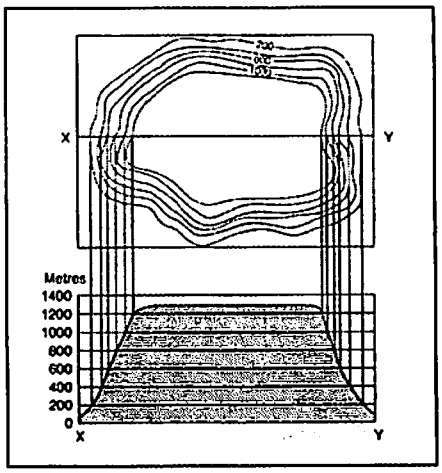


Figure 3

A. Hill
B. Plain
C. Plateau
D. Ridge ( )

11. Which one of the following statements is **NOT** an example of how landforms affect people?

A. Landforms affect the places where people build their houses.
B. Landforms affect the types of crops that are grown.
C. Landforms affect the religious practices of an area.
D. Landforms affect the activities for tourists. ( )

12. Which one of the following is an agent of erosion?

A. Earthworms burrowing through rocks and soil.
B. Heat and cold causing rocks to expand, contract and break apart.
C. Moving ice and glacier cutting through mountains.
D. Water entering cracks of rocks and dissolving the minerals of the rocks. ( )

13. What does the term 'Pacific Ring of Fire' refer to?

A. It is an area with a high concentration of tourist attractions surrounding the Pacific Ocean.
B. It is an area with a high concentration of active volcanoes surrounding the Pacific Ocean.
C. It is an area around the Pacific Ocean with extremely high temperature all year round.
D. It is an area with a high concentration of fire outbreaks surrounding the Pacific Ocean. ( )

14. What causes the formation of the mountain shown in Figure 4 which has distinct lines?

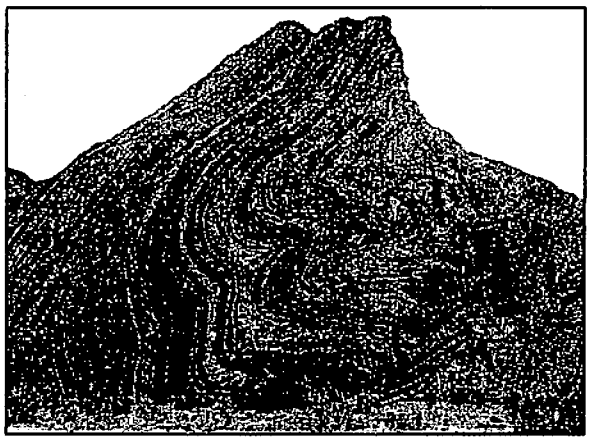


Figure 4

A. Erosion
B. Faulting
C. Folding
D. Vulcanicity ( )

15. The Earth's crust is broken into large pieces called _____.

A. continents
B. landforms
C. mantle
D. plates ( )

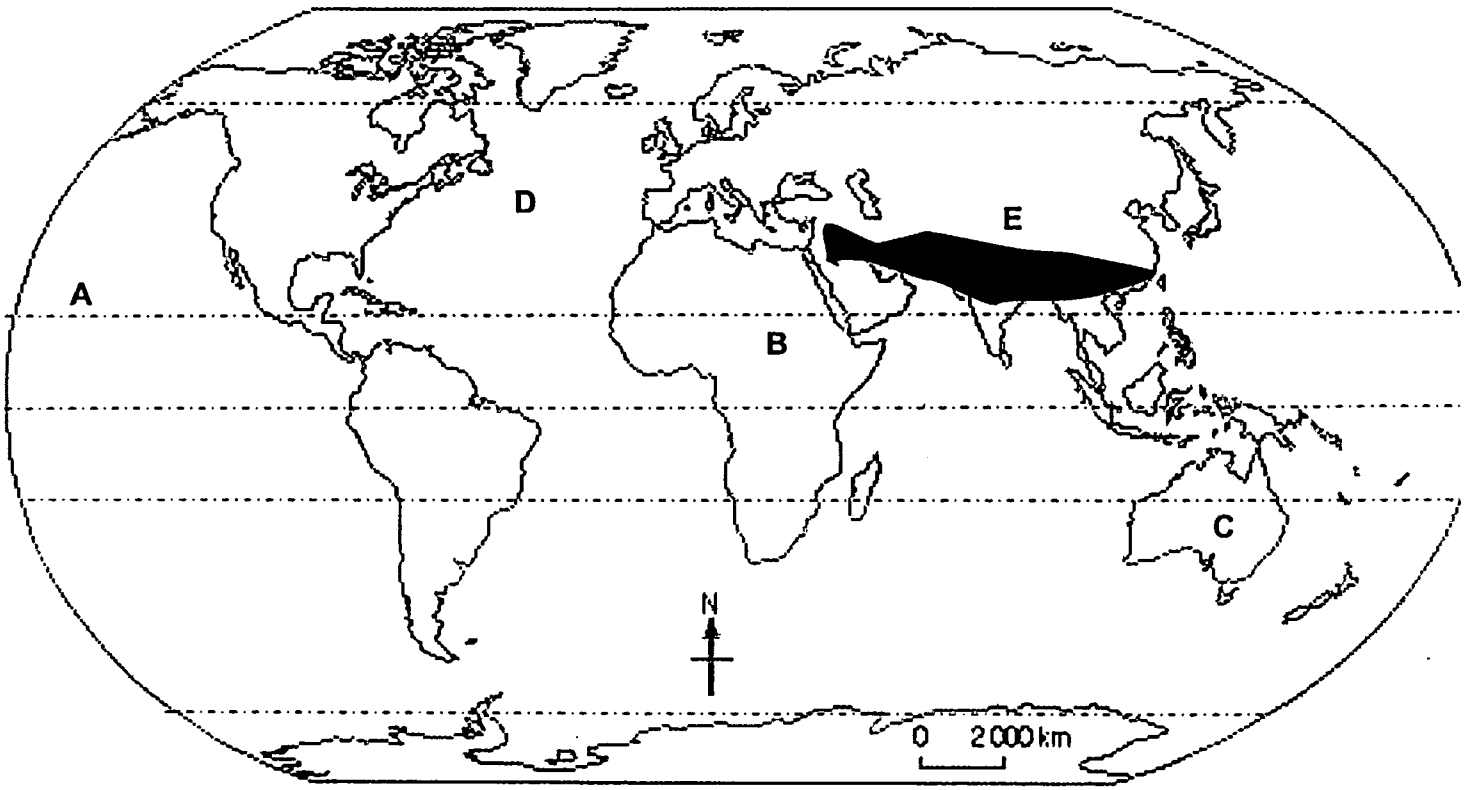
SECTION B: Mapwork and Basic Techniques (25 marks)

Write your answers on the writing paper provided.

Answer each question on a fresh page.

Part 1: Map Reading skills (20 marks)

16 Refer to the Map 1 below and answer the questions that follow.



Map 1

(a) Identify the latitude A. [1]

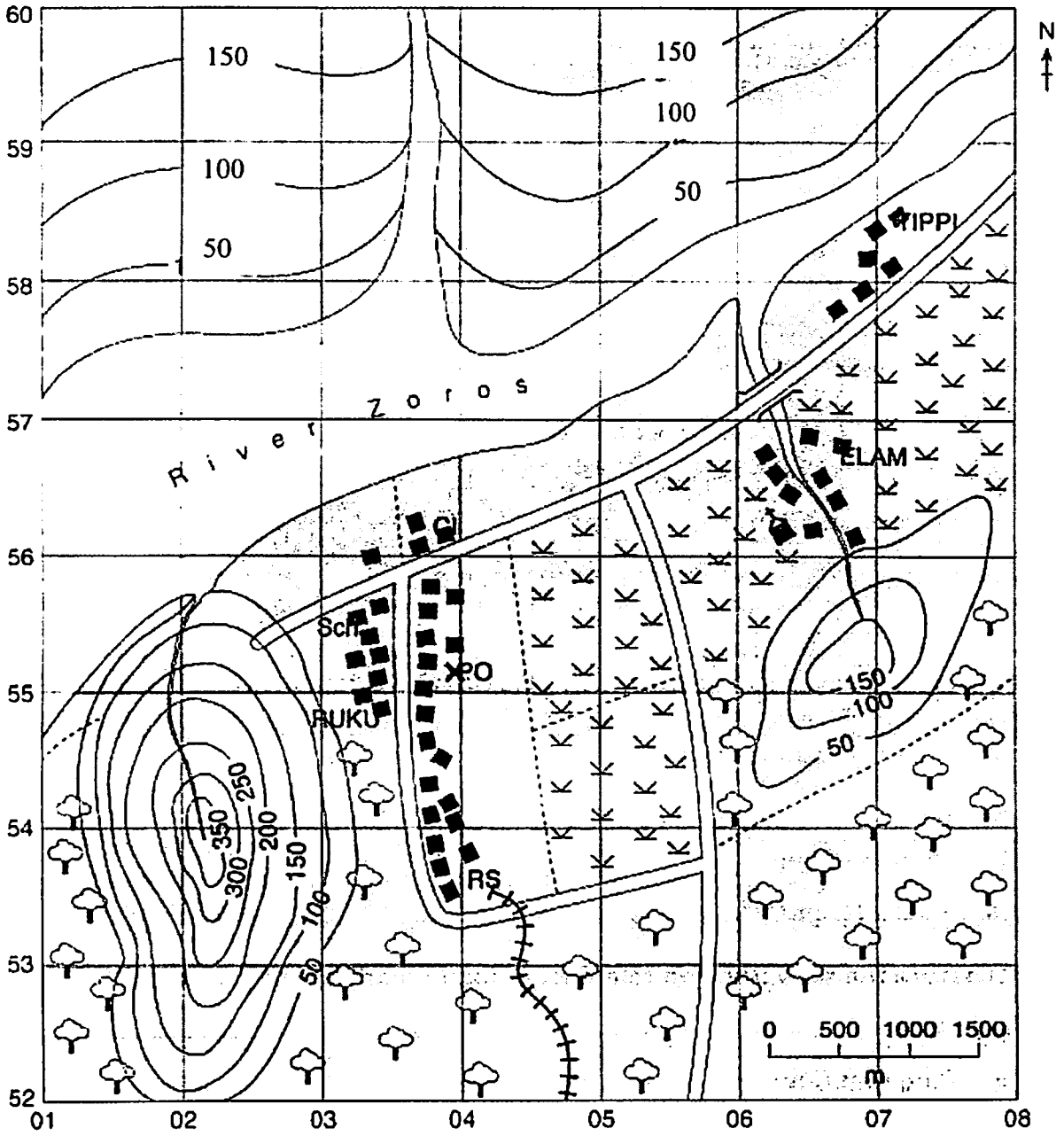
(b) Identify the continent marked B. [1]

(c) Identify the continent marked C. [1]

(d) Name the ocean marked D. [1]

(e) Identify the mountain range found in the area marked E. [1]

17. Study Map 2, the Map of Zoro Town carefully and answer all the questions that follow.



Legend

	Forest		Railway		Dirt track	PO	Post Office
	Padi		Houses	Sch	School	RS	Railway Station
	Bridge		Road	Cl	Clinic		Church
50 100 150	Contours (in metres)		River				

Map 2

(a) State the title of the map. [1]

(b) Present the scale in statement form. [1]

(c) Name one line and one area symbols. [2]

(d) Give the four-figure grid reference of the railway station. [1]

(e) Give the six-figure grid reference of the clinic. [1]

(f) State the contour interval shown on the map. [1]

(g) If you were standing at the school and saw the clinic, in what direction are you looking at? [1]

(h) Calculate the bearing of the clinic from school. [1]

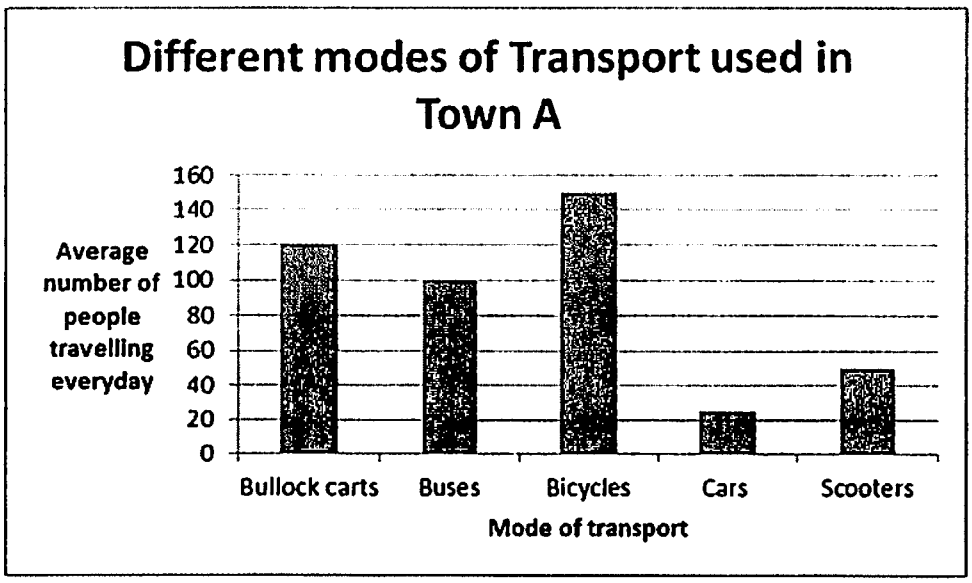
(i) Calculate the straight-line distance of post office to clinic. Express your answer in km. [2]

(j) Many buildings are found along river and road. Suggest possible reasons. [2]

(k) What could be the main occupation of the people living in Zoro Town? Explain your answer. [2]

Part 2: Basic Techniques (5 marks)

18. Graph 1 shows different modes of transport used in Town A.



Graph 1

(a) State the mode of transport that has an average of 120 people travelling every day. [1]

(b) State the mode of transport that is most commonly used in Town A. Suggest a reason for its popularity. [2]

(c) Name one type of transport that is available in Singapore but not in Town A. Explain your answer. [2]

SECTION C: Structured Questions (30 x 2 = 60 marks)

Answer a total of <u>two</u> questions in this section on the writing paper provided.

Question 19 is a compulsory question.

Answer either Question 20 <u>or</u> Question 21.

Each question is awarded 15 marks.

19. (a) Figure 5 shows a weathering process.

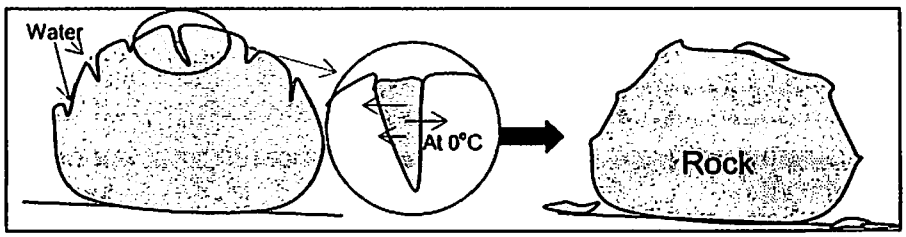


Figure 5

(i) Identify the weathering process in Figure 5. [1]

(ii) Explain the weathering process identified in (ai). [4]

(b) Figure 6 is an article extract. Read the article and answer the following.

Aug 30, 2010

Volcano erupts again, 2 dead

TANAH KARO (Indonesia) - AN INDONESIAN volcano dormant for four centuries erupted for the second straight day Monday, shooting clouds of hot ash more than a mile into the air and forcing 30,000 people to flee.

Some domestic airplanes had to be diverted because of poor visibility. Many villagers living along the slopes of Mount Sinabung in North Sumatra province wore masks as they packed their belongings and headed to emergency shelters, mosques and churches, said Andi Arief, a presidential adviser on disasters.

Their abandoned homes and crops were blanketed in gray soot and the air was thick with the smell of sulfur.

While two people died - a 64-year-old woman from respiratory problems and a 52-year-old man from a heart attack - it was too early to say if the volcano was to blame, said Priyadi Kardono of the National Disaster Management Agency.

Sinabung last erupted in 1600, so observers don't know its eruption pattern and admitted over the weekend they had not monitored it closely before it started rumbling days ago in the lead-up to Sunday's first, less-powerful blast.

Hours later, the alert was raised to the highest level. Like other volcanoes along the Sumatra fault line - the meeting point of the Eurasian and Pacific tectonic plates that have pushed against each other for millions of years - it has the potential to be very destructive.

http://www.straitstimes.com/BreakingNews/SEAsia/Story/STIStory_572655.html

Figure 6

(i) With reference to Figure 6 and studies made, explain three advantages and three disadvantages of living near volcanic areas. [6]

(ii) Describe ways in which people adapt to living near volcanic areas. [2]

(iii) Explain the high number of volcanoes in Indonesia. [2]

Answer either Question 20 or Question 21

20. (a) Figure 7 shows human influence on an area in Brunei.

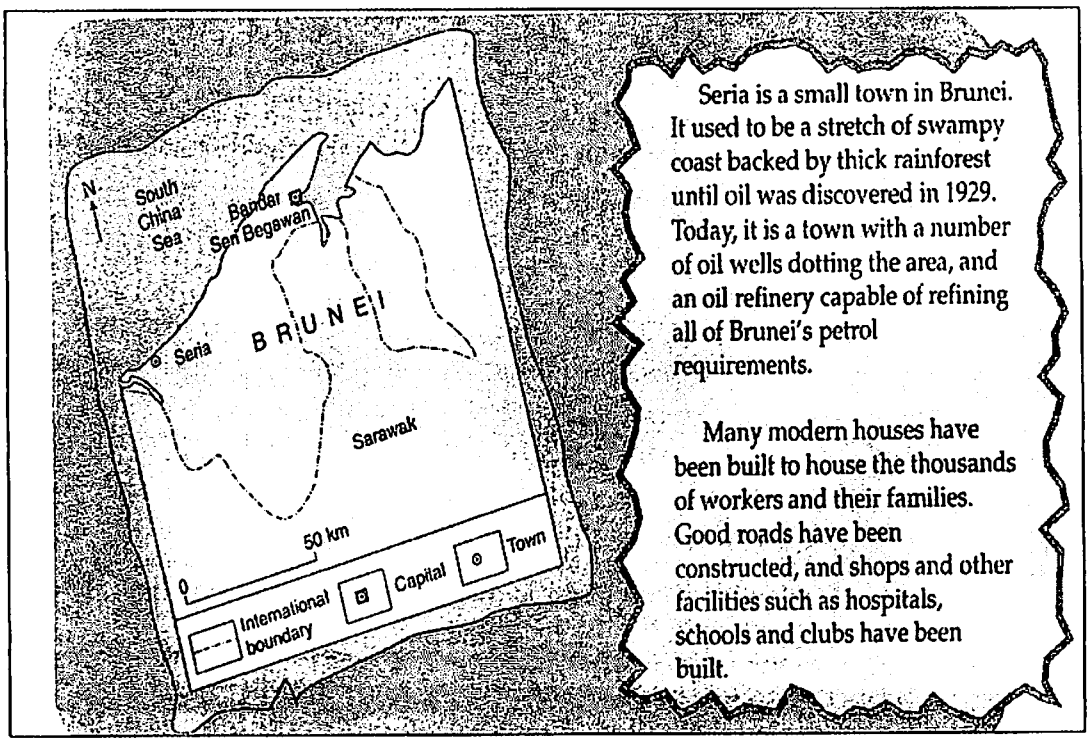


Figure 7

(i) With reference to Figure 7, describe how humans have changed the physical environment of Seria. [3]

(ii) Explain the reasons for the changes described in (ai). [3]

(iii) Explain how these changes described in (ai) might have negative impacts on the environment. [3]

(b) Figure 8 shows women in sub-Saharan Africa, carrying water from a lake, back to their homes.

Figure 8

Using evidences from Figure 8, explain how the physical environment has influenced the way the people live. [3]

(c) Explain why it is so important for us to protect the Earth and give one example of how we can protect the Earth. [2,1]

21. (a) Figure 9 shows movement of the Earth around the Sun.

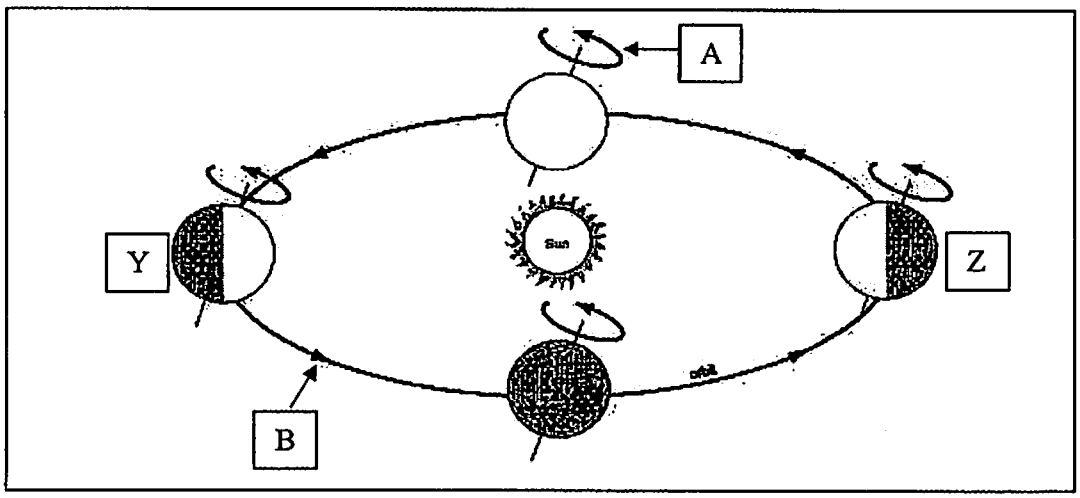


Figure 9

(i) Name the Earth's movement indicated by A and B. [2]

(ii) At which position (Y or Z) does the Northern Hemisphere experience summer? Explain your answer. [3]

(iii) The shaded portions of the Earth represent night while the unshaded portions represent day. Explain how day and night occur. [3]

(b) Figure 10 below shows the conditions of four planets.

	Mercury	Venus	Mars	Jupiter
Temperature	180°c to 430°c	482°c	-10°c to 123°c	-62°c
Atmosphere	None	97% carbon dioxide and other toxic gases	Only 1% of Earth's atmosphere 95% carbon dioxide	Mainly Helium and Hydrogen
Water	None	Rains Sulphuric Acid	Largely frozen at the poles	Extremely little, especially in vapour form

Figure 10

With reference to Figure 10 and studies made, explain why human beings may not survive on the four planets. [4]

(c) Explain one human activity and two natural hazards that will cause damage to Earth. [3]

End of Paper

ANG MO KIO SECONDARY SCHOOL
MID YEAR EXAMINATION 2013
SECONDARY 1 EXPRESS

GEOGRAPHY

Total Mark: 100 **8th May 2013 / Wednesday**

SECTION A: Multiple Choice Questions (15 marks)

1.	A	6.	D	11.	C
2.	B	7.	B	12.	C
3.	B	8.	B	13.	B
4.	D	9.	B	14.	C
5.	A	10.	C	15.	D

SECTION B: Mapwork and Basic Techniques (25 marks)

Part 1: Mapwork (15 marks)

16. (a) Tropic of Cancer [1]

(b) Africa [1]

(c) Australia [1]

(d) Atlantic Ocean [1]

(e) Himalayas [1]

17. (a) Map of Zoro Town [1]

(b) 1cm in map represent 500m in real life [1]

(c) Line symbol: Railway
Area Symbol: Padi/ Forest [1]

(d) 0453 [1]

(e) 039562 [2]

(f) 50m [1]

19

(g) Northeast [1]

(h) 45° (+/-1) [1]

(i) 2X500=1000m=1km [2]

(j) Buildings are built along road as it increases accessibility and convenient to travel.
Buildings are also built along the river as it provides a source of water for drinking. [2]

(k) They can be farmers. There are many padi plantations. [2]

18. (a) Bullock carts [1]

(b) Bicycles with 150 people travelling every day. It is the cheapest compared to others. [2]

(c) MRT. Town A seems to be of a developing country/ poor country/ low technology place therefore they cannot afford to build MRT. [2]

SECTION C: Structured Questions (30 x 2 = 60 marks)

19. (a) (i) Freeze thaw action/Action of freezing water [1]

(ii)
- Water enters cracks when it rains/snow melts
- Occur when temperatures fall low enough to freeze water expands, sets up stresses on rocks
- In the day, the ice melts and water enters further into the cracks
- Constant expanding and contracting over a long period of time, shattered rocks break from main body

[4]

(b) (i) Advantages
- Fertile soil for farming
- Precious stones
- Tourism

Disadvantages
- Loss of lives
- Loss of property
- Health problems
- Disruption to flights

[6]

3 each with explanation

(ii)
- Put in place various emergency plans by providing transport to escape – as this is more efficient in saving lives
- Drawn a volcanic map- guides people in building their homes
- Build emergency shelters – to house people when property is destroyed
- Alert system in place – so people can evacuate when there is impending eruption
- Providing masks – to overcome breathing difficulties

[2]

Any 2

(iii)
- It is along a fault line / plate boundaries
- Sumatra Fault line is the area where there is greatest impact / movement
- Ring of fire
- Eurasian and Pacific tectonic plates
- Moving towards each other

20. (a) (i) People have cleared the swamps and forests to harvest oil. [3]
People have built houses.
People have built roads.

(ii) People change the environment according to their needs. [3]
E.g deforestation to create land for housing. People need housing to stay
E.g. people use petrol to fuel cars
E.g deforestation to create land for school as education is important

(iii)
- Loss of forest causes loss of animal habitats [3]
- Air pollution due to excessive carbon dioxide not absorbed by vegetation
- More land for economic uses leads to land degradation, flood
- Factories releasing toxic gases into the atmosphere causing air pollution

(b)
- Adapts to high temperature - wear light clothing to keep themselves cool [3]
- Adapts to dry conditions – carrying water from a lake to their homes, absence of ready source of water
- Adapts to high temperature – has short hair to keep themselves cool

Accept other plausible answers

(d)
- Earth is the only planet on which life can exist [3]
- It provides us with materials that we need to live comfortably
- We can protect the Earth by reducing the amount of waste generated by using recyclable shopping bags to carry groceries instead of using plastic bags.

Accept other plausible answers

21. (a) (i) A: Rotation [2]
B: Revolution

(ii)
- Y [3]
- In June, position Y, the Northern Hemisphere experiences summer because it is leaning/tilting towards the Sun.
- The Southern hemisphere experiences winter because it is leaning away from the Sun.

(iii)
- The Earth rotates from the west to east on its axis. [3]
- When Earth rotates, the part facing the Sun receives the Sun's rays and experiences day.
- The part facing away from the sun experiences night.

(b) (i)
- Temperatures are either too high (482°c) or too low (-62°c) to support life. [4]
- There is lack of water on all planets.
- There is large percentage of hydrogen, helium and other toxic gases that cannot support life.
- The atmospheres of these planets do not support life.
- Humans need water, oxygen to survive.
*if student explained by planets, its one mark per planet.

(ii)
- Earthquake [3]
- Volcanic eruption

- Deforestation
- Air/land/water pollution

With explanation

Name: ..... Class: 1E .....

St. Gabriel's Secondary School

2013 First Semestral Examination

Subject : **Geography**
Level/Stream : **Sec 1 Express**
Duration : **1 hour 30 min**
Date : **3 May 2013**
Setter : **Ms.S.Josephine Mary**

Additional materials:
Writing paper
String

READ THESE INSTRUCTIONS FIRST

Answer **all** the questions in Section A on the Answer Sheet.

For Section B, answer Question 4 which is compulsory and, **either** Question 5 **or** Question 6 on the writing papers provided.

Write in dark blue or black pen.
You may use a soft pencil for diagrams, graphs or for rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

At the end of the examination, tie the Cover Sheet, Answer Sheet and the writing papers together.

This document consists of **13** printed pages, including this cover page.

[Turn Over

51

SECTION A: Geographical Skills (20 marks)

Answer all the questions.

1 Study Fig.1 carefully and answer the questions that follow.

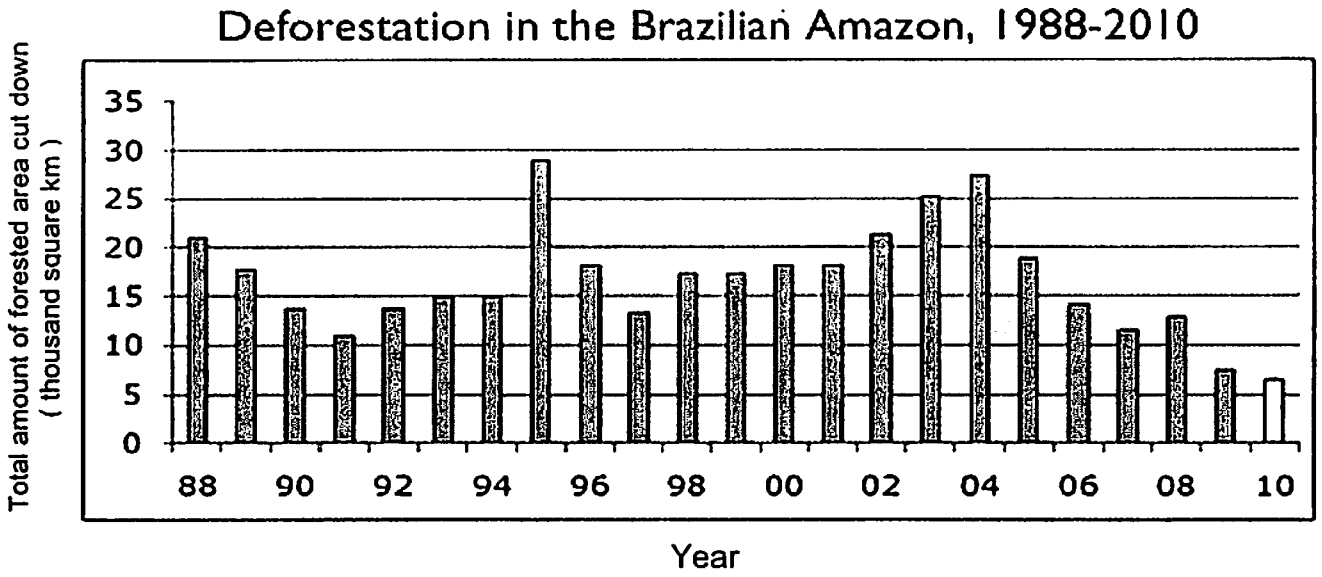


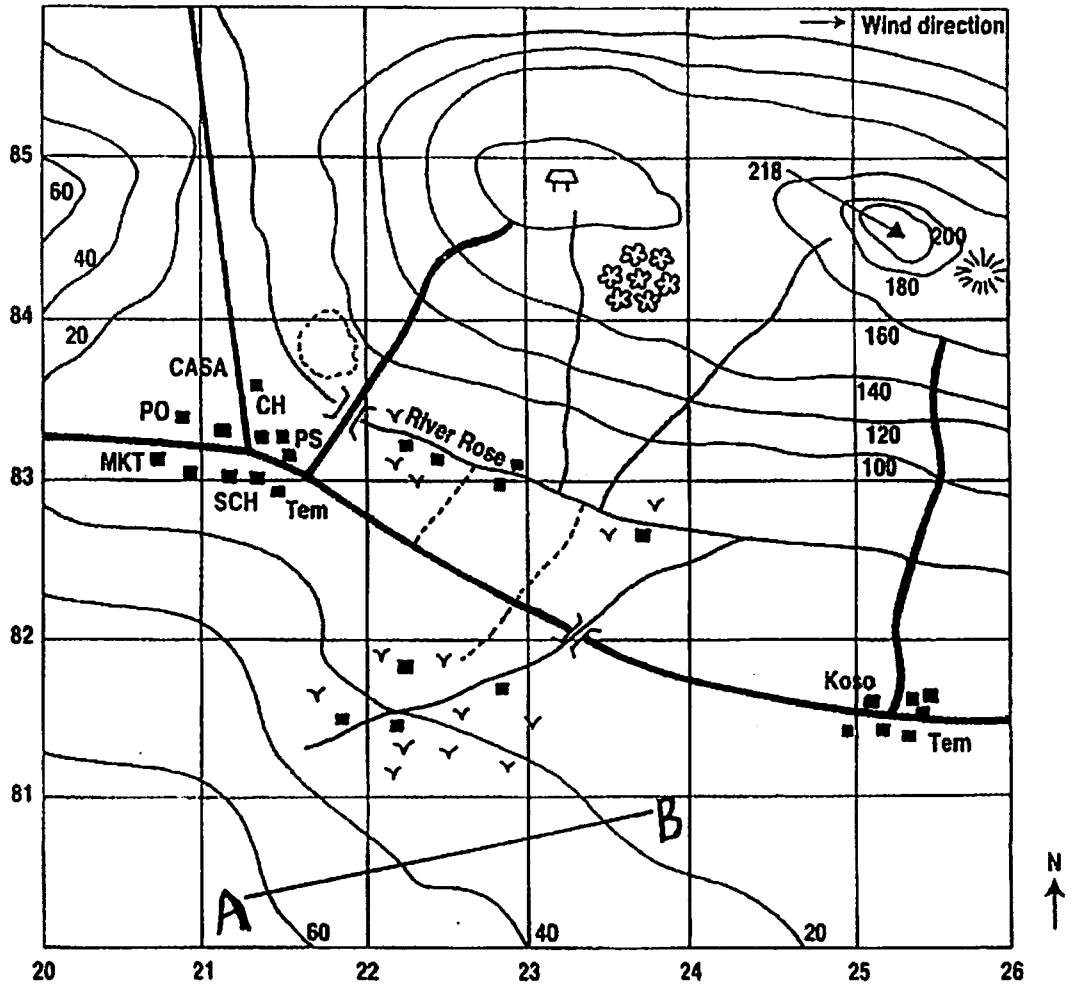
Fig.1

(a) Which year had the highest rate of deforestation? [1]

(b) What was the total amount of forested area that was cut down between 2001 and 2004?
You must show your working. [2]

(c) State a reason why so many trees have been cut down. [1]

2 Study Fig.2 carefully and answer the questions that follow.



1cm represents 2 km

Legend

Contour (Height in metres)	Houses	CH	Church	Bridge	
Foot path	Flower Orchard	Tem	Temple		
Quarry	Vegetable Farms	PO	Post Office		
Hill resort	Golf Course	SCH	School		
	Road	PS	Post Station		
		MKT	Market		

Fig.2

(a) What is the four - digit grid reference of the quarry? [1]

(b) Measure the straight – line distance between the Post Office and the Hill resort.
Express your answer in **km**.
You must show your working. [2]

(c) What is the compass direction of the Post Office from the Flower Orchard? [1]

(d) What do the contours of the slope labelled **AB** tell us about its gradient?
Support your answer with an evidence. [2]

3 Your geography teacher has asked you to carry out a fieldwork with your group.

Aim of project: To find out the **hotspot** in your school.

The 4 sites are:

Site A: Ecological Garden
Site B: Football Field
Site C: Foyer
Site D: Parade Square

(a) Name an instrument you will need to measure the temperature of the 4 sites. [1]

(b) Fig.3 shows 5 temperature readings recorded at different times at each of the 4 sites.

	Site A	Site B	Site C	Site D
Time	Ecological Garden	Football Field	Foyer	Parade Square
11:00am	25.0 °C	28.5 °C	23.5 °C	29.0 °C
11:10am	24.5 °C	29.0 °C	24.0 °C	29.5 °C
11:20am	24.5 °C	29.5 °C	24.5 °C	29.0 °C
11:30am	24.0 °C	29.0 °C	24.0 °C	30.0 °C
11:40am	24.5 °C	29.5 °C	24.5 °C	29.5 °C

Fig.3

(i) Calculate the mean temperature of Site A, Site B, Site C and Site D. You must show all your working. [4]

(ii) Rank the sites, starting from Rank No. 1, which has the highest temperature to Rank No. 4 which has the lowest temperature. [1]

(iii) State 1 reason why the site you ranked number 1 has the highest temperature. [2]

(iv) State 1 reason why the site you ranked number 4 has the lowest temperature. [2]

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SECTION B: Structured Questions (30 marks)

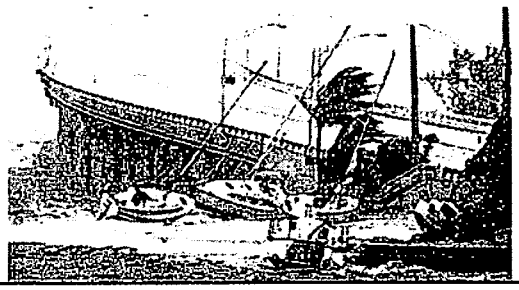
Question 4 is a **COMPULSORY** question.
You MUST answer **either** Question 5 **or** 6.

4 **(a)** State 2 conditions found on Planet Earth that supports life. [2]

(b) Study the figures below carefully and answer the question that follows.

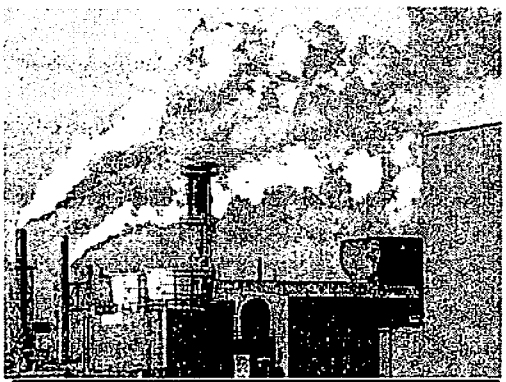
The earth shook in a city in China

Fig.4



Very strong winds blew across this coastal area

Fig.5



Chimneys of factories in Japan

Fig.6

The feathers of a bird covered with oil

Fig.7

For Figs.4, 5 and 6, identify the name of the hazard and state whether it is a natural hazard or a human hazard.

An example of the answer for Fig.7 is shown below:

An oil spill (human hazard) [3]

(c) Study the figures below carefully and answer the question that follows.

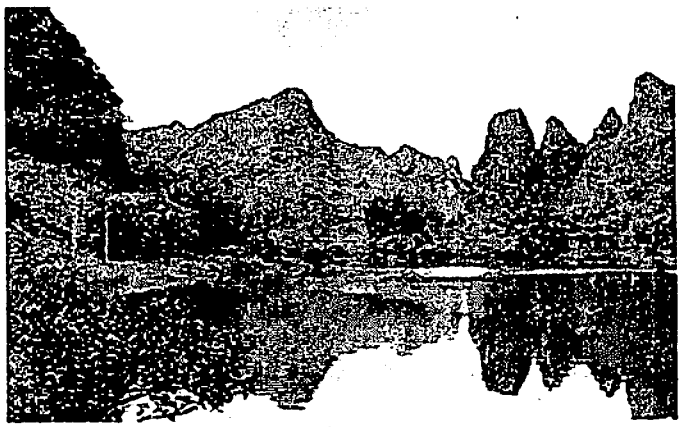


Fig.8

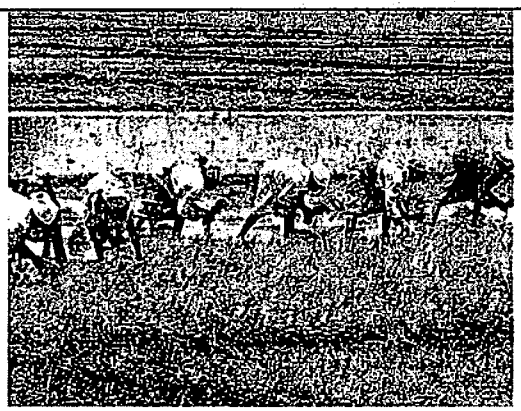
Fig.9

Identify the type of environment shown in Fig.8 and Fig.9.

Support your answer with an evidence from each photograph. [4]

51

(d) Study Fig.10 carefully and attempt the question that follows.



Farmers in a small farmland in India growing wet rice. They receive enough rainfall at the right time. The crops grow well and they enjoy good harvest.

A farmer in China is very upset that floodwaters have swept away his crops just a few days before they were harvested.

The owner of this banana farm in the Philippines is very sad as it has not rained for two months and his crops are dying. His income will be affected.

These farmers in Indonesia are growing spices. They are very happy that their crops receive enough sunlight and are growing well.

Fig.10

Weather has a positive impact on the livelihood of farmers.

Using examples from Fig.10, discuss the impact of weather on the farmers in some parts of Asia. [6]

5 (a) State the main difference between renewable natural resources and non - renewable natural resources. [2]

(b) With reference to Fig.11, 12 and 13, briefly describe how each of the natural resource is useful to man. [3]

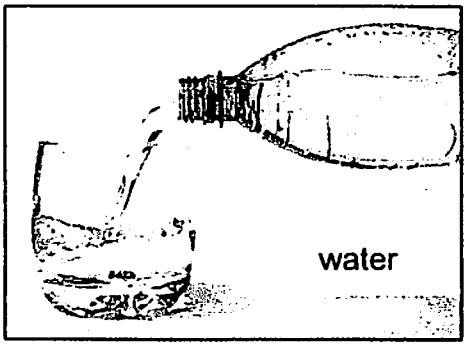


Fig.11

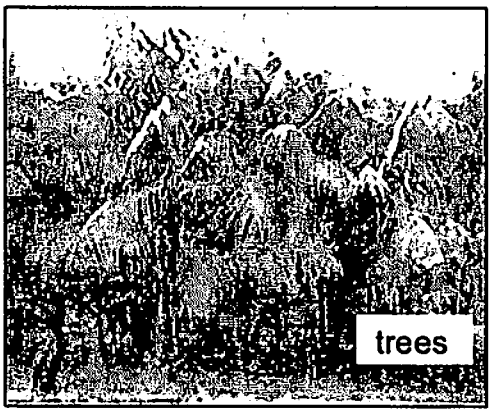


Fig.12

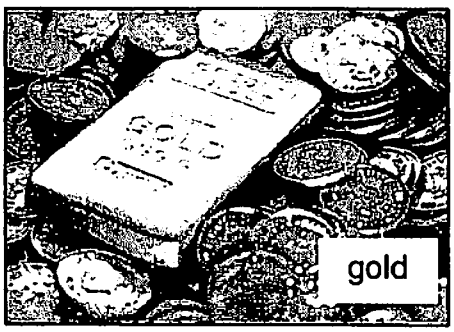


Fig.13

(c) Study the following figures below carefully and answer the questions that follow.

Fig.14

Fig.15

Fig.16

Fig.17

With reference to the figures, state how the !Kungbushmen and Singaporeans do the following:

(i) Obtain their food [2]

(ii) Build their houses [2]

(d) Study Fig.18 and answer the questions that follow.

Note: April has **30** days.

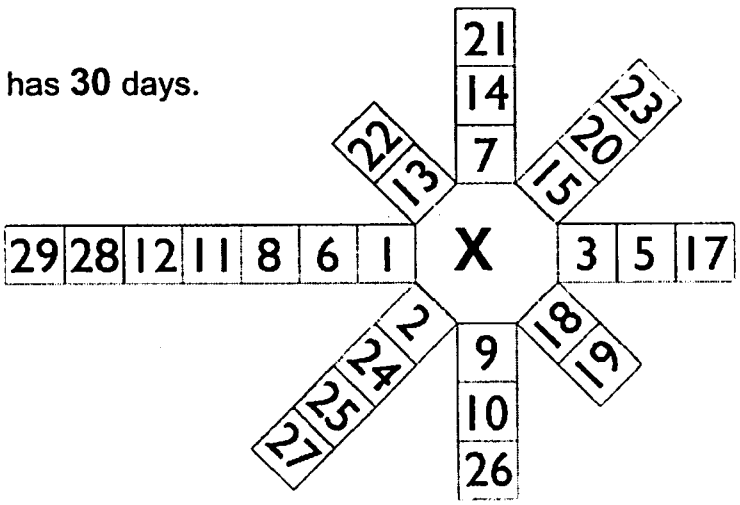


Fig.18

(i) State the direction of the prevailing wind. [1]

(ii) What does **X** stand for?
Calculate the value of X. [2]

(e) Draw a well-labelled diagram of a rain gauge. [3]

6 Study Fig.19 carefully and answer the questions that follow.

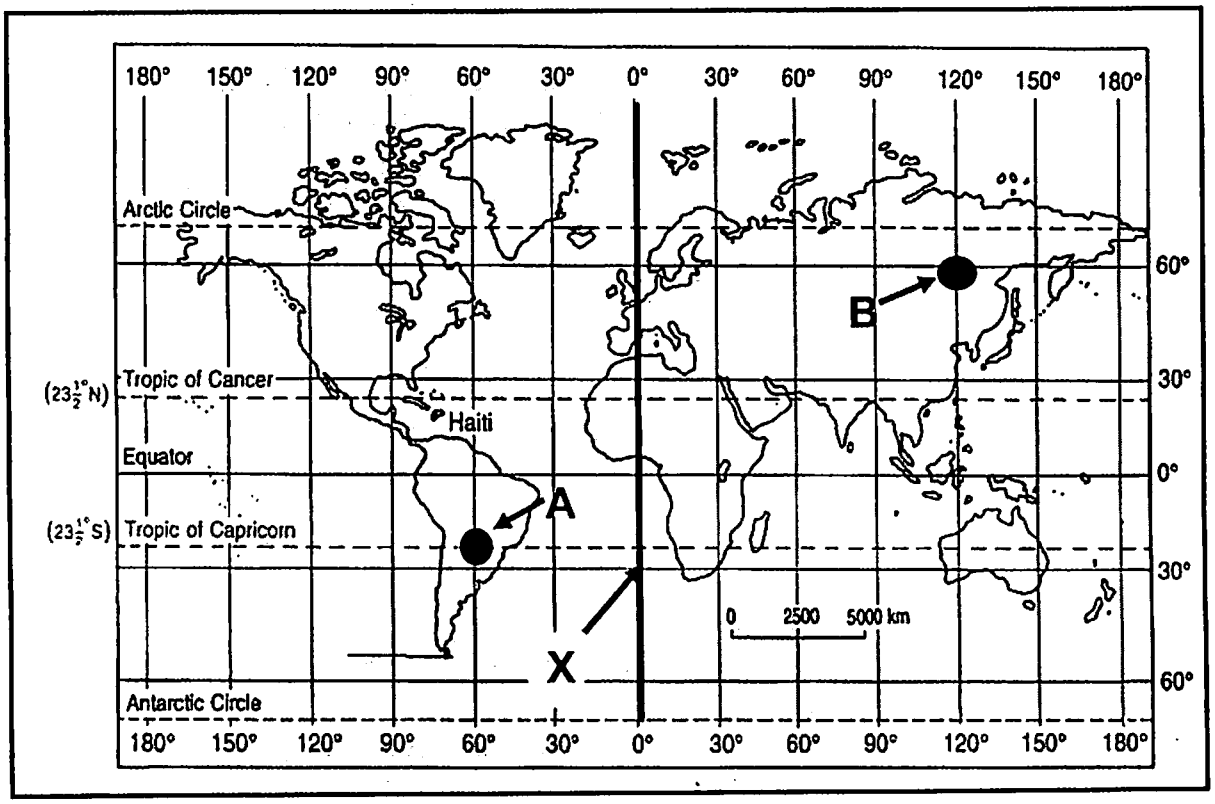


Fig.19

(a) State the latitudes and longitudes of **A** and **B**. [2]

(b) The line labelled '**X**' divides the globe into 2 hemispheres.

(i) What is the line '**X**' known as? [1]

(ii) Name the 2 hemispheres. [2]

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(c) Study the photographs which were taken in the same area in Singapore.

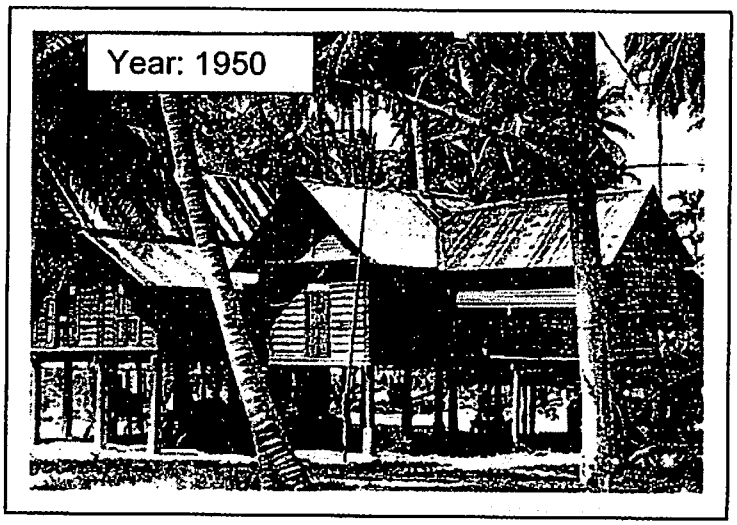


Fig.20

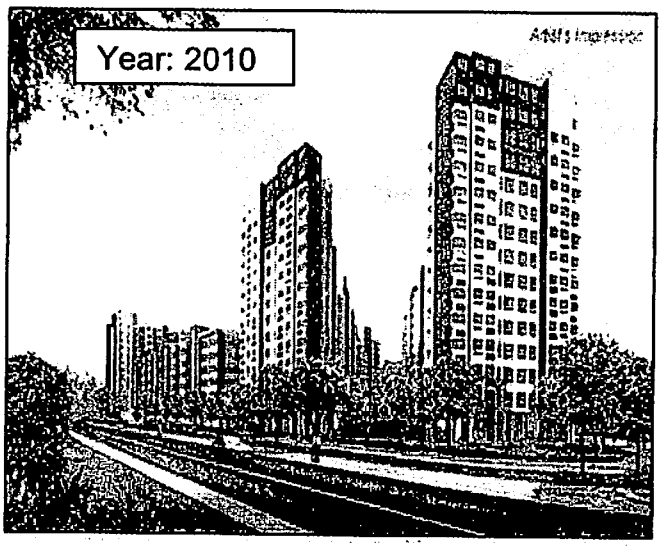


Fig.21

(i) What type of photographs are these?
Where were they taken from? [2]

(ii) Name 2 major changes that have taken place in this area, between 1950 and 2010. [2]

(d) Fig.22 shows the layout of a school.

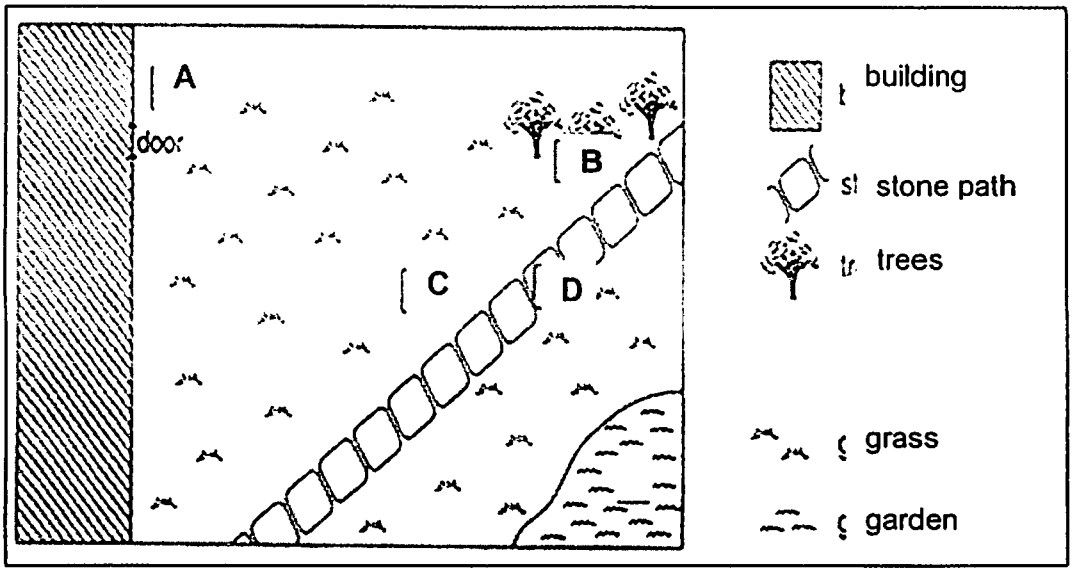


Fig.22

Of the four sites that have been identified, which is the best location (A,B,C or D) to place a Stevenson Screen?
State 2 reasons why you have chosen that site. [3]

(e) Draw a well – labelled diagram of the water cycle. [3]

END OF PAPER

St. Gabriel's Secondary School
2013 First Semestral Examination
Geography
Sec 1 Express

ANSWER KEY

SECTION A: Geographical Skills (20 marks)

Question 1 [4m]	
(a)	1995 [1m]
(b)	17 + 22 + 25 + 27 [working – 1m] = 91 thousand sq km [answer - 1m] *figures need not be exact; allow for slight variations*
(c)	- There is a high demand for timber / trees cut down to create farmlands / trees are cut down to make way for settlements / trees cut down to build factories [any 1 reason – 1m] * accept any sensible answer*

Question 2 [6m]	
(a)	2584 [1m]
(b)	5.9 cm [1m] 1cm represents 2 km 5.9 cm X 2 km = 11.8 km [1cm]
(c)	Southwest [1m]
(d)	Gentle [1m] The contours are far apart from each other. [1m]

Question 3 [10m]		
(a)		A maximum – minimum thermometer OR a data logger [1m]
(b)	(i)	**Site A** 25.0 °C + 24.5 °C + 24.5 °C + 24.0 °C + 24.5 °C = 122.5 / 5 = 24.5 °C [1m] **Site B** 28.5 °C + 29.0 °C + 29.5 °C + 29.0 °C + 29.5 °C =145.5 / 5 = 29.1°C [1m] **Site C** 23.5 °C + 24.0 °C + 24.5 °C + 24.0 °C + 24.5 °C = 120.5 / 5 = 24.1 °C [1m] **Site D** 29.0 °C + 29.5 °C + 29.0 °C + 30.0 °C + 29.5 °C = 147 / 5 = 29.4 °C [1m]
	(ii)	Rank 1 – Site D / parade square Rank 2 – Site B / football field Rank 3 – Site A / ecological garden Rank 4 – Site C / foyer [1m]
	(iii)	Parade Square / Site D is the hottest for the following reason(s): - Concrete ground [1m] tends to absorb a lot of heat [1m] OR - Enclosed area [1m] with poor air circulation so heat builds up [1m] OR - Surrounded by tall buildings [1m] so heat builds up [1m] [2m]
	(iv)	Foyer / Site C is the coolest for the following reason(s): - Sheltered area [1m] so does not receive direct sunlight [1m] OR - As the foyer faces the porch / main road [1m] so there is good air circulation preventing the accumulation of heat [1m] [2m]

SECTION B: Structured Questions (30 marks)

Question 4 [15m]

(a)

* Planet Earth has an average temperature of 22˚C.
* It has a layer of air called atmosphere
* Adequate amount of heat and light from the Sun
* It has fresh water in its rivers, lakes and underground / Earth is the only known planet where water exists in three forms.

Any 2 of the above [1 mark each X 2 conditions = 2m]

(b)

Fig 4 : Earthquake (natural hazard) [1m]
Fig 5 : Hurricane / tornado / typhoon (natural hazard) [1m]
Fig 6 : Air pollution (human hazard) [1m]

Pupils must mention both the name and type of hazard to score 1m for each figure.

(c)

Fig. 8 –

Natural / Physical environment [1m];

Evidence – there is a large river / pond and a large of mountains; there are only physical features / no human features [1m]

Fig. 9 –

Human / Man-made environment [1m];

Evidence – there is a house and a road [1m]

(d)

Level 1 (0 - 2m)

L1 (0m)
- No attempt by student
- Simply writing the given question

L1 (1m)
- Meaning of weather
- Makes reference to farming activities
- Gives examples of countries in Asia

<student states one of the above>

L1 (2m)
- Meaning of weather
- Makes reference to farming activities
- Gives examples of countries in Asia
- Does not include terms such as 'positive impact' or 'negative impact'

Level 2 (3 – 4m)

L2 (3m)
- Makes reference to one positive impact

L2 (4m)
- Makes reference to one positive impact / with reference to a given example / No examples given

OR
- Makes reference to one negative impact / with reference to a given example

Level 3 (5 – 6m)

L3 (5m)
- Makes reference to minimum one positive impact and one negative impact / with reference to a given example for each type of impact / no introduction / no conclusion

L3 (6m)
- Makes reference to minimum one positive impact and one negative impact / with reference to a given example for each type of impact / must give a balanced view [not mere copying of the given information]

Question 5 [15m]

(a)

Renewable Natural resources :
- Refer to natural resources that take a short period of time to renew or replenish themselves [1m]

Non - Renewable Natural resources :
- Refer to natural resources that take a very long time (thousands or millions of years to renew or replenish themselves [1m]

(b)

Water : it helps human beings quench our thirst / we need it to cook food / to water our crops in the farmlands / for industrial use – for cooling down machinery [1m]

Trees : we use the timber to build houses, make furniture, fishing sampans / trees produce oxygen for respiration during photosynthesis [1m]

Gold : we use gold for making jewellery / for making products, such as watches [1m]

(c)

(i) !Kungbushmen - they use simple hunting tools, such as bows and arrows, to hunt for animals which they cook and eat [1m]

Singaporeans – we buy cooked food from food courts [1m]

(ii) !Kungbushmen – they use natural materials, such as twigs, branches and leaves to build simple, temporary huts [1m]

Singaporeans – we build tall / high-rise buildings made of metal and concrete which are permanent [1m]

(d)

(i) West [1m]

(ii) X stands for the number of calm days [1m]

Value of X : 3 [1m]

(e)

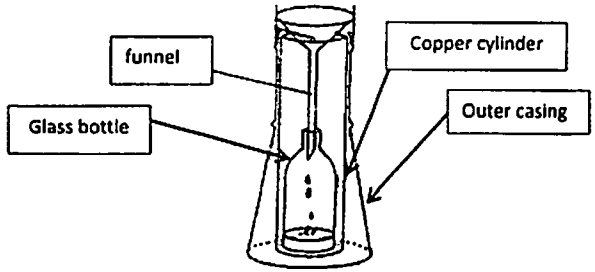


Diagram : 1m
4 labels X 0.5m = 2m
Total : 3m

Question 6 [15m]

(a)

A : 23.5°S , 60°W [1m]

B : 60°N , 120°E [1m]

(b)

(i) Greenwich Meridian [1m]

(ii) Western Hemisphere [1m]

Eastern Hemisphere [1m]

(c)

(i) Landscape photographs [1m]

At ground level [1m] from land [0m]

(ii)

- Wooden zinc – roofed huts have been replaced with tall concrete buildings [1m]
- Tall coconut trees have been cut down and shady trees line the road [1m]

(d)

- C [1m]
- it is a grassy area so the Stevenson Screen's legs can be planted into the soil to keep it stable [1m]
- it is an open area so there is free air circulation (to ensure that the weather instruments in the weather station record accurate readings) [1m]

(e)

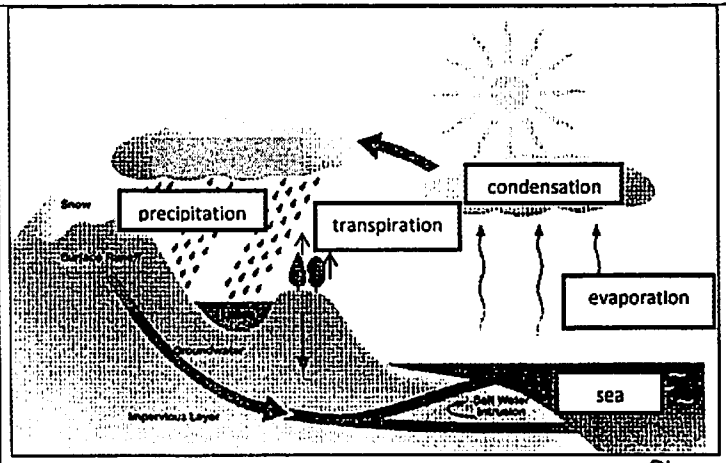


Diagram : 1m

4 labels < evaporation / transpiration / condensation / precipitation> X 0.5m = 2m

Total : 3m

Josephine Mary

Candidate Name:	Class:	Index No:

DUNMAN SECONDARY SCHOOL
Where.....discipline, determination, discernment, daring, & duty become a part of life.

MID-YEAR EXAMINATION 2013
SECONDARY 1 EXPRESS
GEOGRAPHY

2 HRS
0800-1000

10th May 2013
FRIDAY

Instructions to candidates:

1. The paper consists of three sections.
    a) Section A: MCQ
    b) Section B: Map-Reading & Basic Techniques
    c) Section C: Structured Questions
2. Candidates must answer ALL questions on the spaces provided in the question paper.
3. The use of calculators is allowed.

Information for candidates:

The number of marks for each part-question is given in brackets [ ] at the end of each part question. The total marks for this paper is 100 marks.

Setter: Ms Nadirah

This question paper consists of **19** printed pages including the cover page.

21

Section A: MCQ [15 marks]

Answer all questions in this section by filling in the box on Page 6.

1. The study of Geography is about the interaction between _____.

   A) human and physical environments

   B) man-made and human environments

   C) natural and physical environments

   D) human and animal environments

2. Which of the following is not a component of the human environment?

   A) Rubber plantation

   B) Power lines

   C) River

   D) Canal

3. Which one of the following activities will **least** damage the environment?

   A) Using water from the river to water the crops

   B) Dumping untreated sewage into the sea

   C) Building a beach resort

   D) Throwing litter into the drains

4. Which of the following descriptions about the !Kung Bushmen is **NOT** true?

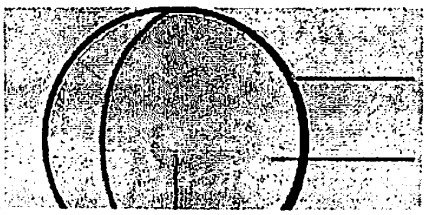
   A) They use simple tools to hunt for a living.

   B) They make big changes to their environment in order to survive.

   C) They use ostrich eggs to collect water.

   D) They do not build permanent shelters as they are always on the lookout for food and water.

5. The diagram below shows a cross-section of the Earth.



2

Figure 1

Which of the following is in the correct order?

	(i)	(ii)	(iii)
A)	Core	Mantle	Crust
B)	Crust	Mantle	Core
C)	Mantle	Crust	Core
D)	Crust	Core	Mantle

6. Which letter indicates the location of the Southern Ocean?

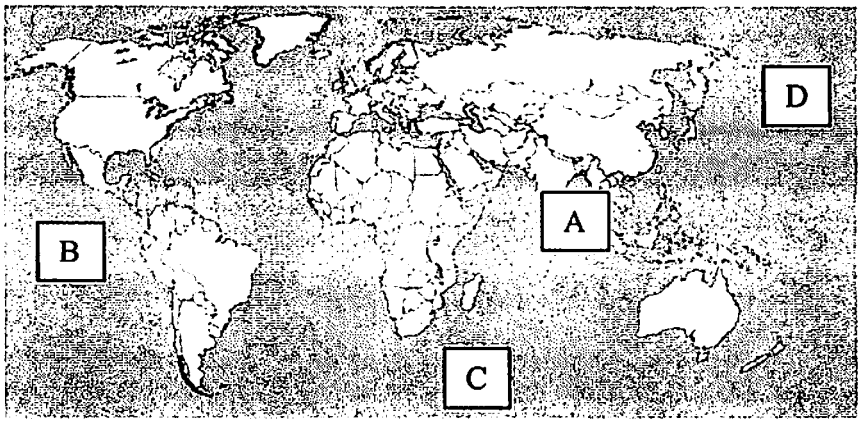
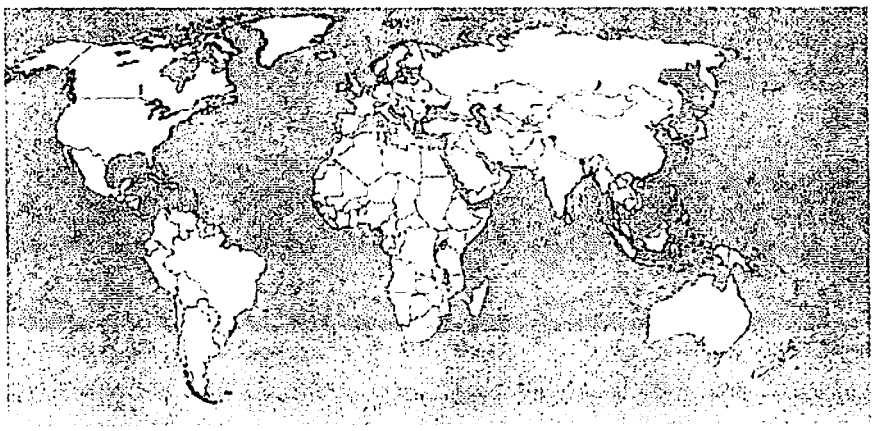


Figure 2

7.  Which letter indicates the location of the Australian

C

23

3

B

Continent?

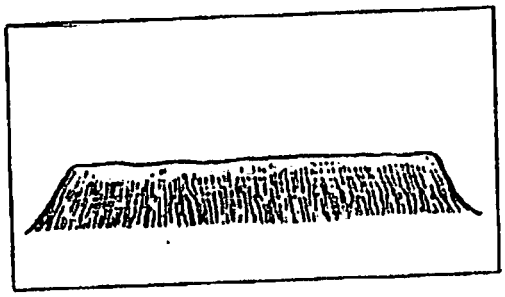
D

Figure 3

8. Study the landforms below carefully.

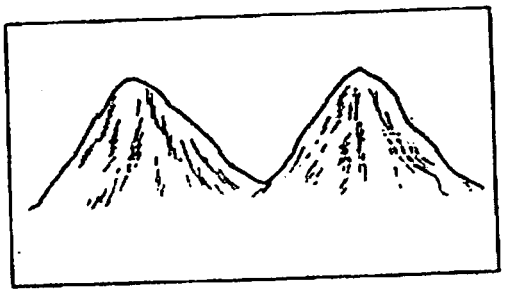
Which of these landforms best represents a plain?

A.



B.

C.



D.

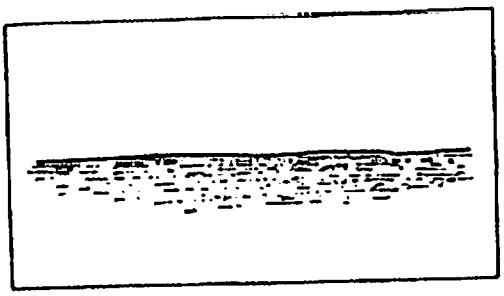


Figure 4

9. The horizontal lines on a grid map are called _____.

A) axis

B) equator

C) northings

D) eastings

10. A _____ refers to an imaginary line joining points or places of the same height.

A) latitude

B) scale

C) longitude

D) contour

11. The 0° latitude is also known as the _____.

A) Tropic of Capricorn

B) Tropic of Cancer

C) Equator

D) North Pole

12. The action of running water commonly takes place in _____.

A) sandy beaches in Australia

B) deserts in Africa

C) rivers in Thailand

D) polar regions in Alaska

13. Maps _____.

i- are tools used in planning
ii- are sources of information
iii- are used to calculate the distances between places accurately
iv- are used to record changes over time

A) i and iii only

B) ii and iv only

C) i, ii and iv only

D) all of the above

14. Molten rock which is found in the mantle layer is known as _____.

A) lava

B) magma

C) rock fragments

D) vulcanicity

15. The diagram below shows the contour lines of a _____.

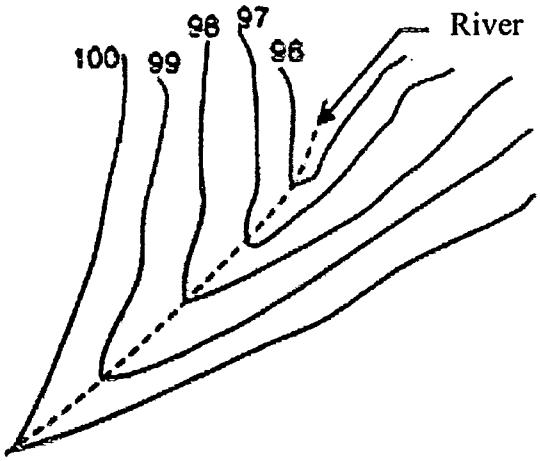


Figure 5

A) hill

B) mountain

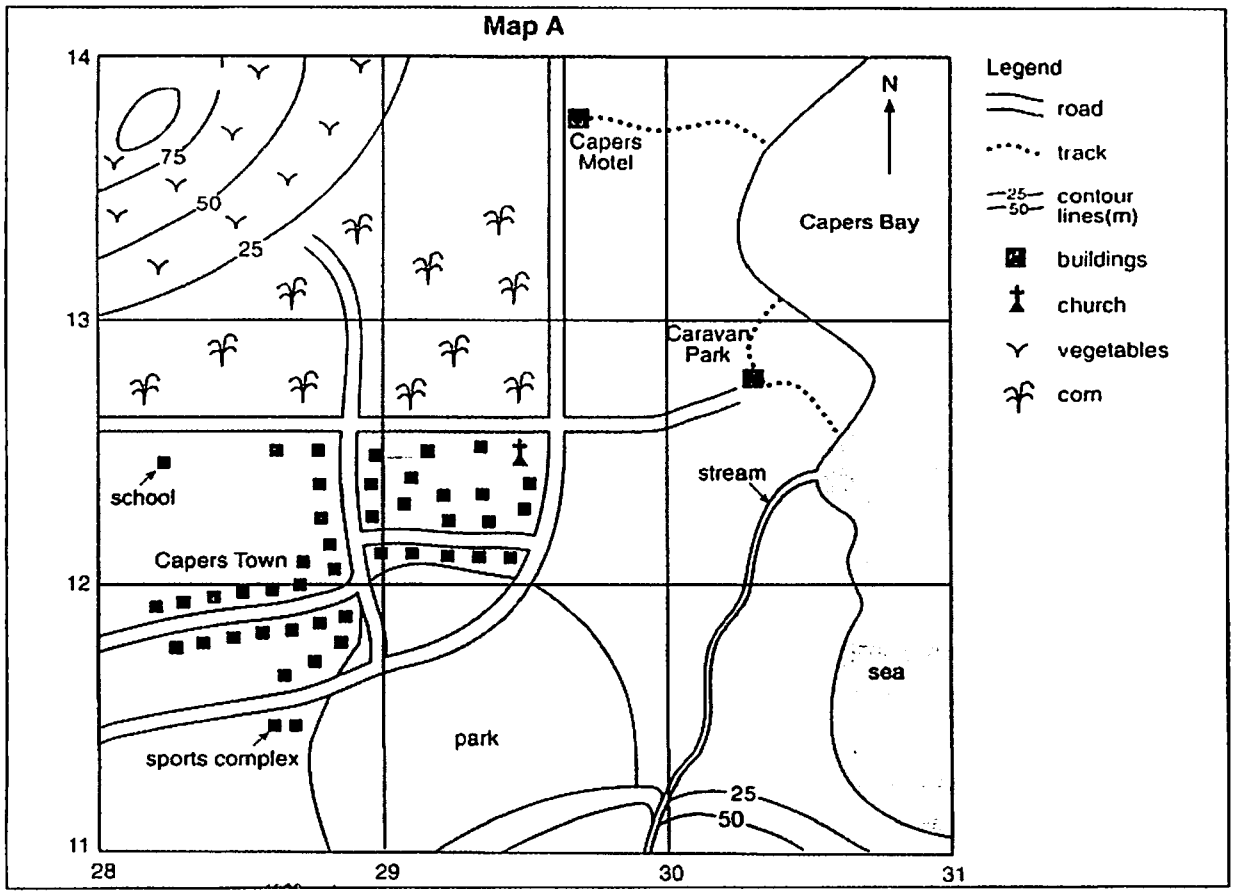
C) plateau

D) valley

Fill in the table below with your answers.

1.	**4.**	**7.**	**10.**	**13.**
2.	**5.**	**8.**	**11.**	**14.**
3.	**6.**	**9.**	**12.**	**15.**

Section B: Map-Reading [15 marks]



1: 25 000

16 Study the map of Capers Town carefully and then answer the following questions.

a Express the scale as a statement. [1]

_____

b Name a physical feature located in grid square 2813. [1]

_____

c Identify the 4-figure grid reference of the sports complex. [1]

_____

d Identify the 6-figure grid reference of the school. [1]

_____

e What is the contour interval in the topographical map? [1]

_____

f What is the direction of the school from Capers Motel? [1]

_____

g What is the direction of Caravan Park from Capers Motel? [1]

_____

h What is the bearing of Capers Motel from Caravan Park? [1]

_____

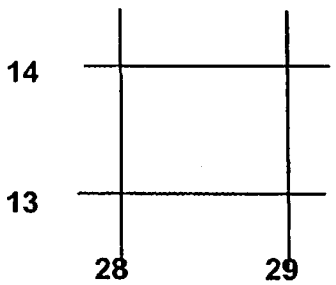
i Calculate the distance of the track from Capers Motel to Capers' Bay. Give your answer in kilometers. [1]

_____

j Name two physical features that one can see if one stands on top of the sports complex and looks east. [2]

_____

k Describe the slopes found in the grid square below. Give **evidence** for your answer. [2]



_____

_____

_____

l What could be the main economic activity in the area? Use map evidence to support your answer. [2]

_____

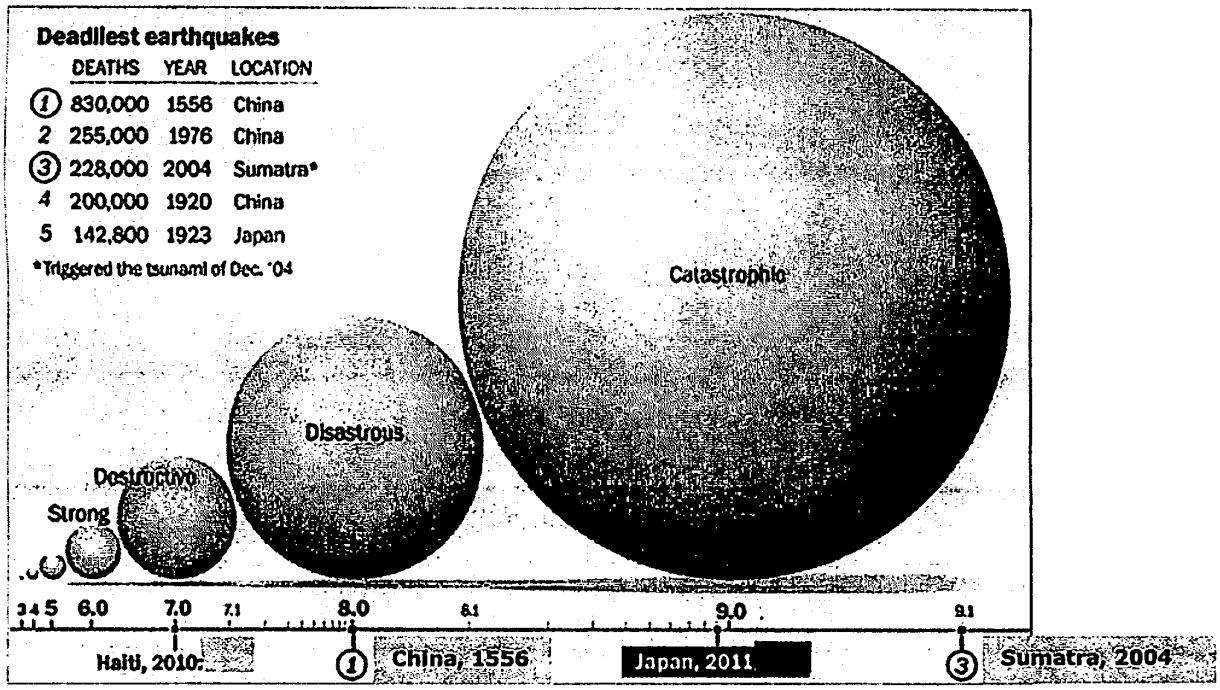
_____

_____

Section B: Basic Techniques [10 marks]

Answer all questions in this section.

17 The diagram below shows the 5 deadliest earthquakes and the magnitude of the Haiti and Japan earthquakes.



The line above shows the magnitude of the earthquake measured in Richter Scale.

Diagram 1

a What is the magnitude of the earthquake that occurred in Haiti in 2010? [1]

_____

b How many deaths were recorded during the earthquake in Japan in 1923? [1]

_____

c Which country had the highest number of deaths? [1]

_____

d Where do earthquakes usually take place? [2]

_____

_____

_____

18 The diagram below shows the percentage of deforestation of different regions in the 1990s and 2000s.

Percentage of Deforestation in the 1990s **Percentage of Deforestation in the 2000s**

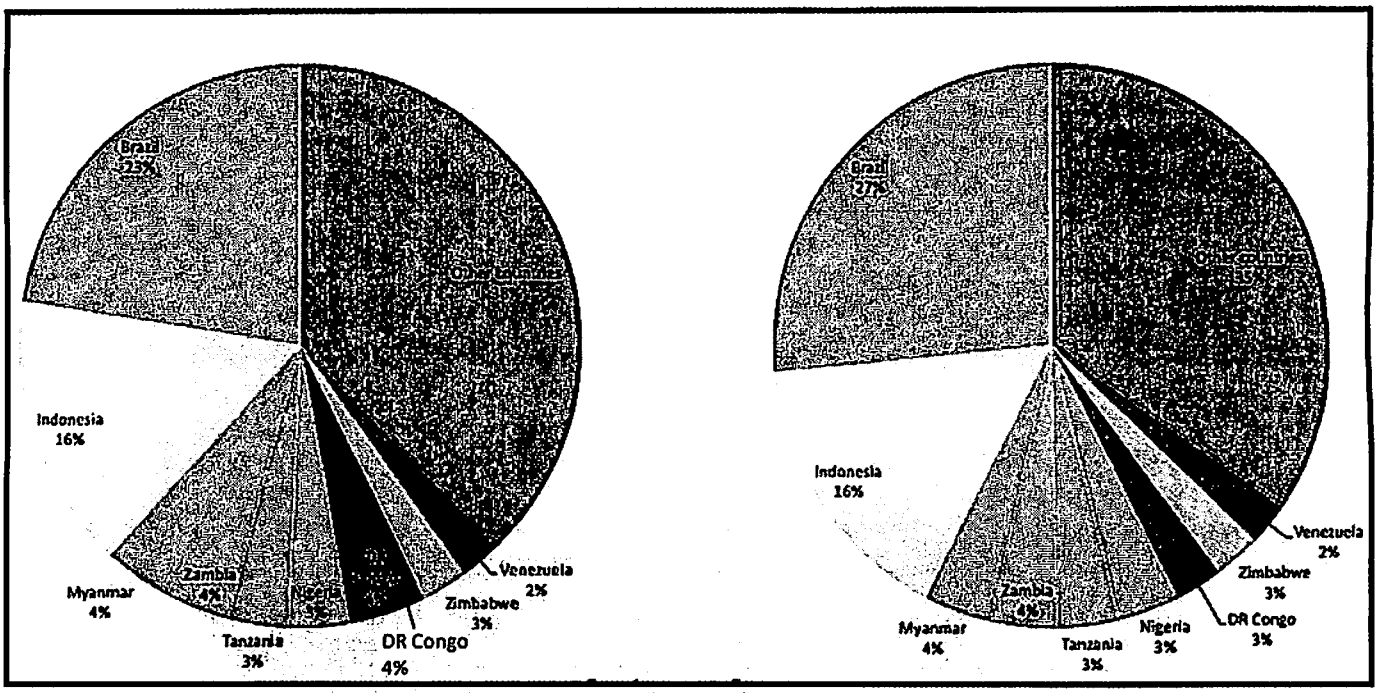


Diagram 2

a What is Indonesia's percentage of deforestation in the 1990s? [1]

_____

b Which country had a decrease in deforestation in the 2000s? [1]

_____

c Which country had the lowest percentage of deforestation in the 1990s and 2000s? [1]

_____

d Describe a trend in deforestation as shown in the diagram above. Include evidence from the diagram. [2]

_____

_____

_____

Section C: Structured Questions [60 marks]

Answer all questions in this section.

19a Study the figure below carefully and answer the questions that follow.

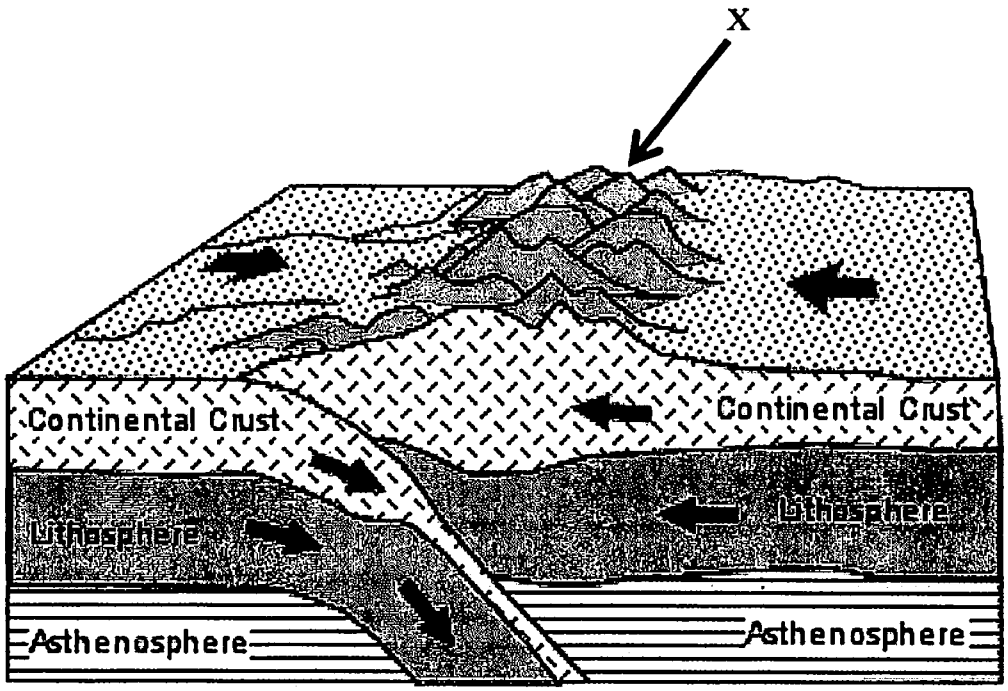


Figure 6

i Identify landform X and identify the plate movement that has led to its formation. [2]

ii With the help of the diagram above, describe the formation of landform X. [4]

iii Name one example of landform X. [1]

19b Read the excerpt below carefully and answer the questions that follow.

> Thursday's eruption is just the latest in a series that have left at least 44 people dead since the volcano became active on October 26.
>
> The volcano has belched hot gas and debris for more than a week, and increasingly forceful eruptions have sent ash raining down on communities up to 25 kilometers away. Many of those who live on the volcano's slopes are used to sweeping ash from their floors and washing thick, grey soot from their crops and trees.
>
> Budi Utomo runs his family's guesthouse. He is not sure how badly the eruptions will hurt businesses, because while some tourists stay away, others have come to see the exploding volcano.
>
> Daily weather reports refer to ash rain, which hits different sections of the city depending on the wind direction. When a neighborhood gets hit, children get a break from school. People will start to become sick if they breathe the dusty air for too long.

i Based on the excerpt above, identify and describe two negative impacts of Mt Merapi's eruption. [4]

ii Explain why people live near volcanoes despite the risks. [4]

20ai Define the term erosion. [2]

ii Describe the action of wind on rocks. [5]

20b Study the figure below which shows a type of weathering process.

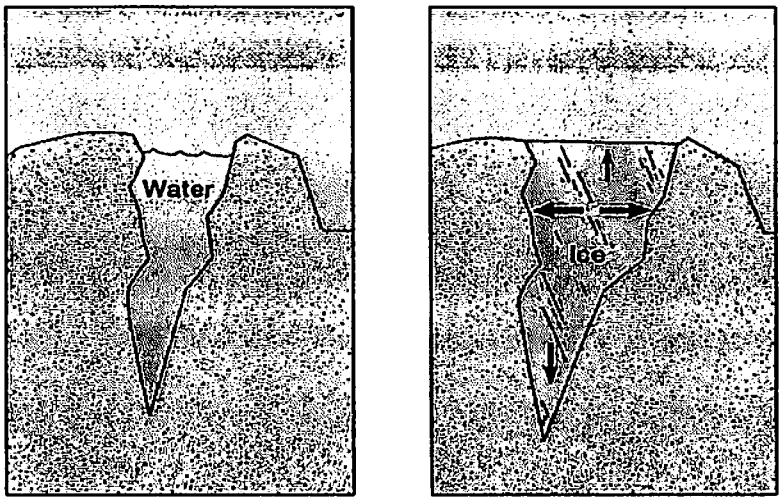


Figure 7

i Identify the weathering process found in the figure above. [1]

ii With help from Figure 7, describe the weathering process you have stated in ai. [5]

iii State two other causes of weathering. [2]

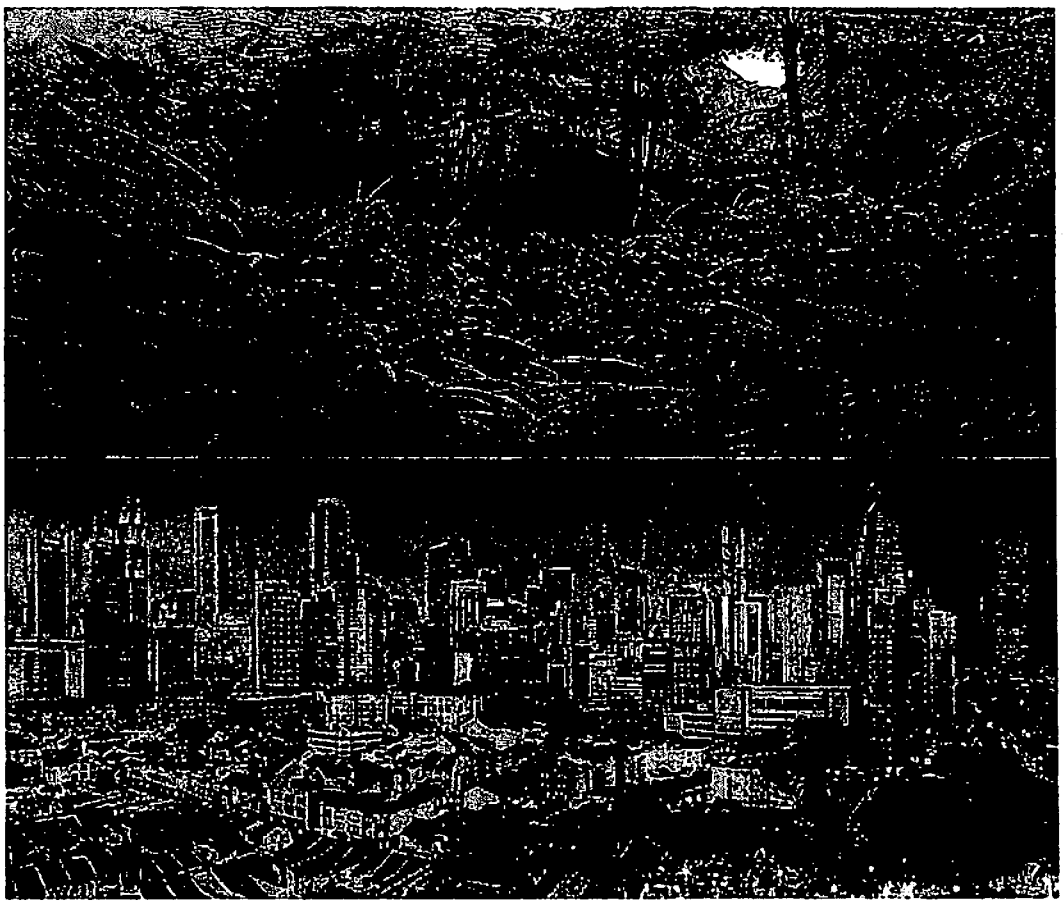
21a Study the photographs carefully and answer the questions that follow.

Photograph A

[4]

Explain how the !Kung Bushmen in Photograph A have adapted to the environment.

21b



Photograph B (Top: Singapore in the past and Bottom: Singapore now)

i Define 'physical' and 'human' environments. [2]

ii Describe how Man has changed the environment in Photograph B. [4]

21c "We live in a fragile earth. Human activities and natural disasters can damage earth."

i Name one human activity that can damage earth. [1]

ii Give two reasons why the earth is fragile. [4]

22a Study the photograph below carefully and answer the questions that follow.

Photograph C

i Identify the type of photograph shown above. [1]

_____

ii Describe **both** the human and physical features found in the: [4]

Foreground of the photograph:

_____

_____

Middle ground of the photograph:

_____

_____

(Do not repeat answers)

22b The photographs below are taken before and after a city was affected by an earthquake.

Before

After

Figure 8

i Identify the type of photograph shown above. [1]

_____

ii Compare three differences that you can see in the photos before and after the earthquake. [6]

_____

_____

_____

_____

_____

_____

iii State three uses of photographs in Geography. [3]

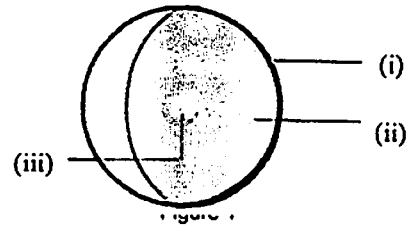
End of Paper

Answers to Sec 1 EXP MYE Paper 2013

Section A: MCQ [15 marks]
Answer all questions in this section.

1.	The study of Geography is about the interaction between _____.
	A) human and physical environments
	B) man-made and human environments
	C) natural and physical environments
	D) human and animal environments
	[A]
2.	Which of the following is not a component of the human environment?
	A) Rubber plantation
	B) Power lines
	C) River
	D) Canal
	[C]
3.	Which one of the following activities will least damage the environment?
	A) Using water from the river to water the crops
	B) Dumping untreated sewage into the sea
	C) Building a beach resort
	D) Throwing litter into the drains
	[A]
4.	Which of the following descriptions about the !Kung Bushmen is NOT true?
	A) They use simple tools to hunt for a living.
	B) They make big changes to their environment in order to survive.
	C) They use ostrich eggs to collect water.
	D) They do not build permanent shelters as they are always on the lookout for food and water.
	[B]

5.	The diagram below shows a cross-section of the Earth.



Which of the following is in the correct order?

	(i)	(ii)	(iii)
A)	Core	Mantle	Crust
B)	Crust	Mantle	Core
C)	Mantle	Crust	Core
D)	Crust	Core	Mantle

[B]

6. Which letter indicates the location of the Southern Oceans?

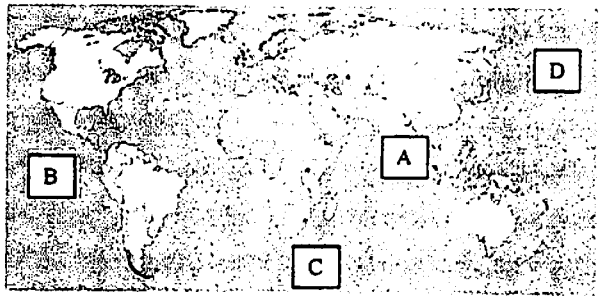


Figure 2

[C]

7. Which letter indicates the location of the Australian Continent?

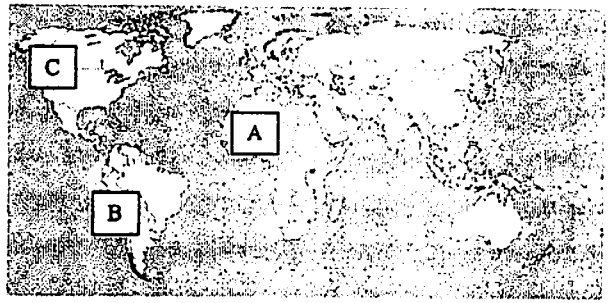
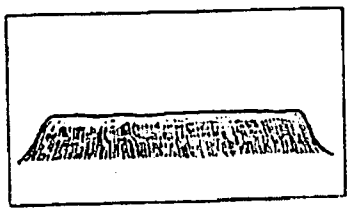
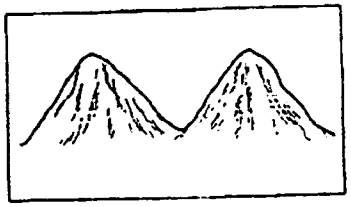
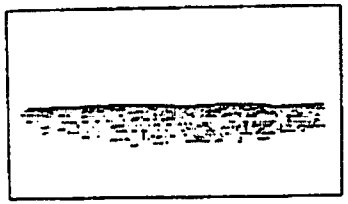


Figure 3

	[D]
8.	Study the landforms below carefully. Which of these landforms best represents a plain? A.  B.  C.  D.  Figure 4
	[D]
9.	The horizontal lines on a grid map are called _____.
	A) axis
	B) equator
	C) northings
	D) eastings
	[D]
10.	A _____ refers to an imaginary line joining points or places of the same height.
	A) latitude
	B) scale
	C) longitude
	D) contour
	[D]
11.	The 0° latitude is also known as the _____.
	A) Tropic of Capricorn
	B) Tropic of Cancer
	C) Equator
	D) North Pole
	[C]
12.	The breakdown of rocks due to large changes in temperate commonly takes place in _____.
	A) sandy beaches in Australia
	B) deserts in Africa
	C) caves in Vietnam
	D) polar regions in Alaska
	[C]
13.	Maps _____. i- are tools used in planning ii- are source of information iii- are used to calculate the distances between places accurately iv- are used to record changes over time
	A) i and iii only
	B) ii and iv only
	C) i, ii and iv only
	D) all of the above
	[D]
14.	Molten rock which is found in the mantle layer is known as _____.
	A) lava
	B) magma
	C) rock fragments
	D) vulcanicity
	[B]
15.	The diagram below shows the contour lines of a _____.

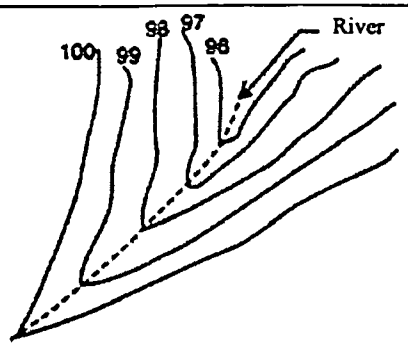
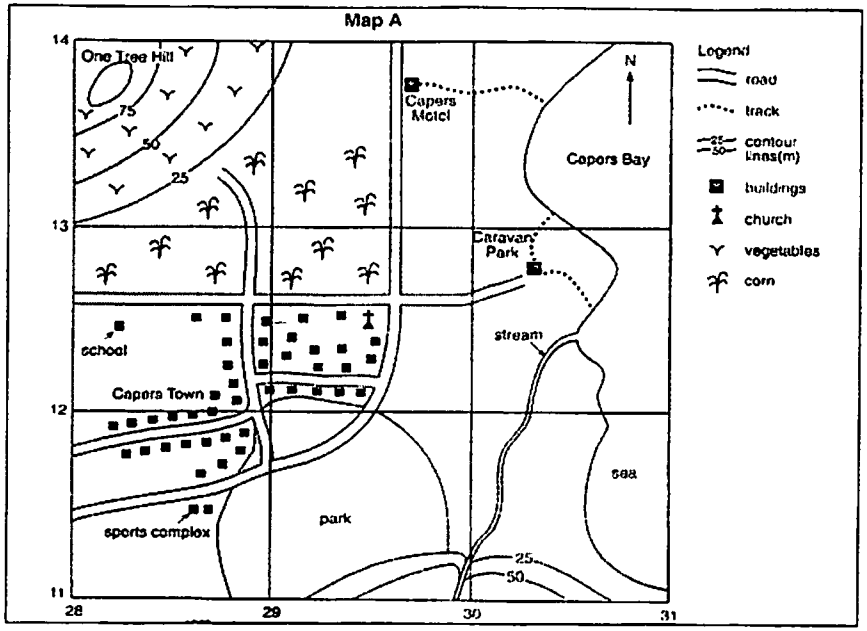


Figure 5

	A) hill
	B) mountain
	C) plateau
	D) valley
	[D]

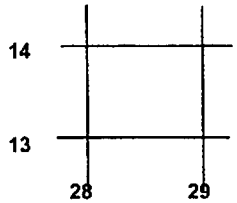
Section B: Map-Reading [15 marks]



1: 25 000

16 Study the map of Capers Town carefully and then answer the following questions.

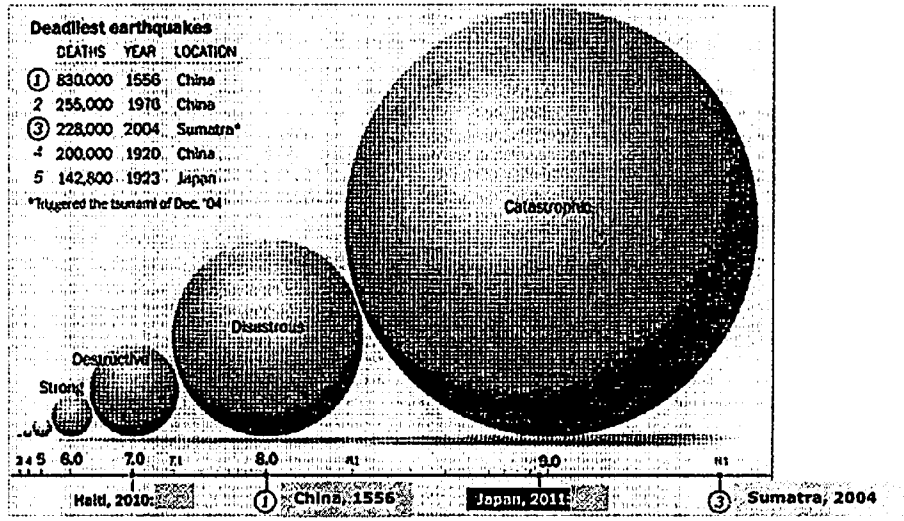
a	Express the scale in statement form.	[1]
	1cm represents 0.25km	
b	Name a physical feature located in grid square 2813.	[1]
	Hill	
c	Identify the 4-figure grid reference of the sports complex.	[1]
	2811	
d	Identify the 6-figure grid reference of the school.	[1]
	283125	

e	What is the contour interval in the topographical map?	[1]
	25m	
f	What is the direction of the school from Capers Motel?	[1]
	Southwest	
g	What is the direction of Caravan Park from Capers Motel?	[1]
	Southeast	
h	What is the bearing of Capers Motel from Caravan Park?	[1]
i	Calculate the distance of the track from Capers Motel to Capers' Bay. Give your answer in kilometers.	[1]
j	Name two physical features that one can see if one stands on top of the sports complex and looks east.	[2]
	Sea and stream	
k	Describe the slopes found in the grid square below. Give **evidence** for your answer.  	[2]
	Gentle slopes [1] Contour lines are widely-spaced [1]	
l	With **evidence** from the map, what could the main economic activity be in this area?	[2]
	Vegetable farming [1] Presence of vegetables grown near the hill Corn plantation [1] Presence of corn near the hill Tourism [1] Presence of sea and motel	

Section B: Basic Techniques [10 marks]

Answer all questions in this section.

17 The diagram below shows the 5 deadliest earthquakes and the magnitude of the Haiti and Japan earthquakes.



The line above shows the magnitude of the earthquake measured in Richter Scale.

Diagram 1

a	What is the magnitude of the earthquake that occurred in Haiti in 2010?	[1]
	7.0 on the Richter Scale	
b	How many deaths were recorded during the earthquake in Japan in 1923?	[1]
	142,800 deaths	
c	Which country had the highest number of deaths?	[1]
	China	
d	Where do earthquakes usually take place?	[2]
	Earthquakes usually take place at the edge of plate boundaries [1] where plate movement is greatest [1].	

18 The diagram below shows the percentage of deforestation of different regions in the 1990s and 2000s.

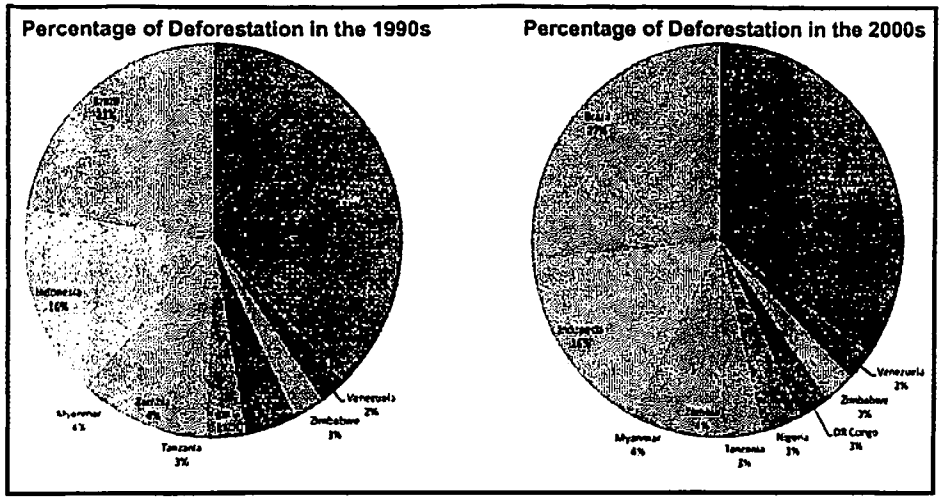


Diagram 2

a	What is Indonesia's percentage of deforestation in the 1990s?	[1]
	16%	
b	Which country had a decrease in deforestation in the 2000s?	[1]
	DR Congo	
c	Which country had the lowest percentage of deforestation in the 1990s and 2000s?	[1]
	Venezuela	
d	Describe a trend in deforestation as shown in the diagram above. Include evidence from the diagram.	[2]
	Increase in percentage of deforestation [1] + Brazil increased from 23% to 27% [1] Percentage of deforestation stays the same [1] + Myanmar, Tanzania, etc remained at 4% or 3% [1]	

Section C: Structured Questions [60 marks]

Answer all questions in this section.

19a Study the figure below carefully and answer the questions that follow.

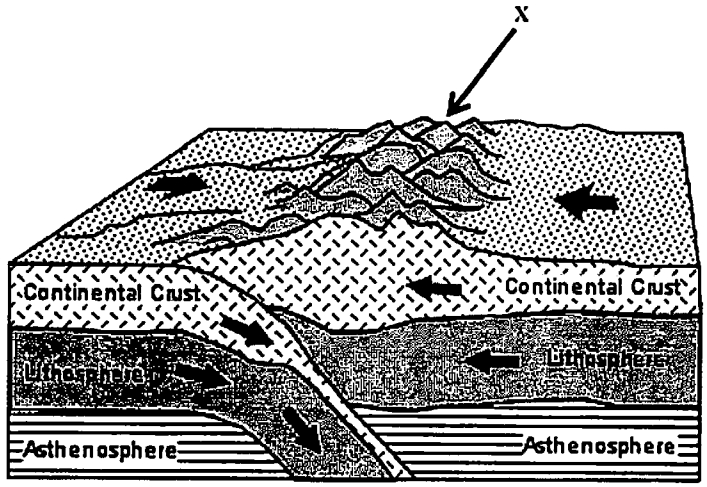


Figure 6

i	Identify landform X and identify the plate movement that has led to its formation.	[2]
	Fold Mountains [1], plates push against each other/converge [1]	
ii	With the help of the diagram above, describe the formation of landform X.	[4]
	Fold mountains are formed when two continental plates converge with one another [1]. The force of the collision causes some layers of the rock to buckle and form folds [1]. Massive layers of the earth's crust gets uplifted [1]. Over millions of years, the mountain was gradually pushed above the sea level [1].	
iii	Name one example of landform X.	[1]
	Appalachian Mountains/Andes Mountains/Rocky Mountains/Himalayas Mountains	

19b Read the excerpt below carefully and answer the questions that follow.

Thursday's eruption is just the latest in a series that have left at least 44 people dead since the volcano became active on October 26.

The volcano has belched hot gas and debris for more than a week, and increasingly forceful eruptions have sent ash raining down on communities up to 25 kilometers away. Many of those who live on the volcano's slopes are used to sweeping ash from their floors and washing thick, grey soot from their crops and trees.

Budi Utomo runs his family's guesthouse. He is not sure how badly the eruptions will hurt businesses, because while some tourists stay away, others have come to see the exploding volcano.

Daily weather reports refer to ash rain, which hits different sections of the city depending on the wind direction. When a neighborhood gets hit, children get a break from school. People will start to become sick if they breathe the dusty air for too long.

i	Based on the excerpt above, identify and describe two negative impacts of Mt Merapi's eruption.	[4]
	It caused deaths [1] with at least 44 people dead [1]. It disrupted school time [1] as school was forced to close due to the ash [1]. It affected tourism/business [1] as some tourists stayed away due to danger [1]. It affected health of the people [1] as some people fell sick due to the dusty air. Accept all plausible answers.	
iii	Explain why people live near volcanoes despite the risks.	[4]
	There is very fertile soil produced by volcanic ash [1] and crops able to grow well and have good harvest [1]. It serves as a tourist attraction location [1] allowing the local people to earn money through tourism [1] Accept all plausible answers.	

20a

i	Define the term 'erosion'.	[2]
	Erosion is the process of wearing down of surface materials [1] and moving them from one place to another [1].	
ii	Describe the action of wind on rocks.	[5]
	In deserts where there are few plants to hold the soil [1], strong winds can carry large amounts of sand [1]. The sand polishes and smoothens the surface of the rocks [1]. As sand is heavy, it cannot be blown very high into the air [1]. Hence, wind erosion tends to take place mainly at the base of the rocks. [1]	

20b Study the figure below which shows a type of weathering process.

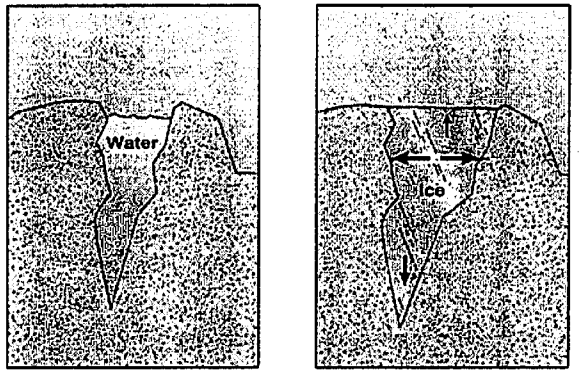


Figure 7

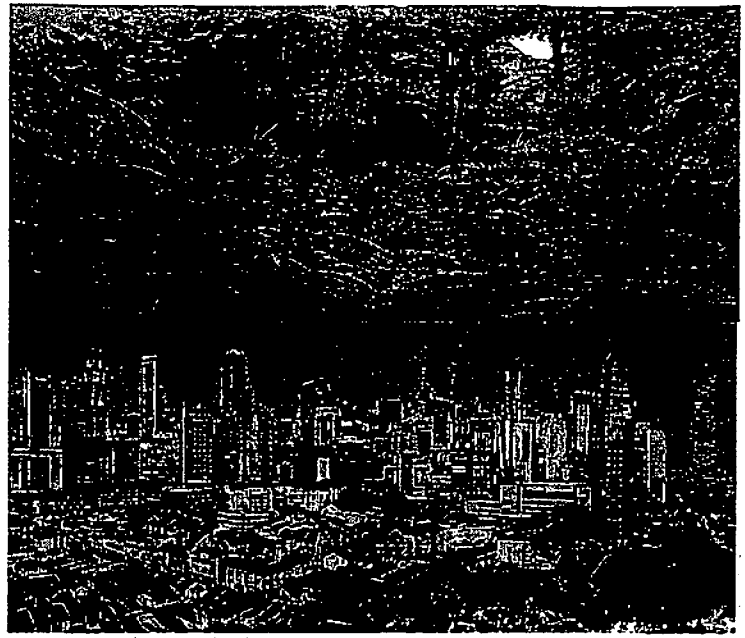
i	Identify the weathering process found in the figure above.	[1]
	Action of freezing water.	
ii	With help from Figure 7, describe the weathering process you have stated in ai.	[5]
	On a high mountain, water from melting snow or rain may enter cracks in rocks [1]. At night, when temperature falls below 0 degree Celsius, the water turns into ice [1]. When it freezes, it expands and causes the cracks in the rocks to widen [1]. During the day, when the temperature rises, the ice melts and turns back into liquid water [1]. The alternate freezing and melting causes the rocks to become wider, eventually breaking apart [1].	
iii	State two other causes of weathering.	[2]
	Large changes in temperature [1] and action of water [1].	

21a Study the photographs carefully and answer the questions that follow.

Photograph A

	Explain how the !Kung bushmen in Photograph A have adapted to the environment.	[4]
	The !Kung bushmen used the resources around there such as leaves and mud [1] to build their huts [1]. The !Kung bushmen used simple tools such as sticks [1] to build hunting weapons [1]. The !Kung bushmen used animal skin [1] to make clothing [1].	

21b



Photograph B (Top: Singapore then and Bottom: Singapore now)

i	Define 'physical' and 'human' environments.	[2]
	Physical environment – an environment that consists of physical features that occur naturally on earth [1] Human environment – an environment that is formed when a physical environment is changed as a result of human activities	
ii	State how Man has changed the environment in Photograph B.	[4]
	Man has changed the environment by clearing the land [1], building skyscrapers [1], constructed roads and carparks [1], planted new trees [1].	

21c "We live in a fragile earth. Human activities and natural disasters can damage earth."

i	Name one human activity that can damage earth.	[2]
	Deforestation/ pollution/ burning of fossil fuels Accept all plausible answers.	

ii	Give two reasons why the Earth is fragile.	[4]
	The Earth is our only home [1] and it can be damaged [1] In order for the Earth to continue to support life [1], the Earth's resources have to be used wisely [1] When we extract natural resources from our environment, we change the environment [1] and since the components of the Earth's physical environment are interrelated, the change on our environment will have an impact on us too [1] Since Earth is the only planet where life can exist [1], we need to take care of our environment and use resources responsibly so that future generations can survive [1]	

22a Study the photograph below carefully and answer the questions that follow.

Photograph C

i	Identify the type of photograph shown above.	[1]
	Landscape photograph	

ii	Describe **both** the human and physical features of the:	[4]
	Foreground of the photograph: Human – cars/bridge [1] and Physical – hill/ rocks/ sea/ cliff [1] Middle ground of the photograph: Human – buildings/bridge [1] and Physical – sea, rock landforms/cliffs [1]	

(Do not repeat answers)

22b The photographs below are taken before and after a city was affected by an earthquake.

Before After

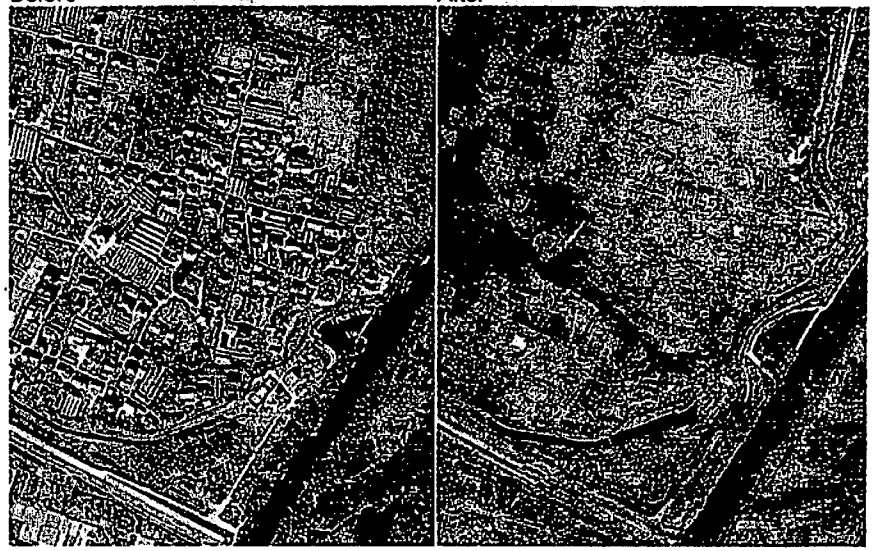


Figure 8

i	Identify the type of photograph shown above.	[1]
	Satellite Image	
ii	Compare three differences that you can see in the photos before and after the earthquake.	[6]
	Before the earthquake, there are many buildings [1]. After the earthquake, there are fewer buildings as many have been destroyed [1]. Before the earthquake, there are many developed roads [1]. After the earthquake, fewer developed roads can be seen [1].	

	Before the earthquake, there is more vegetation cover [1]. After the earthquake, there is less vegetation visible due to damage [1]. Accept any plausible answers.	
iii	State three uses of photographs in Geography.	[3]
	Photographs provide information about a place [1] Photographs can be used as records of changes [1] Photographs can be used as a tool to study the environment. Accept any plausible answers.	

End of Paper

Section A

Mapwork (20marks)

1 Refer to the Treasure Bay Map which is found on page 3.

Study the map and answer questions 1a to 1j.

a. Name the table of the map which shows the list of symbols(**X**). [1m]

b. State the contour interval of the contour lines. [1m]

c. State the four-figure grid reference of Lake Diamond. [1m]

d. State the six-figure grid reference of the school. [1m]

e. State the direction of the church from Lake Diamond. [1m]

f. State the bearing from the school to the Post Office. [1m]

g. Calculate the straight-line distance between the Police Station and the school [2m]

Show your workings clearly. Express your answer in **metres**.

h. Measure and calculate the length of the major road. Show your workings clearly. [2m]

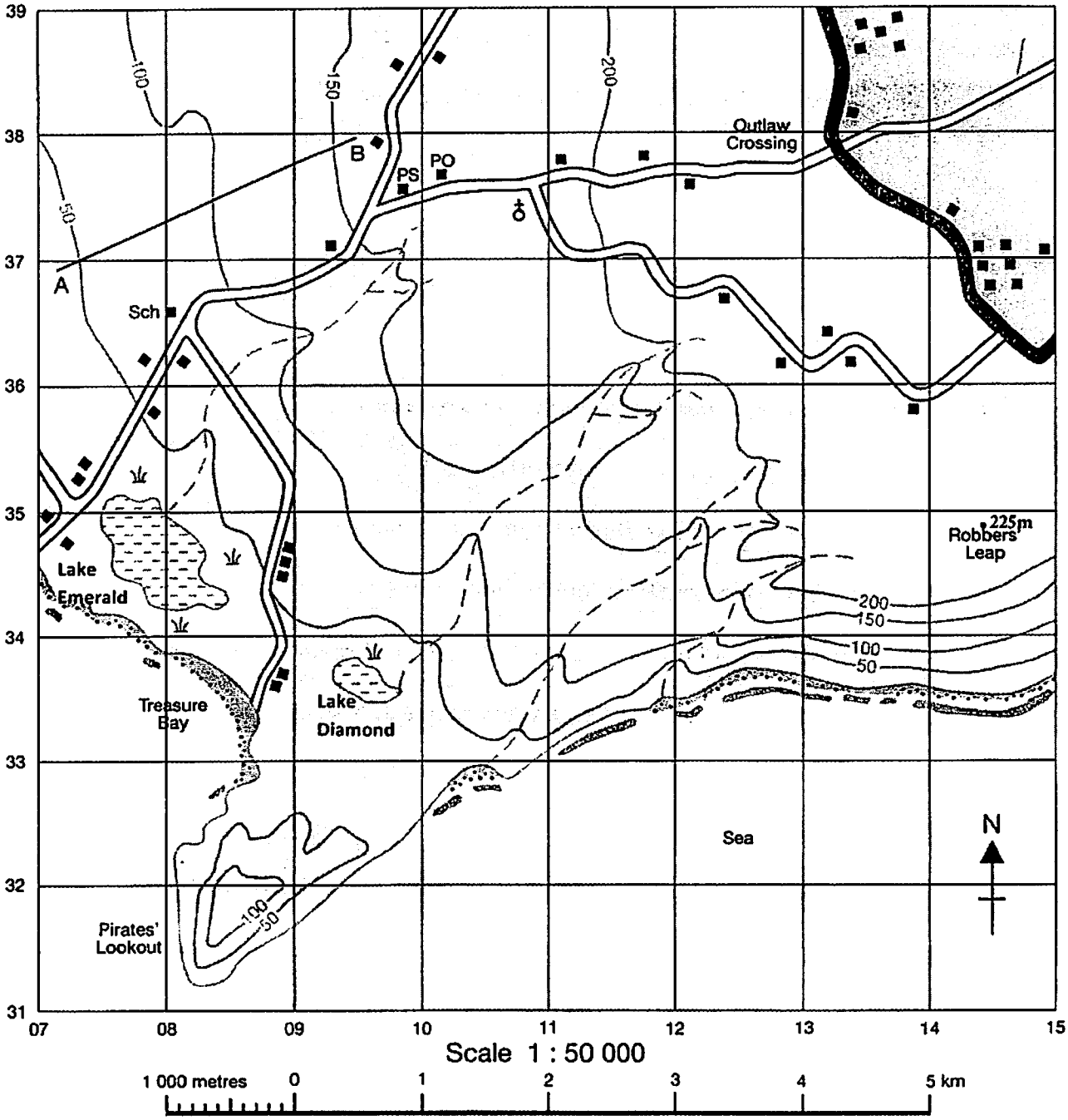
Express your answer in **metres**.

i. State the 4 figure grid reference of the grid with the steepest slope on the [2m]

map and explain your answer.

j. State the highest physical feature on the map and give its height. [2m]

Map of Treasure Bay



Scale 1 : 50 000

1 000 metres 0 1 2 3 4 5 km

Major Road

Minor Road

Contour Lines (metres)

Lake

Seasonal River

Swamp

Sand & Mud

Flat Rock

Scrub

Sea

Sugar Cane Plantation

Church

Building

Sch School

Abbreviations

PO Post Office

PS Police Station

• 225m Spot Height

X

2 Fig.1 shows an annual rainfall map of Singapore

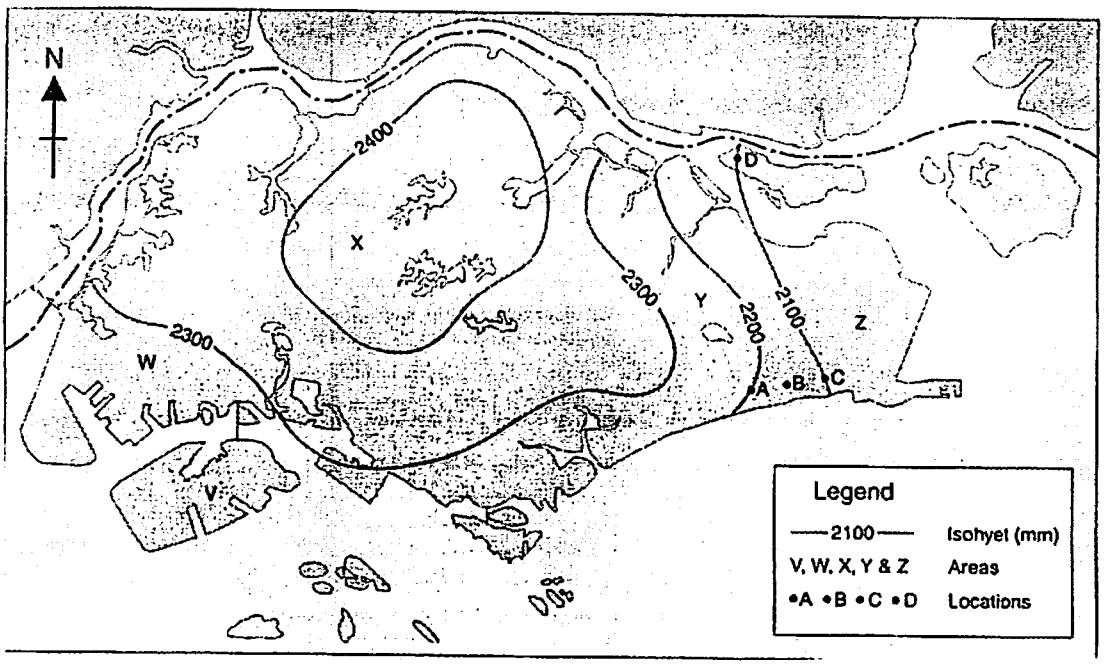


Fig. 1

a. Which area experiences the lowest average annual rainfall? [1m]

b. Which three areas receive an average annual rainfall between 2200mm and 2300mm? [3m]

c. State the area that experiences the highest average annual rainfall and give one example of how Singapore uses the area for its water needs. [2m]

Section B

Basic Techniques and Short Answer Questions (15marks)

3 a. Explain the difference between weather and climate. [2m]

b. Fig. 2 shows a Stevenson Screen.

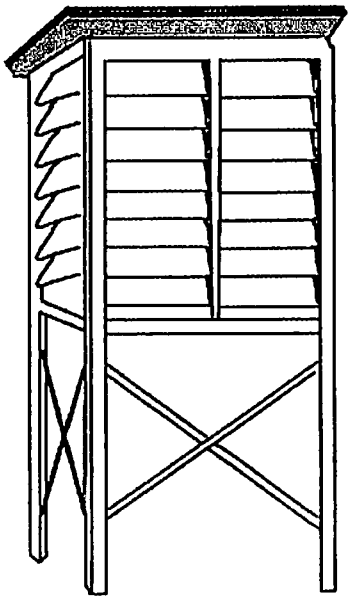


Fig. 2

Explain 2 characteristics of a Stevenson Screen. [2m]

4 a. State the three types of crustal movement. [3m]

b. Explain folding. [2m]

5 Fig.3 shows a photo of a type of environment.

Fig. 3

a. Identify the change to the environment [1m]

b. Identify the type of environment and explain 1 possible impact on humans from the change. [3m]

c. Explain the difference between physical and human environments. [2m]

Section C

Structured Questions (45marks)

Answer all Questions.

6 Fig. 4 shows the climograph of Country X.

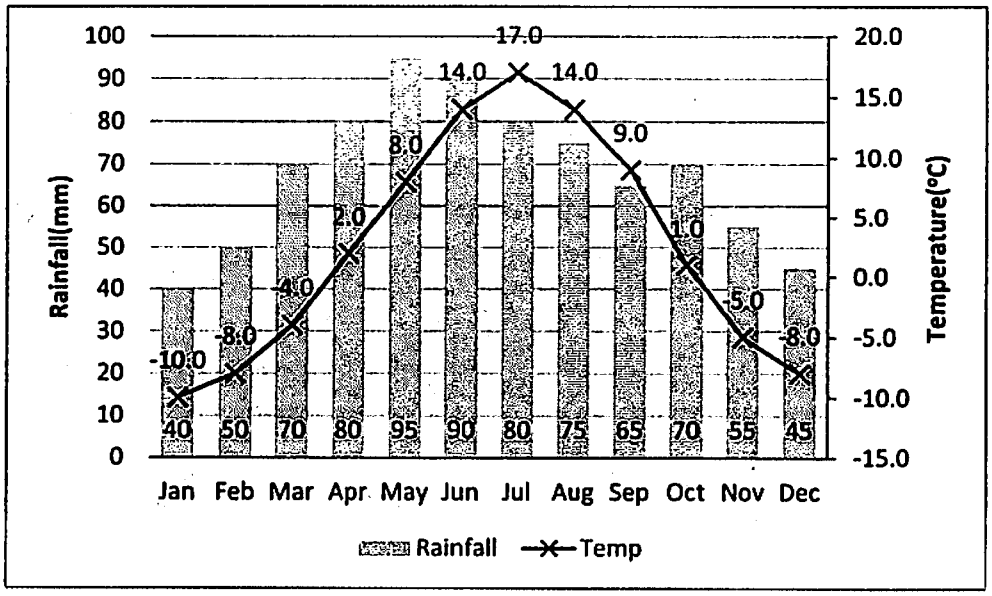


Fig. 4

a. Describe the rainfall and temperature patterns of the entire year shown in Fig.4 [4m]

b. Calculate the mean annual temperature for Country X. Show your working. [2m]

c. Calculate the annual temperature range. Show your working. [2m]

d. Calculate the total annual rainfall for Country X. Show your working. [2m]

e. Based on your answers above, state the climate of Country X. [1m]

f. Identify the instrument used for collecting rainwater. [1m]

g. State 3 requirements for the use of a rain gauge. [3m]

7 Fig.5 shows a diagram of a tropical rainforest

Fig. 5

a. Explain 2 characteristics for all three layers of a tropical rainforest [6m]

b. Describe how the leaves of the trees in tropical rainforests adapt to the tropical climate. [3m]

c. Explain using examples, three benefits of natural vegetation [6m]

8 a. State where most volcanoes and fold mountains are found and provide one example of a fold mountain. [2m]

b. Explain the 2 differences between an active volcano and an extinct volcano. [2m]

c. State 3 risks and 3 benefits of living close to a volcano. [6m]

d. Identify 3 adaptations people make to survive living close to a volcano. [3m]

e. State the characteristics of a plateau. [2m]

End of Paper

		SEC 1 EXP MYE 2013 ANS Section A Mapwork (20marks)	
1		Study the map and answer the following questions.	
	a.	Name the element of the map labelled X, which explains the symbols on the map. Legend	[1m]
	b.	State the contour interval of the contour lines. 50m	[1m]
	c.	State the four-figure grid reference of Lake Diamond. 0933	[1m]
	d.	State the six-figure grid reference of the school. 081366	[1m]
	e.	State the direction of the church from Lake Diamond. North-east/NNE	[1m]
	f.	State the bearing from the school to the Post Office. 63°	[1m]
	g.	Calculate the straight-line distance between the Police Station and the school Show your workings clearly. Express your answer in **metres**. 4.2cm/2 x 1km=2.1km	[2m]
	h.	Measure and calculate the length of the major road. Show your workings clearly. Express your answer in **metres**. 7.3/2x1km=3.65km	[2m]
	i.	State the 4 figure grid reference of the grid with the steepest slope on the map and explain your answer.	[2m]

		1334 or 1333, the contour lines are most closely spaced in the grid square.	
	j.	State the highest physical feature on the map and give its height. Spot height at. Robbers' Leap. 225m	[2m]

2		Fig.2 shows an annual rainfall map of Singapore	

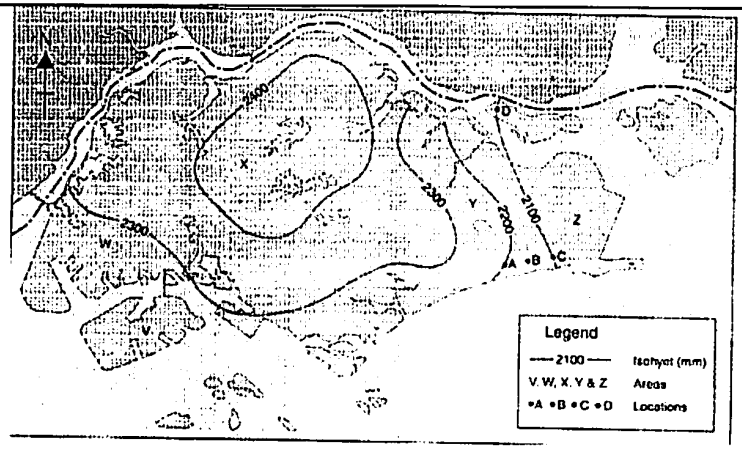
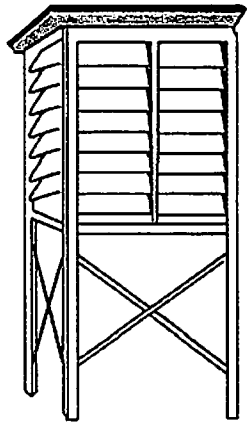


Fig. 1

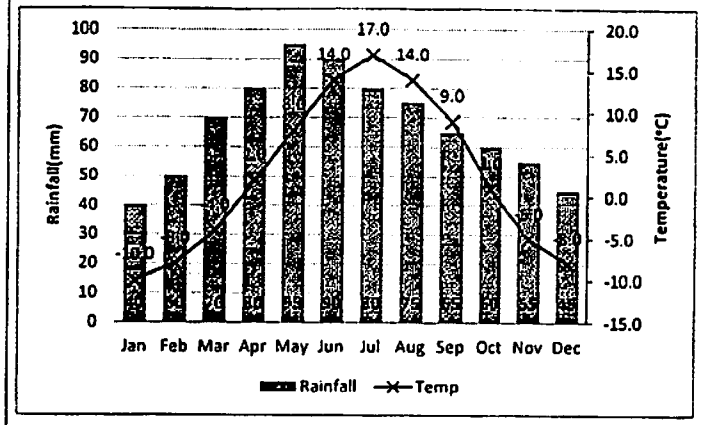
	a.	Which area experiences the lowest average annual rainfall? Z	[1m]
	b.	State 3 areas which receive more than 2100mm of average annual rainfall Award 1 mark per location. W,v,y,x	[2m]
	c.	State which area experiences the highest average annual rainfall and give one example of how Singapore uses the area for its water needs. X(1m). As a Water Catchment Area or any of the reservoirs in the area : Seletar Reservoir.	[2m]

		Section B Basic Techniques and Short Answer Questions (15marks)	
3	a.	Explain the difference between weather and climate. Award 1 mark per comparison made. Weather is the condition of the atmosphere over a short period of time, whereas Climate is the weather pattern over a long period of time.	[2m]
	b.	Fig. 2 shows a Stevenson Screen.	
		 Fig. 2	
		Explain 2 characteristics of a Stevenson Screen.	[2m]
		Award 1 mark for chacteristic, 1 mark for explanation of the characteristic.	

Characteristic	Explanation
Painted white (1m)	to reflect heat (1m)
Louvres	To allow for air circulation
Raised on stilts 1.2m above ground	ensure that heat from the ground does not affect the readings(1m)

4	a.	State the three types of crustal movement. Convergent Divergent Transform	[3m]
	b.	Explain folding. Folding occurs when two plates collide with each other, some layers of the rock from the Earth's crust buckle and form folds.	[2m]

5		Fig.3 shows a photo of a type of environment.	
		 Fig. 3	
	a.	Identify the change to the environment. Factories are built.	[1m]
	b.	Identify the type of environment and explain 1 possible impact on humans from the change. Human environment. Pollution from the smoke may affect human health	[3m]
	c.	Explain the difference between physical and human environments. Physical environments are natural (1m) whereas human environments are environments that have been changed by humans to suit human needs.(1m)	[2m]

		Section C Structured Questions (45marks)	
6		Fig. 4 shows the climograph of Country X.	
		 Fig. 4	
	a.	Describe the rainfall and temperature patterns of the entire year shown in Fig.4 Award 1 mark for pattern and 1 mark for using evidence from graph. Rainfall increases from 40mm in Jan to 95mm in May and decreases to 45mm in Dec. Temperature increases from -10°C in Jan to 8°C in May and decreases to -8 °C in Dec.	[4m]
	b.	Calculate the mean annual temperature for Country X. Show your working. No marks awarded if answer comes without working. 1 mark only if no units provided.	[2m]

		Sum of all monthly temperatures/12(1m)= 2.5 °C(1m)	
	c.	What is the annual temperature range? Show your working. No marks awarded if answer comes without working. 1 mark only if no units provided. Maximum Temperature- Minimum Temperature(1m)= 17 °C- -10 °C= 27 °C (1m)	[2m]
	d.	Calculate the total annual rainfall for Country X. Show your working. 1 mark only if no units provided. Sum of all rainfall data(1m)=805mm(1m)	[2m]
	e.	Based on your answers above, state the climate of Country X. Temperate Climate	[1m]
	f.	Identify the instrument used for collecting rainwater. Rain gauge	[1m]
	g.	State 3 requirements for the use of a rain gauge. Place it in an open area where there are no obstructions to block rain(1m). Away from concrete surfaces to prevent additional water from splashing into the rain gauge(1m). Soft soil for partial burial to make rain gauge more stable.	[3m]

7		Fig.5 shows a diagram of a tropical rainforest	
		 Fig. 5	
	a.	Explain 2 characteristics for all three layers of a tropical rainforest Emergent layer Characteristics[1 mark for any of the following] Trees grow very tall to compete for sunlight. (40-50m) [1] Buttress roots to support the trees. [1] Canopy Layer Characteristics[1 mark for any of the following] Formed by crowns of trees. [1] Block out 70-100% of sunlight.[1] Lianas and epiphytes are common.[1] Trees grow tall to compete for sunlight. (15-30m)[1] Cool and moist interior. [1] Undergrowth: Characteristics[1 mark for any of the following] Plant growth is sparse because very little sunlight receives in. [1] Made up of shrubs, grasses, ferns,mosses and fungi. [1]	[6m]
	b.	Describe how the leaves of the trees in tropical rainforests adapt to the	[3m]

tropical climate.

- Leaves are waxy with drip-tips to allow excess water to flow off quickly as the rainfall is abundant(1m)
- Broad leaves allow the plants to absorb as much sunlight as there is competition for sunlight(1m)
- Evergreen, trees bear leaves throughout the year as the climate supports plant growth(1m)

d. Explain using examples, three benefits of natural vegetation [6m]

Award 1 mark each for any of the three answers below. Award 1 additional mark for examples.

Benefit	Example
1. Natural resource	Wood/building materials for construction
2. Medicinal purpose	Raw material for medicines/medical research
3. Recreation	Leisure activities
4. Oxygen production	NV produce oxygen for all other living creatures.
5. Formation of rain	Transpiration from NV contributes to cloud formation
6. Prevent soil erosion	Roots of NV help hold soil together.
7. Natural habitats	NV provide food and homes for animals.

8 a. State where most volcanoes and fold mountains are found and provide one example of a fold mountain. [2m]

They are found along the margins/boundaries (1m) of crustal plates.

Accept reasonable examples such as Mount Everest,Andes.

b. Explain the 2 differences between an active volcano and an extinct volcano. [2m]

An active volcano is one which has erupted recently(1m), and is likely to erupt again in the future while extinct volcanoes have not erupted for a long time and is unlikely to erupt again.

c. State 3 risks and 3 benefits of living close to a volcano. [6m]

Accept any 3 from each column.

Risks	Benefit
The ash in the air can cause breathing difficulties, skin diseases , diarrhoea and serious eye infections.	Volcanic ash is very fertile, good for farming.
Eruption may result in the destruction of the land used for farming and a loss of livelihood for the farmers	There may be valuable gems and minerals placed on the surface by volcanic activity.
Fires caused by lava flowing across people's homes.	People can earn money from tourists who come to visit.
Death by lava/lava bombs	
Destruction of roads and buildings by earthquakes.	

	d.	Explain 3 adaptations people make to survive living close to a volcano. Any 3 of the answers below. • Evacuation plans and drills to ensure people will be able to get out safely. • Volcanic hazard maps to guide people in placing their homes • Distribution of masks and survival kit to protect people. • Regular inspection of volcanoes.	[3m]
	e.	State the 2 characteristics of a plateau. A plateau is a raised area with flat broad top(1m) and Steep slopes(1m)	[2m]

End of Paper

NAME:	NO:	CLASS:

RIVERSIDE SECONDARY SCHOOL

MID-YEAR EXAMINATION 2013

SUBJECT	: GEOGRAPHY
LEVEL/STREAM	: 1 EXPRESS
DATE	: 6th MAY 2013
TIME	: 0815 – 0945 HRS
DURATION	: 1 HR 30 MIN

Instructions to candidates:

DO NOT TURN OVER THIS QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO.

Answer all questions in the writing paper provided.

Section A
Answer all basic techniques and map reading questions in this section.

Section B
Answer all structured questions in this section.

The total marks for this paper is **60**.

This Question paper consists of **8** printed pages including this cover page.

SECTION A: BASIC TECHNIQUE [5m]

1. Study Figure A below and answer the following questions.

Name	Distance from the sun (million km)	Number of moons	Diameter (km)
Mercury	58	0	4 878
Venus	108	0	12 104
Earth	152	1	12 756
Mars	228	2	6 794
Jupiter	778	16	142 796
Saturn	1427	23	120 660
Uranus	2870	15	51 118
Neptune	4497	8	49 528

Figure A

a. Which planet is the third largest in diameter? [1]

b. Calculate the difference in diameter between the largest and smallest planets. [1]

c. Calculate the distances between the planets listed below and identify the pair with the longer distance between them: [3]
   i. Jupiter and Mercury
   ii. Jupiter and Saturn

SECTION B: Part 1 ATLAS [10 MARKS]

2. Study Figure B below and answer the following questions:

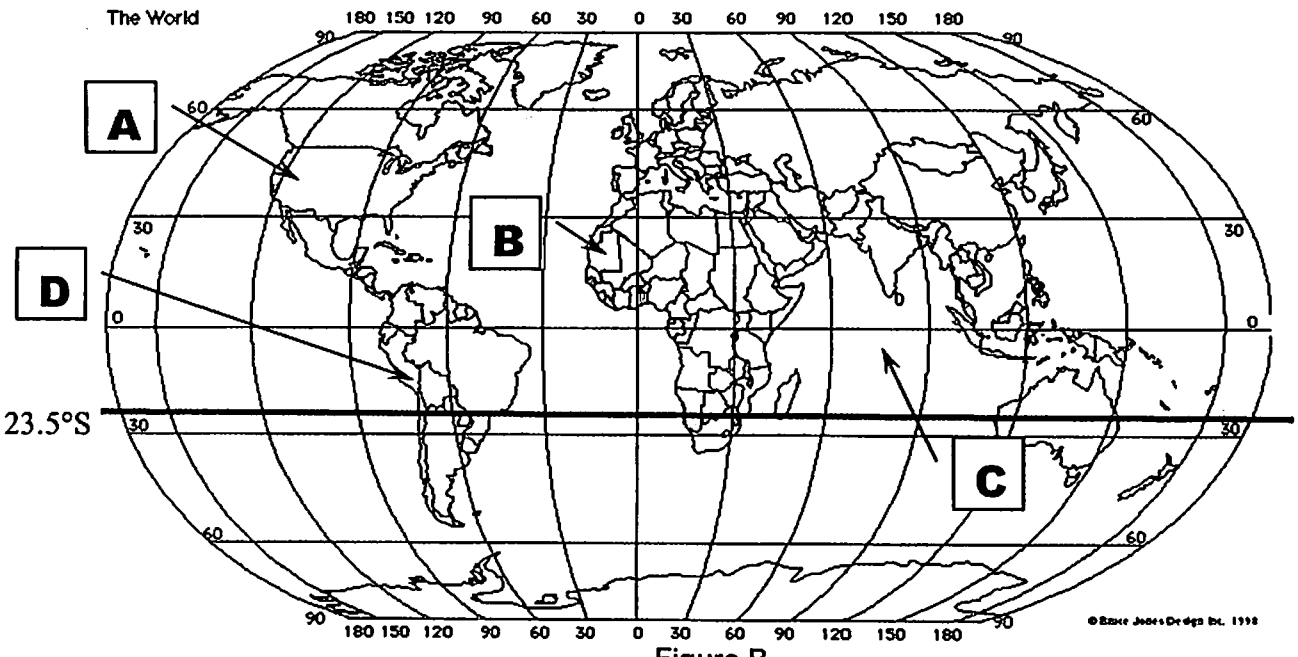


Figure B

a. What is the line of latitude 23.5°S known as? [1]

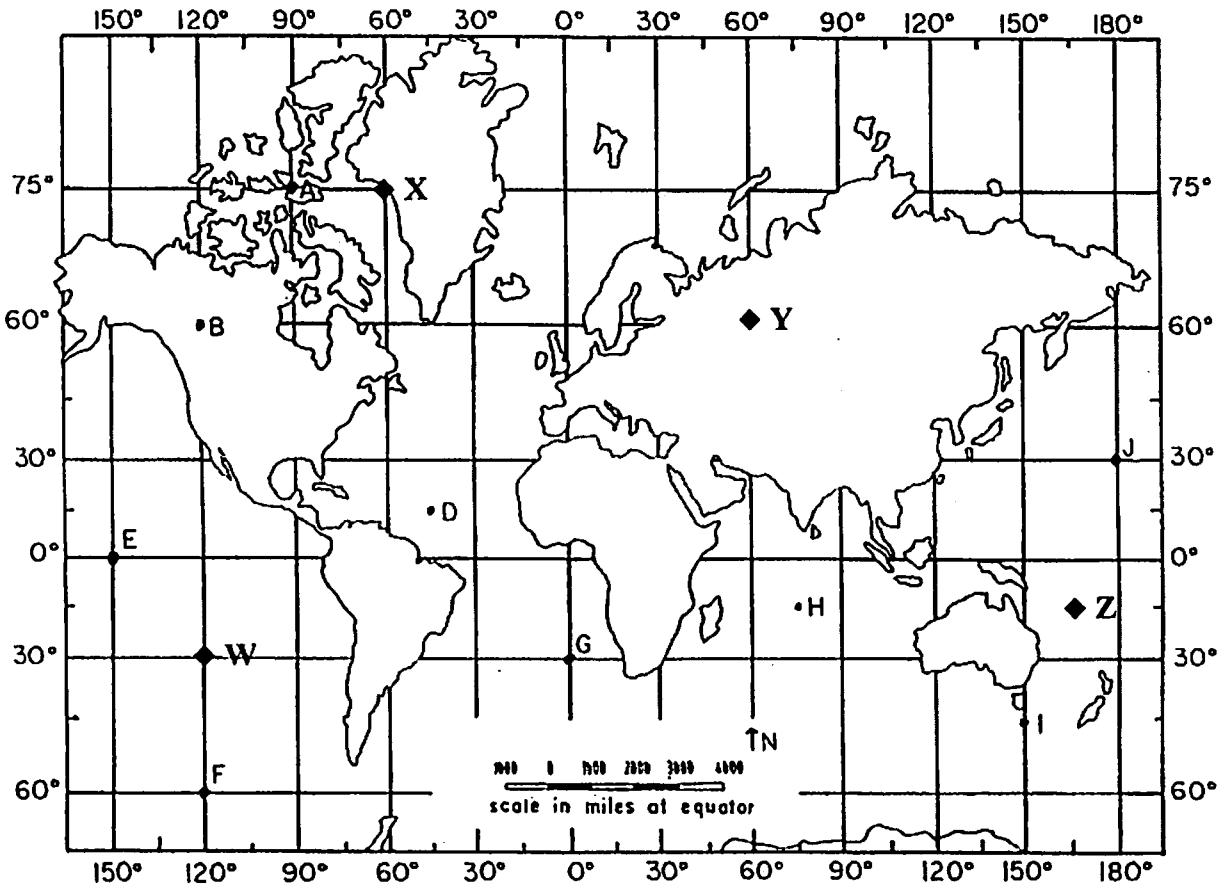
b. What are the names of continents 'A' and 'B'? [2]

c. What is the name of ocean 'C'? [1]

d. What is the name of the mountain range in continent 'D'? [1]

e. Name the land mass found at 90° South of the equator. [1]

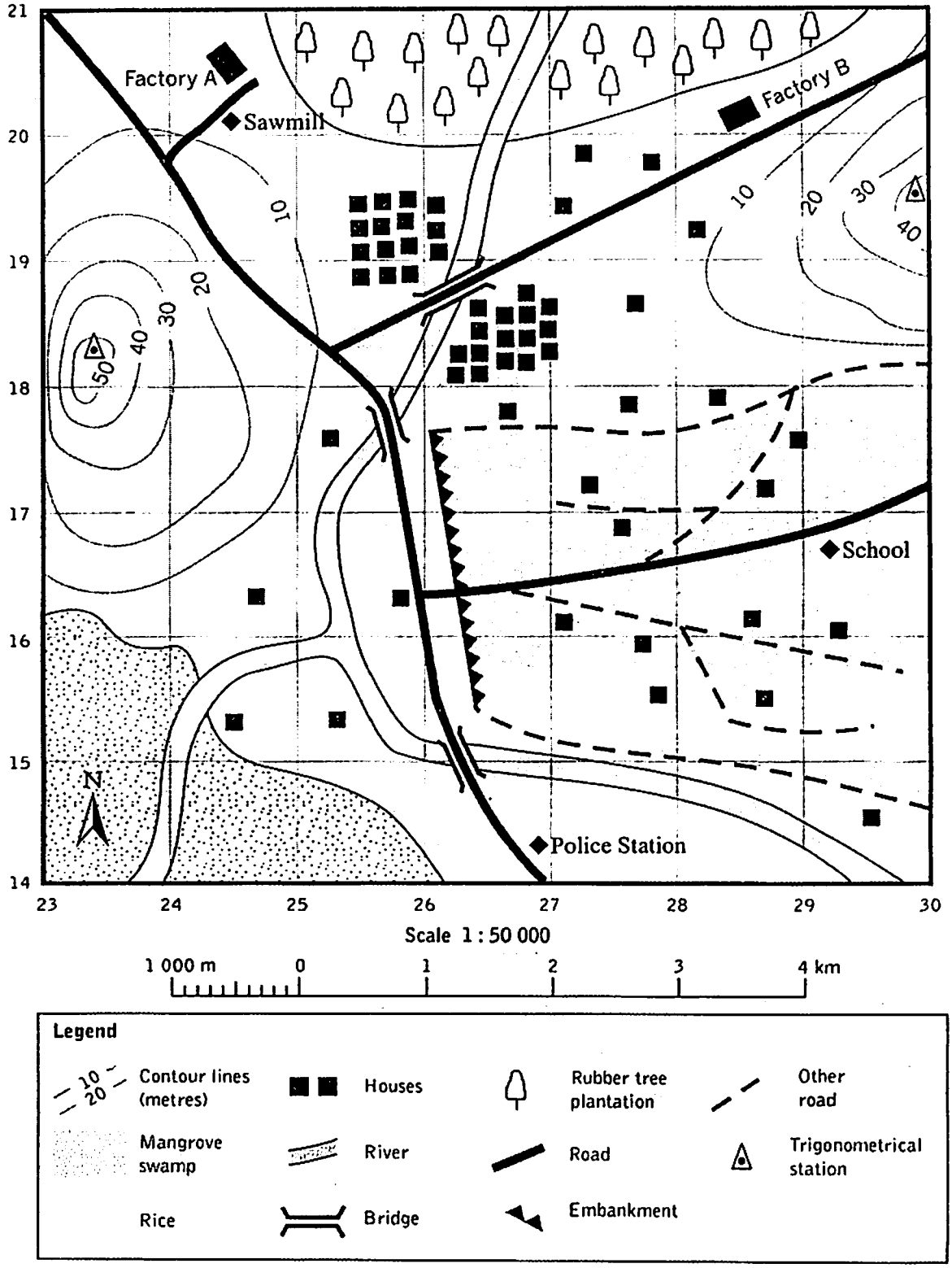
3. Study the map extract below and answer the following question.



Find the latitudes and longitudes of W, X, Y and Z. [4]

SECTION B: Part 2 MAP READING [15 MARKS]

4. Study the map below and answer the questions on the following page.



Answer the following questions using the map provided in the previous page

a. Find the four-figure grid reference of Factory B. [1]

b. Find the six-figure grid reference of the school. [1]

c. Find the six-figure grid reference of the sawmill. [1]

d. What is the contour interval of the map? [1]

e. What is the direction of the school from the police station? [1]

f. Find the distance travelled by road from the school to the police station. [2]
Give your answer to the nearest one decimal place.

g. Identify the landform found in grid reference 2919 and justify your answer with evidence from the map. [2]

h. Find the compass bearing of the trigonometrical station in GR 2318 from the trigonometrical station in GR 2919. [2]

j. Find the compass bearing of the school from the sawmill. [2]

i. What is the settlement pattern found in GR 2817 and state a reason why it is such? [2]

SECTION C: STRUCTURED ESSAY QUESTIONS (30m)

5. a. Explain the effect of Earth's rotation in a 24 hour time period. [2]

b. Study Figure C below and answer the following question.

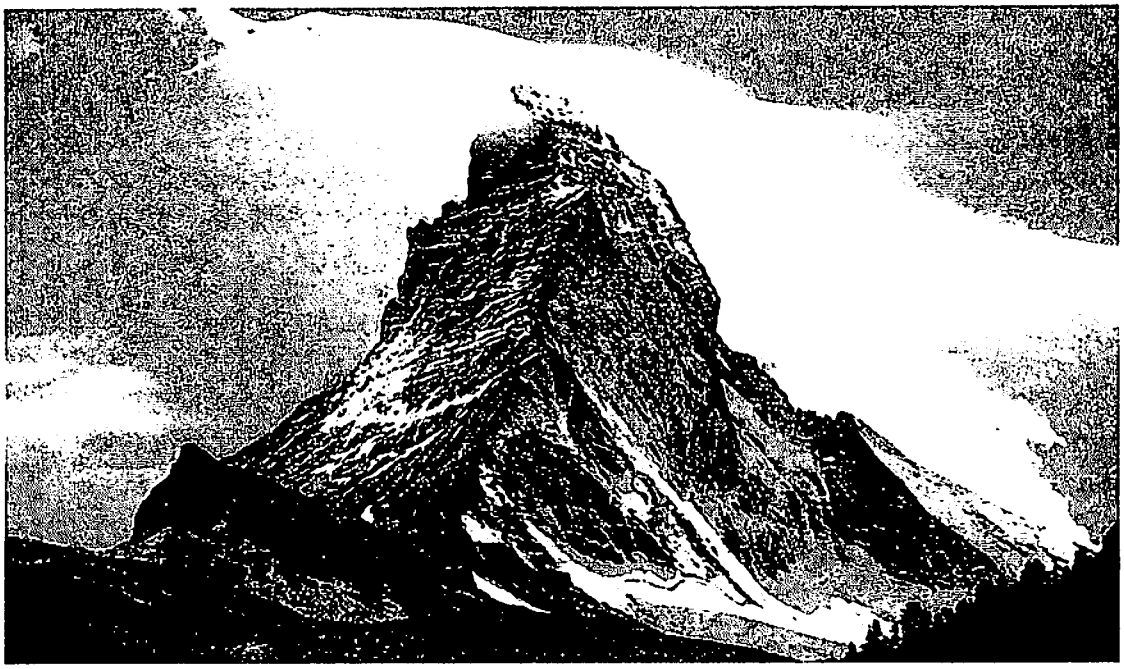


Figure C

Identify the type of landform shown above and describe its formation. [3]

c. Study Figure D shown below and describe how convection currents cause crustal movements. [4]

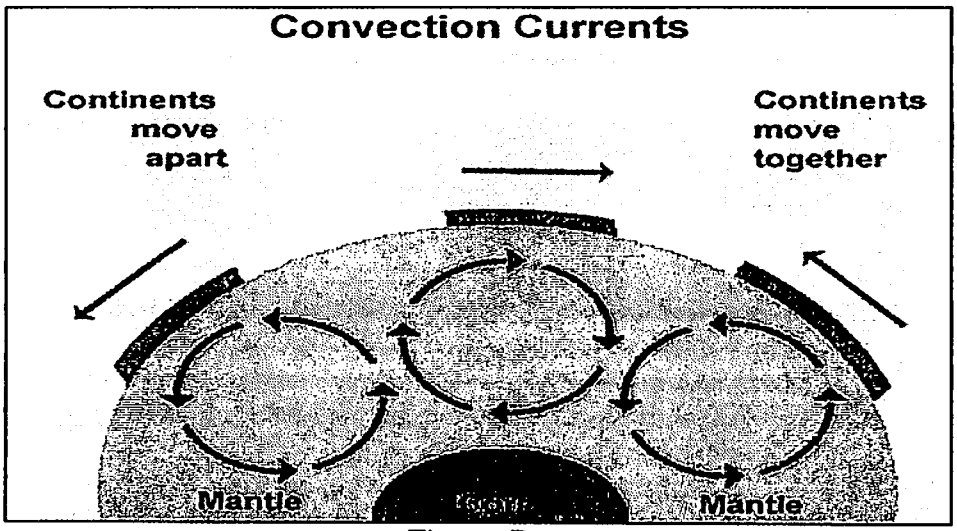
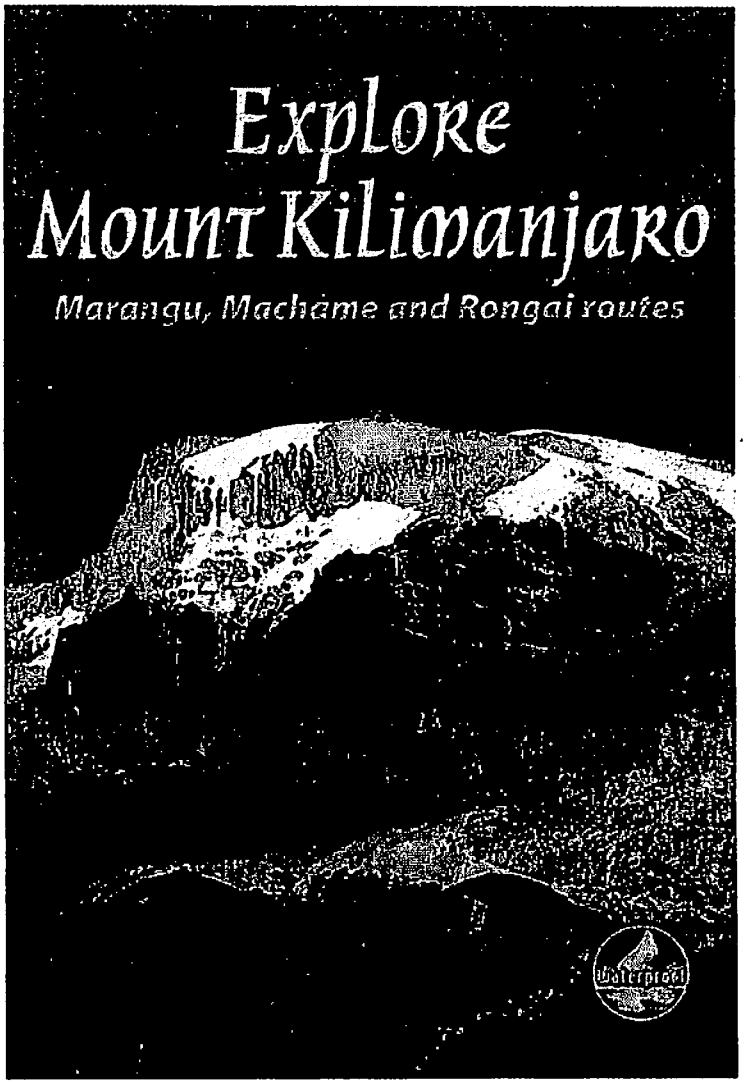


Figure D

d. With clear examples, describe three uses of maps. [6]

6 a. Describe how the !Kung Bushmen adapt to the hot daytime and cold night-time environment of the Kalahari desert. [3]

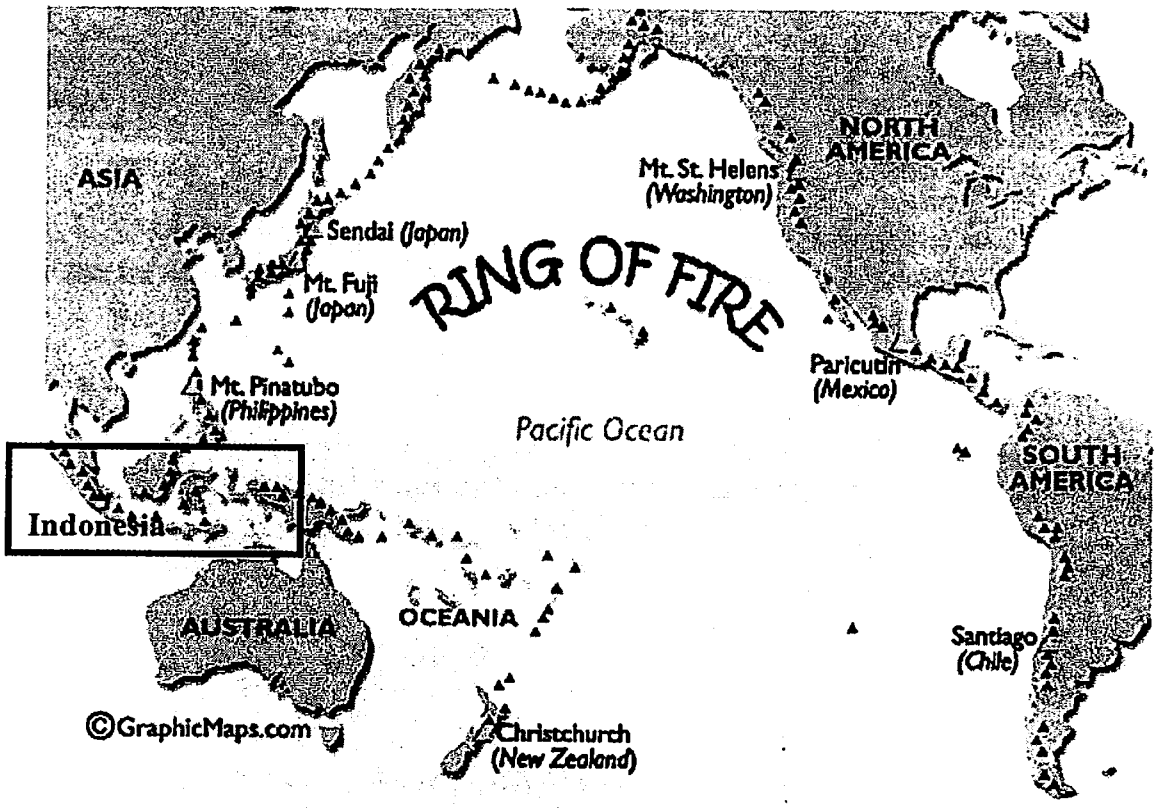
b. Study the picture below. It shows the cover of tourist brochure.



In which country is this volcano located? Explain why this volcano is safe for tourism activities? [3]

c. With the aid of well-labelled diagrams, identify the features of a volcano. [5]

d. With reference to the map below of the Pacific Ring of Fire, cite a volcano that you have studied in the region marked in the box. Describe the risks of living near a volcano. [4]



END OF PAPER

SECTION A: BASIC TECHNIQUE [5m]

1. Study Figure A below and answer the following questions.

Name	Distance from the sun (million km)	Number of moons	Diameter (km)
Mercury	58	0	4 878
Venus	108	0	12 104
Earth	152	1	12 756
Mars	228	2	6 794
Jupiter	778	16	142 796
Saturn	1427	23	120 660
Uranus	2870	15	51 118
Neptune	4497	8	49 528

Figure A

a. Which planet is the third largest in diameter? [1]
Uranus

b. Calculate the difference in diameter between the largest and smallest planets. [1]
137918km

c. Calculate the distances between the planets listed below and identify the one with the longer distance: [3]
i. Jupiter and Mercury **720000000km [1]**
ii. Jupiter and Saturn **649000000km [1]**
Jupiter and Mercury [1]

Marker's remarks:
Students did generally well for this question, answering well for part a & b. However, students displayed high levels of carelessness for part c. Majority did not take into account that the distance is in million km. No marks awarded if units are missing.

SECTION B: Part 1 ATLAS [10 MARKS]

2. Study the Figure B below and answer the following questions.

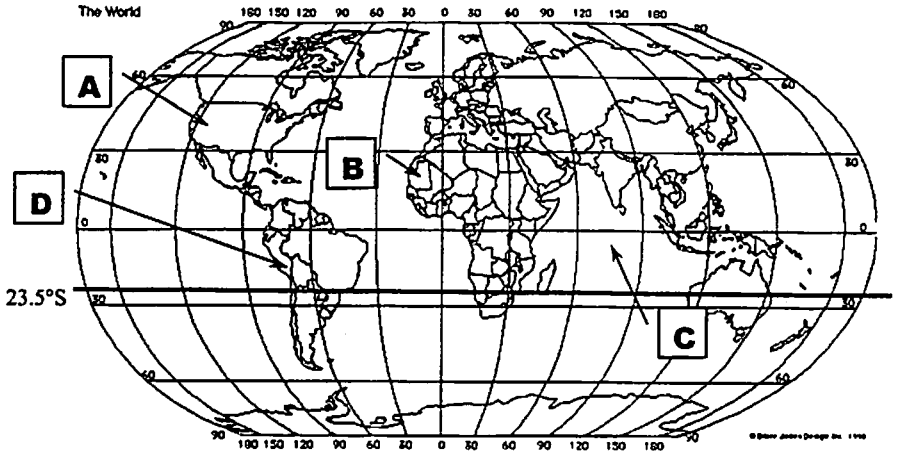


Figure B

a. What is the line of latitude 23.5°S known as? [1]
Tropic of Capricorn

b. What are the names of continents 'A' and 'B'? [2]
A – North America
B - Africa

c. What is the name of ocean 'C'? [1]
Indian Ocean

d. What is the name of the mountain range in continent 'D'? [1]
Andes Mountains

e. Name the land mass found at 90° South of the equator. [1]
Antarctica

Marker's remarks:
Students did generally well for this question, answering well for part a,b & c. Majority of students fail to answer question d. Majority of students failed to spell Antarctica correctly. They were penalised if they misspelled by 2 letters eg Antartic [X]

3. Study the map extract below and answer the following questions

Find the coordinates of W, X, Y and Z. [4]

W – 30°S 120°W
X – 75°N 60°W
Y – 60°N 60°E
Z – 15°S 165°E

Marker's remarks:
Students found this question very difficult. Most have their latitu longitudes missed up. Some did not label the degrees with cardin More practice is needed.

SECTION B: Part 2 MAP READING [15 MARKS]

4. Study the map below and answer the questions on the following page.

Answer the following questions using the map provided in the previous page

a. Find the 4-figure grid reference of Factory B. [1]
GR 2820

b. Find the 6-figure grid reference of the school. [1]
GR 292 167

c. Find the 6-figure grid reference of the sawmill. [1]
GR 245 201

d. What is the vertical interval of the map? [1]
10m

e. What is the direction of the school from the police station? [1]
Northeast

f. Find the distance travelled by road from the school to the police station. [2]
Give your answer to the nearest 1 decimal place.
Accept any answer from 5.3km to 5.7km

g. Identify the landform found in GR 2919 and justify your answer with evidence from the map. [2]
Hill. [1] It is highland / below 600m [1]

h. Find the compass bearing of the trigonometrical station in GR 2318 from the trigonometrical station in GR 2919. [2]
Accept any answer from 259° to 261°

j. Find the compass bearing of the school from the sawmill. [2]
Accept any answer from 125° to 127°

i. What is the settlement pattern found in GR 2817 and state a reason why it is such? [2]
Dispersed. [1]Area often floods as it is behind an embankment[1]

Marker's remarks:
Students found this question a mixed bag, answering parts a to e relatively w for carelessness here and there. Students found questions on distance, compa and settlement pattern difficult giving

SECTION C: STRUCTURED ESSAY QUESTIONS (30m)

5. a. Study Figure C below and answer the following question.

Figure C

Identify the type of landform shown above and describe its formation. [3]

It is a mountain [1]
Folding[1]
Two plates collide and layers of rock will buckle and bend forming a fold mountain. [1]

b. Explain the effect of Earth's rotation in a 24 hour time period. [2]

Results in night and day.
Part of the Earth will face the sun resulting in day time [1]
,part of the Earth facing away from the sun will experience night. [1]

c. Study Figure D shown below and explain the interaction between the mantle and crust leads to crustal movements. [4]

The solid crust is made up of many plates. [1]
It floats on the mantle.[1]
The upper part of the mantle is made up of semi-molten magma.[1]
The convection currents within the mantle will push/pull the plates resulting in crustal movements.[1]

d. With clear examples, describe three uses of maps. [6]

1m for use and 1m for description
Maps are sources of information[1] as they can be used to help us locate places and find out where we are.[1]
Maps can be used as a tool for planning[1] as urban planners use maps to plan on where to build new buildings and roads.[1]
Maps are used to record changes[1] as we can keep track of the landscape of the place as the years go by, by comparing maps of the same location over a few years.[1]

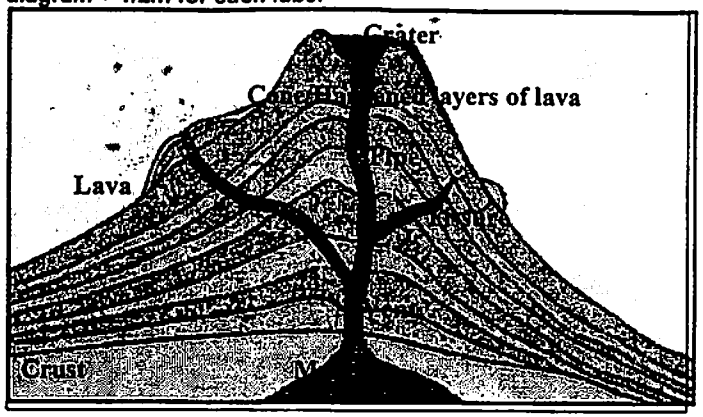
6 a. Describe how the !Kung Bushmen adapt to the hot daytime and cold night-time environment of the Kalahari desert. [3]

1m for adaption in the day, 1m for adaptation at night + 1m for additional adaptation
In the day, the Bushmen wear minimal pieces of hide/leather to keep their bodies cool.
Due to the heat, they store water in emptied ostrich eggs to quench their thirst.
In the night-time, they sleep in small sherms / huts to keep themselves warm.
They build fires to keep themselves warm.

b. Study the picture below. It shows the cover of tourist brochure.

In which country is this volcano located and explain why this volcano is considered safe and is open to tourists? [3]
Tanzania. [1]
Mount Kilimanjaro is an extinct [1]volcano hence it is safe for tourist expeditions.
It last erupted more than 100 centuries ago.[1]

c. With the aid of labels, illustrate and name the features of a volcano. [5]
2m for diagram + 1/2m for each label



d. Citing a volcano that you have studied in the region marked in the box on the map above, describe the risks of living near a volcano. [4]
Mt. Merapi.[1]
Volcano eruptions will damage and destroy property.[1]
People may get killed by the debris / mudflows.[1]
The ash can cause breathing difficulties / obstruct visibility.[1]