Bukit View Secondary School

Secondary 1 Express
End-of-Year Examination 2022

CANDIDATE NAME			
CLASS / BAND	SEC 1 ___ /GG3 / GG4 / GG3 / GZ4	INDEX NUMBER	

GEOGRAPHY

26 September 2022
1 hour 15 minutes

Candidates answer on the Question Paper.

No Additional Materials are required.

Calculators are allowed.

READ THESE INSTRUCTIONS FIRST

Write your candidate name, class and number in the spaces at the top of this page.
Write in dark blue or black pen.
You may use a HB pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, glue or correction fluid.

Answer **all** questions.

Candidates should support their answers with the use of relevant examples.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

At the end of the examination, fasten all your own work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

For Examiner's use	
Question 1	**18**
Question 2	**17**
Total	**35**

Setter: Mrs Ng-Sim K.M. **Parent's Signature: _____**

1(a) State the difference between "**renewable resources**" and "**non-renewable resources**".

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_____[3]

(b) Study Fig. 1, which shows a map of the global distribution of tropical rainforests.

Global Distribution of tropical rainforests in the world

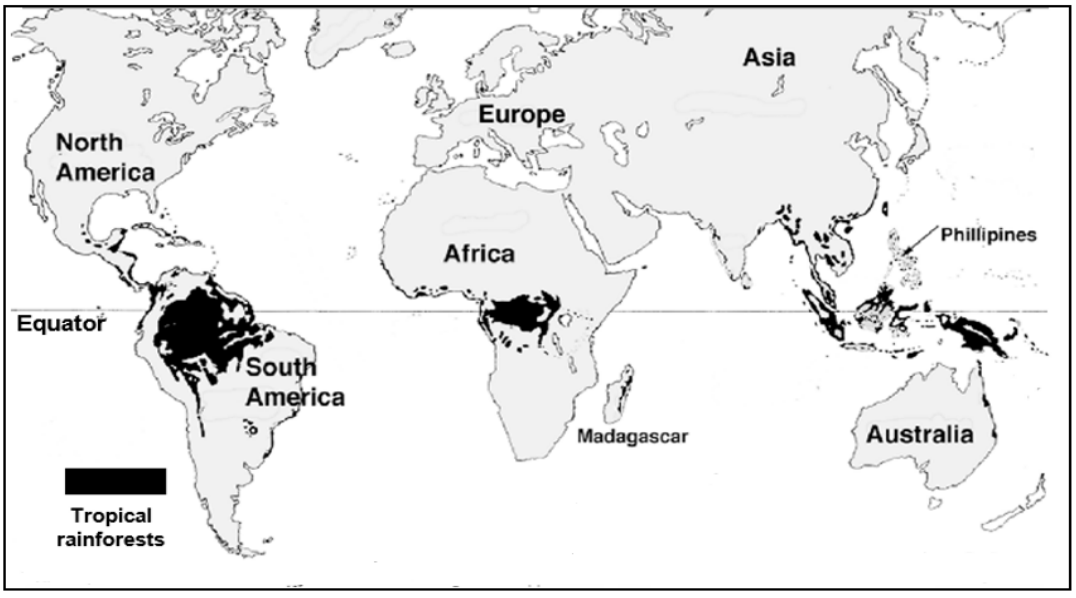

Fig. 1

With the help of Fig. 1 and what you have learnt, describe the distribution of tropical rainforests around the world.

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_____[2]

(c) Study Fig. 2, which shows how plants in the tropical rainforest adapt to their environment.

Adaptation features of plants in tropical rainforest

Fig. 2

With reference to Fig. 2, explain how plants in the tropical rainforest adapt to their environment.

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_____[4]

(d) Describe how plants in mangrove forests adapt to an environment with low levels of oxygen.

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_____[4]

(e) Study Fig. 3, which shows how mangrove forests prevent coastal erosion.

Mangroves forests preventing coastal erosion

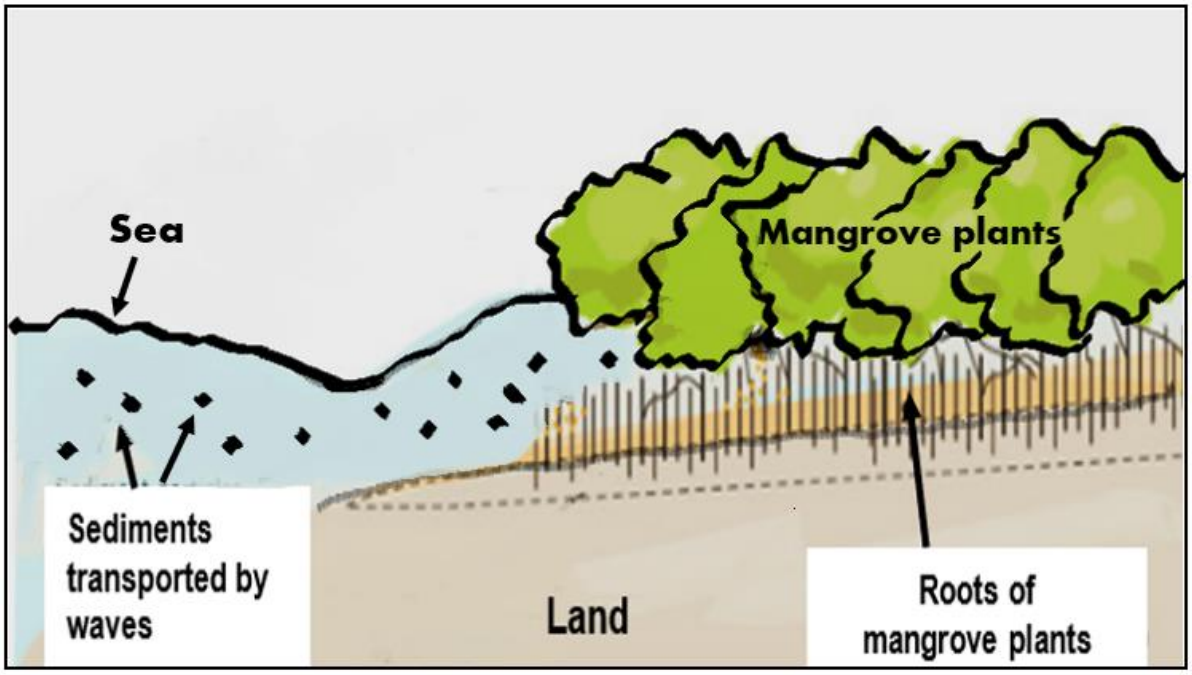

Fig. 3

With the aid of Fig. 3, explain how the mangrove forests help to prevent coastal erosion.

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_____[3]

(f) Describe how Singapore protects its primary forest in the Bukit Timah Nature Reserve.

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_____[2]

Name:_____( ) Class: _____

Band: Sec 1 /GG3 / GG4 / GG3 / GZ4 (CIrcle the band you are in)

2(a) Study Table 1, which show a list of water stores.

List of water stores

Caspian Sea	Batura Glacier	Atlantic Ocean	Pandan Reservoir

Table 1

Categorise them into 'freshwater' or 'saltwater' stores in the table below.

Freshwater stores	Saltwater stores

[2]

(b) Compare between a '**flood**' and a '**drought**'.

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_____[2]

(c) Study Fig. 4, which shows water pollution in a river.

Water pollution in river

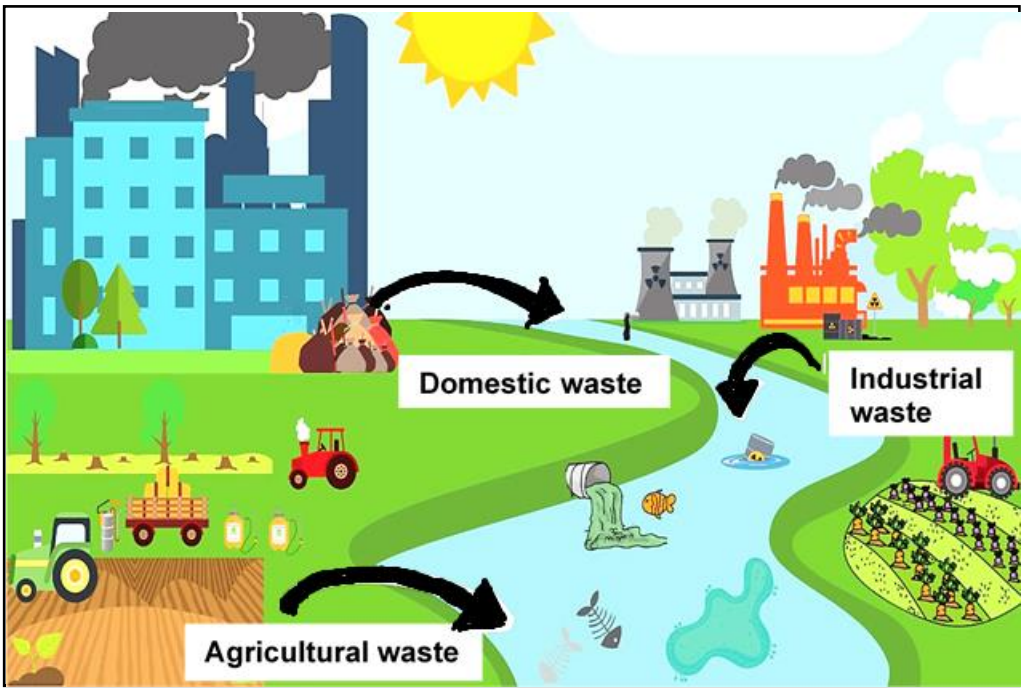

Fig. 4

With reference to Fig. 4, describe how the river is being polluted.

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(d) Study Figs. 5A and 5B, which show how water is used in our everyday life.

Usage of water in our everyday life

Fig. 5A

Fig. 5B

Identify and describe the uses of water shown in Figs. 5A and 5B.

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(e) Explain how the Water Efficiency Labelling Scheme (WELS) in Singapore helps to reduce water consumption.

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_____[4]

(f) Study Fig. 6, which shows one of the four National Taps of Singapore.

A National Tap of Singapore

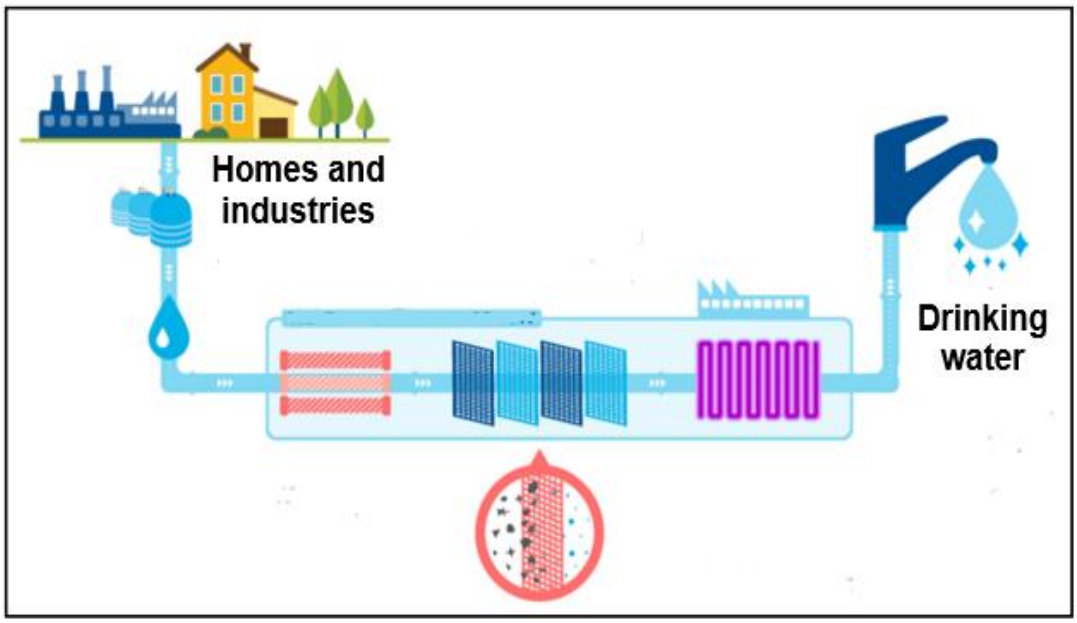

Fig. 6

Identify the National Tap shown in Fig. 6 and describe how it increases Singapore's water supply.

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End of paper

2022 Sec 1 EXPRESS EOY – ANSWER SCHEME

1(a)	State the difference between "renewable resources" and "non-renewable resources". [3] - Renewable resources refers to materials that are **replenished naturally** more or less **within the same time period** when they are used. - **While** non-renewable resources refer to materials which **may or may not be replenished naturally.** - If they are replenished, then the natural processes occur very slowly and **takes such a long time** that it is beyond the period used. -1m each -total 3m - DO NOT ACCEPT: "replenish within a reasonable amount of time" or "replenished easily" - DO NOT ACCEPT terms such as: renew, reuse, recycle, regrow, reproduce
(b)	With reference to Fig. 1 and what you have learnt, describe the distribution of tropical rainforests around the world. [2] - Found near or along the equator - Between Tropic of Cancer and Tropic of Capricorn - Between latitudes 10°N and 10°S - Located in South America and Central Africa / Amazon Rainforest in South America and Congo Basin in Central Africa (at least 2 continents/rainforests listed to get 1m) -1m each - total 2m

(c)	- Point: The leaves of plants **have drip-tips** which are **tips that are downward pointing** - Explain: which **allow rainwater to flow off quickly, preventing the growth of fungi or bacteria** on them in the rainforests which receives heavy rainfall. - Point: The leaves of the plants are also **waxy** - Explain: Which helps to **reduce the amount of water vapour loss through transpiration** due to the high temperatures in the tropical rainforest. - Point: The leaves of the plants are also **broad** - Explain: Which helps the plants to **absorb as much sunlight as possible** to make food/for photosynthesis -1m each with details -total 4m
(d)	- Soil in the coastal environment is often **flooded/waterlogged**, **causing low levels of oxygen** - Plants in mangrove forests have **aerial roots** - That grows p**artially above the soil surface to take in oxygen from air** - When roots are **exposed at low tide** -1m for each, max 2m for each adaptation with details - total 4m - DO NOT ACCEPT: plants photosynthesize to give out more oxygen - DO NOT ACCEPT: roots help the plants to breathe
(e)	- The **dense root systems** of mangrove plants

- **help to trap and stabilise loose sediments on the coast.**
- Sediments are **less likely to be washed away** by waves, currents and tides.

OR

- The **roots, trunks and branches** of mangrove plants
- **cause friction with waves** hitting the coast.
- The waves **lose a significant amount of energy**, thus reducing coastal erosion.

-1m each with etails

- otal 3m

(f)

- By **establishing protected areas** where **human activities are generally restricted** to prevent plant and animal life from being negatively affected.
- Anyone **breaking these laws can be fined heavily and sent to jail**.

-1m each with details
-total 2m

2(a)

Caspian Sea	Batura Glacier	Atlantic Ocean	Pandan Reservoir

Freshwater stores	Saltwater stores
Batura Glacier	Atlantic Ocean
Pandan Reservoir	Caspian Sea

Table 1

- ½ m for each correct categorization
- total 2m

(b)

- A flood is an **overflow** of a large amount of water onto what is **normally dry land.**

	- while a **drought** is a **long period of little or no rainfall** in a specific area. - Compare = tell me the differences → use words such as "while", "but", "however" -1m each pt with details -total 2m
(c)	- Agricultural waste like **excess nutrients like fertilizers** are washed into the water **causing algae bloom.** - Industries **disposed of their industrial waste** some of which are toxic like chemicals and lead into the water directly to save on the costs of treating them. - Homes lack proper waste disposal system and **throw their rubbish into the water** (accept other plausible answers) -1m for each source with details -total 3m
(d)	• Domestic use • using water for **household activities like drinking** • Recreational: • using water for **leisure activities like swimming and water play** - ½ m for each correct purpose, max 1m - 1m each for description, max 2m - total 3m

e(e)	- A **grading system** where water appliances are graded with a tick rating -1m compulsory - The **more ticks a water appliance has, the more water efficient** it is. - Allow people to be **more aware** of water-efficient products in the market - and make **more informed choices** when purchasing water appliances. -1m for each pt, max 3m -total 4m
(f)	- **NEWater** - **Used/recycled water** is collected from **industries and homes** - **processed and treated** into drinking water using **advanced technology,** so that water can be used more than once, becoming a new source of water. -1m for identification -1m max for each description, max 2m -total 3m