Class:	Register No:	Name:

CRESCENT GIRLS' SCHOOL

SECONDARY FOUR

PRELIMINARY EXAMINATION 2024

GEOGRAPHY   2279/01

Paper 1   **20 August 2024**

1 hour 45 minutes

Candidates answer on the Question Paper.

Additional Materials: Insert

READ THESE INSTRUCTIONS FIRST

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

Answer **all** questions.

The Insert contains additional resources referred to in the 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.

The number of marks is given in brackets [ ] at the end of each question or part question.
The total number of marks for this examination is 50.

This document consists of **14** printed pages and 1 blank page.

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1 Cluster 1: Geography in Everyday Life

A group of Geography students investigated the experience of visitors at the Marina Bay area in Singapore. During the pre-fieldwork stage of research and planning, students were interested in the following areas of inquiry:

- the main reason for tourists' visit to Marina Bay,
- if there was a link between the distance travelled by tourists to Singapore and their length of stay Singapore.

Eventually, the students decided to focus their investigation on the following two hypotheses:

Hypothesis 1: 'Tourists mainly visit Marina Bay to shop.'
Hypothesis 2: 'There is a positive correlation between distance travelled by tourists to Singapore and their length of stay in Singapore.'

They designed a close-ended questionnaire to test their hypotheses. Data collection was carried out, between 11.00am and 4.00pm, on the first and third Sunday of March, June and September. Students then proceeded to survey 500 tourists in each month. They selected their survey respondents by using a suitable sampling technique.

Fig. 1.1 (Insert) provides more information about Marina Bay based on the secondary data research carried out by the students.

Fig. 1.2 (Insert) shows a map of Marina Bay where fieldwork was conducted by the students at the locations shown.

(a) (i) Using Figs. 1.1 and 1.2, suggest why the data collected at the locations may not be reliable.

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(ii) Suggest how the students could manage **one** safety risk when collecting data at the locations as shown in Fig. 1.2.

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(b) Students were debating whether to use probability sampling or non-probability sampling. After a pilot study, they decided to use non-probability sampling, specifically quota sampling based on gender, as they feel that gender may play a part in affecting visitors' decisions and experiences.

(i) Explain why the students may have found non-probability sampling to be a more suitable sampling method than probability sampling when considering time and area as possible limitations during the design of fieldwork.

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(ii) Describe how the students could use quota sampling, based on gender, to select visitors as survey respondents to answer the questionnaire.

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(c) Using Figs. 1.1 and 1.2, state **two** close-ended questions and the pre-defined response options which the students could use for their close-ended questionnaire to test Hypothesis 1: '**Tourists mainly visit Marina Bay to shop**.'

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(d) Table 1.1 shows the consolidated results of one of their survey questions.

Table 1.1

Main Reason for Visiting Marina Bay

Reason	June	September
Entertainment	80	200
Food & Beverage	60	40
Sightseeing	100	50
Shopping	150	100
Accommodation	70	90
Others	40	20
Total	**500**	**500**

(i) During data analysis, students decided to present the data findings in Table 1.1 to compare the reasons within each month for June and September.

Using Table 1.1, complete the bar graph as shown on Fig. 1.3. [2]

Fig. 1.3

Main Reason for Tourists' Visit to Marina Bay for June and September
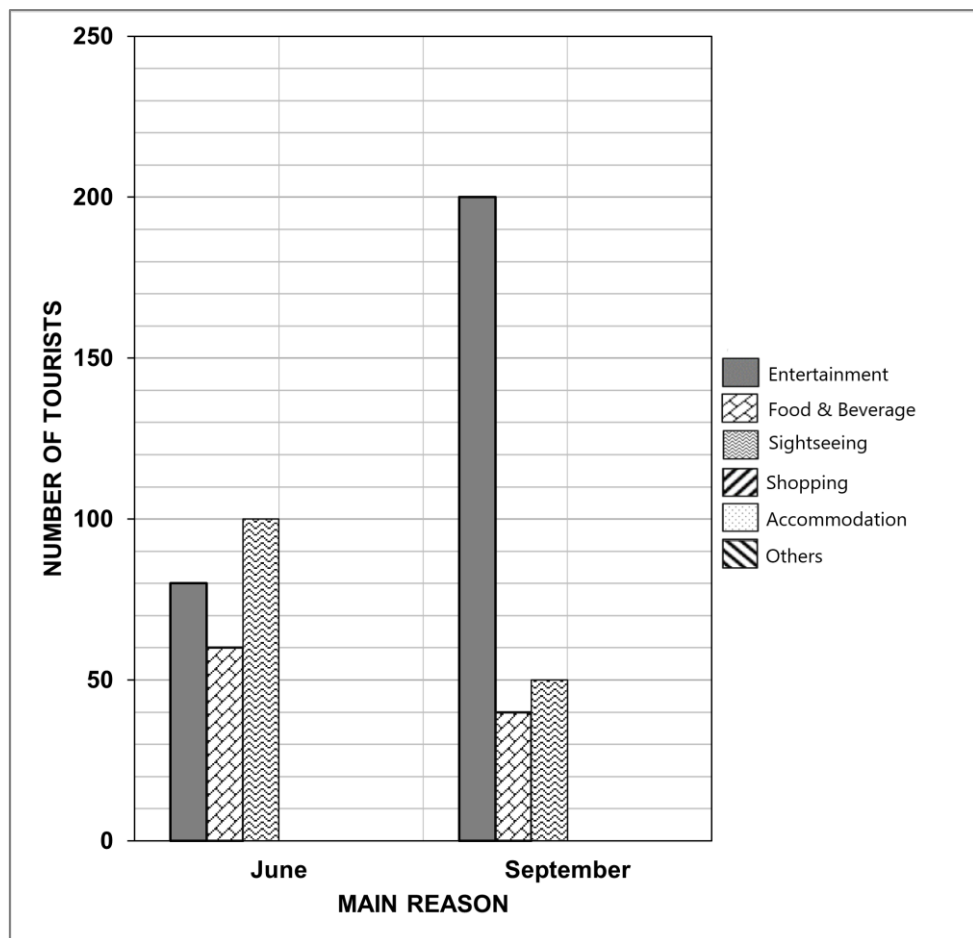
(ii) Using Fig. 1.3, evaluate how well the data supports Hypothesis 1: '**Tourists mainly visit Marina Bay to shop**.'

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(f) Students also carried out a semi-structured interview with 30 tourists to investigate Hypothesis 2: '**There is a positive correlation between distance travelled by tourists to Singapore and their length of stay in Singapore.**'

Students then presented their data findings on a scatter graph as shown in Fig. 1.4. When they checked, they realised that two data points shown in Table 1.2 were not represented in Fig. 1.4.

Table 1.2

Missing Data Points for Data Presentation on Fig. 1.4

Distance travelled by tourists (km)	Length of stay in Singapore (days)
12000	7
15000	12

Fig. 1.4

Relationship between distance travelled by tourists to Singapore and their length of stay in Singapore

Relationship between distance travelled by tourists to Singapore and their length of stay
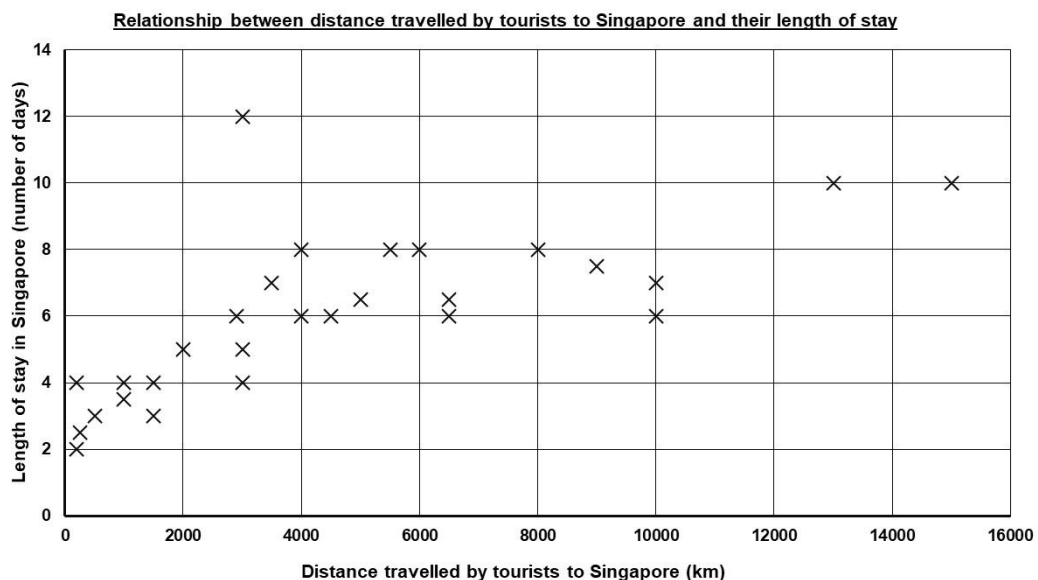
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(i) Use Table 1.2 to complete the scatter graph on Fig. 1.4 by plotting the **two** missing data points and drawing a line of best fit to show the relationship between the two variables. [2]

(ii) Using Fig. 1.4, what conclusions can the students draw about Hypothesis 2: '**There is a positive correlation between distance travelled by tourists to Singapore and their length of stay in Singapore.**'?

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2   Cluster 2: Tourism

(a)   Study Fig. 2.1 (Insert), which shows the changes in international visitor arrivals to Japan, by country/region, for the month of May in 2019 and 2024, respectively.

Using Fig. 2.1, compare the patterns shown by the international visitors to Japan between the two tourist generating countries of South Korea and China from May 2019 to May 2024.

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(b)   Study Fig. 2.2, which shows the international tourist arrivals to Japan from 2010 to 2023.

Tourist arrivals to Japan
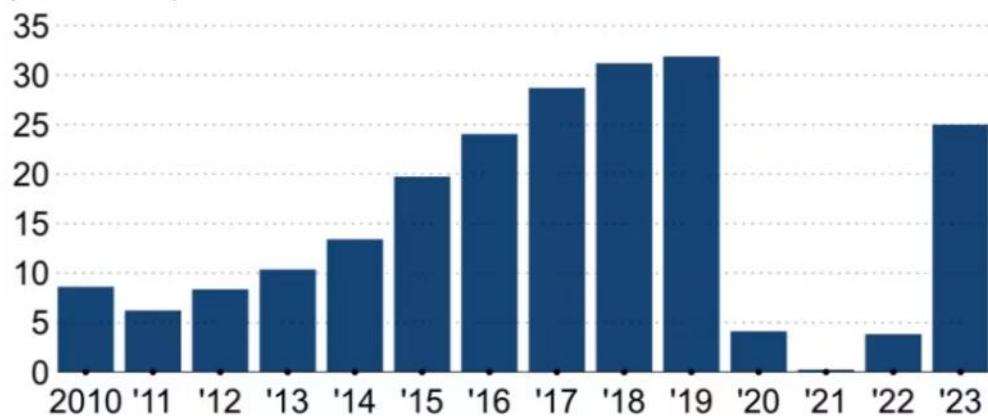
Fig. 2.2

With reference to Fig. 2.2, suggest how unforseen events may have led to the declines in international tourist arrivals to Japan in 2011 and 2020.

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(c) Study Fig. 2.3 (Insert), which is a photograph taken at Lempuyang Temple in Bali, Indonesia. Known as Bali's Gate of Heaven, Lempuyang Temple is one of Bali's most visited Hindu shrines. Its location overlooks the sacred Mount Agung, one of 127 active volcanoes in Indonesia.

Use Fig. 2.4 to sketch the physical and human environment as shown on Fig. 2.3. Label the sketch to identify **one** possible attraction and its associated type of tourism. Annotate the sketch to describe the motivation for travelling and type of tourist activity that could take place at that tourist attraction.

Fig. 2.4 for Question 2

Photograph of View of Mount Agung from Lempuyang Temple in Bali

[4]

(d) Study Fig. 2.5 (Insert), which shows a travelling checklist designed by The TreadRight Foundation, a non-profit organisation that encourages sustainable tourism.

With reference to Fig. 2.5, suggest how tourists can play their part as a consumer and stakeholder in influencing sustainable tourism development.

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3 Cluster 3: Climate

(a) Fig. 3.1 (Insert) is a climograph of India. Fig. 3.2 (Insert) is a map showing the monsoon wind system in Asia between June and September.

Using Fig. 3.1 and Fig. 3.2, explain the effect of the monsoon wind on the rainfall pattern experienced by India from June to September.

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(b) Study Fig. 3.3 (Insert), which is a map showing the distribution of coral reefs in the Great Barrier Reef Marine Park in northeastern Australia.

Describe the general distribution of coral reefs found in the Great Barrier Reef Marine Park as shown in Fig. 3.3.

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(c) Study Fig. 3.4 (Insert), which shows the mean annual proportional loss of coral cover across the Great Barrier Reef, caused by tropical cyclone damages as well as heat stress and associated coral bleaching.

With reference to Fig. 3.4, explain the impact of climate change on natural systems.

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(d) With climate change being a global challenge, Singapore has taken and accelerated efforts to address climate change and ensure sustainable development.

Evaluate the effectiveness of the climate action taken by the government and society to build community resilience to climate change in Singapore.

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