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INDEX NUMBER

# Anglo-Chinese School
## (Independent)

**MID YEAR EXAMINATION 2018**
**INTEGRATED PROGRAMME**
**YEAR 2**

**GEOGRAPHY**
**ANSWER SCHEME**

Monday 7 May 2018 1 hour

**INSTRUCTIONS TO CANDIDATES**

**Do not open this booklet until you are told to do so.**

Write your index number in the boxes at the top of this page.
Write in dark blue or black pen.
You may use a soft pencil for any diagrams and graphs.
Do not use staples, paper clips, highlighters, glue or correction fluid.

**Section A**
Answer all the questions.

**Section B**
Answer all the questions.

Write all answers in the spaces provided.
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.

For examiner's use

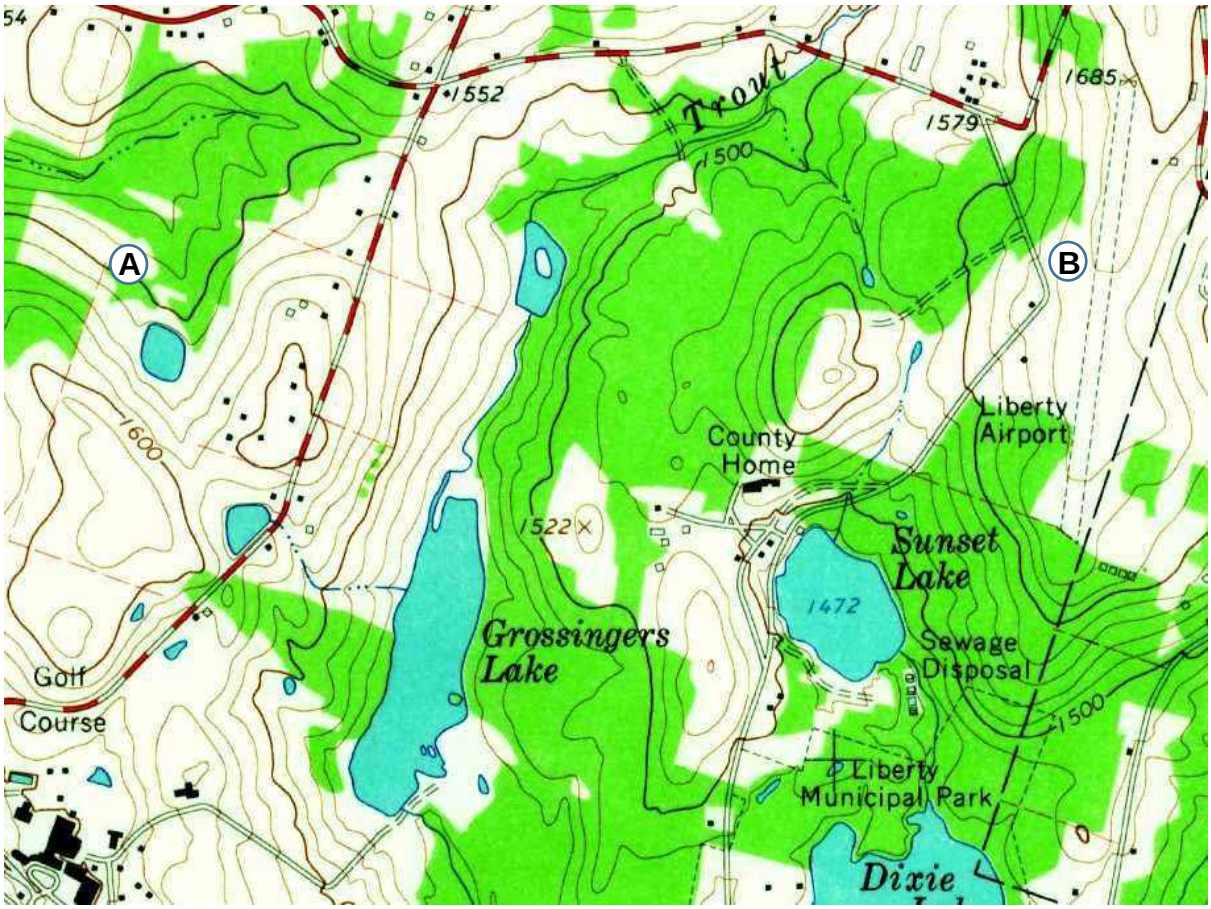
| Question No | Marks obtained |
|---|---|
| 1 | /5 |
| 2 | /3 |
| 3 | /3 |
| 4 | /6 |
| 5 | /4 |
| 6 | /4 |
| 7 | /5 |
| Total | /30 |

This Answer Scheme consists of **11** printed pages.

**[Turn over**

## Section A: Topographical Map [5 marks]

1. Fig. 1 shows a 1:50,000 topographical map.




**Legend**

- main road
- minor road
- bare ground
- cultivation
- houses
- lake
- track

Fig. 1

(Source: http://www.airfields-freeman.com/NY/Airfields_NY_SE.htm)

(a) Suggest why the houses are situated in such a manner. [1]

The houses are situated along the road to gain access to transportation by road.

(b) Describe the changes in the relief, terrain and landuse that you would experience as you walk from Point A to Point B. [4]

The area of cultivation slopes gently [½] followed by bare ground. [½] There are houses [½] near a main road. [½] After the road, the bare ground slopes gradually [½] before reaching a lake. [½] After the lake, there is a steep slope with cultivation [½], followed by a gentle slope with cultivation, [½] There are some tracks [½] and minor road at the end of the cultivation [½] before reaching point B.

## Section B: Structured Questions [25 marks]

2. Fig. 2 shows the distribution of slums in urban areas around the world in 2001.

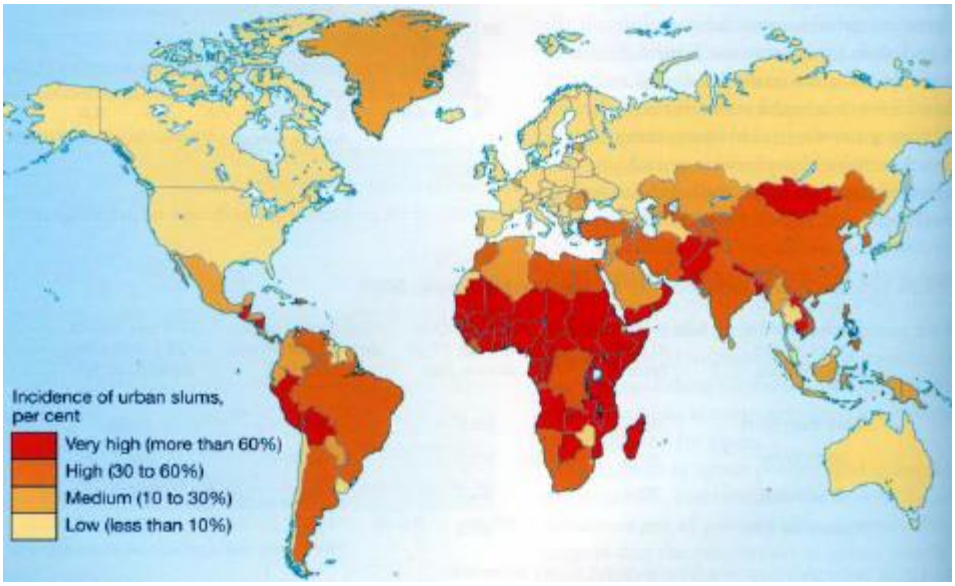



Fig. 2

(Source: https://www.researchgate.net/figure/Percentage-of-urban-population-living-in-slums-in-different-countries_fig1_273321816)

With reference to Fig. 2, describe the distribution of slums in urban areas around the world. [3]

There is a very high incidence of slums (more than 60% located in many countries of Africa, in Mongolia and Peru (eastern part of South America). [1]

About 30% - 60% of urban slums are located in South America, India, China. [1]

There are low incidences of urban slums (less than 10%) in the more developed countries of North America, Australia, Europe and Russia. [1]

Higher distribution of slums in the southern part of the world with the exception of Australia. [1]

[accept other possible answers]

3. Fig. 3 shows a slum.

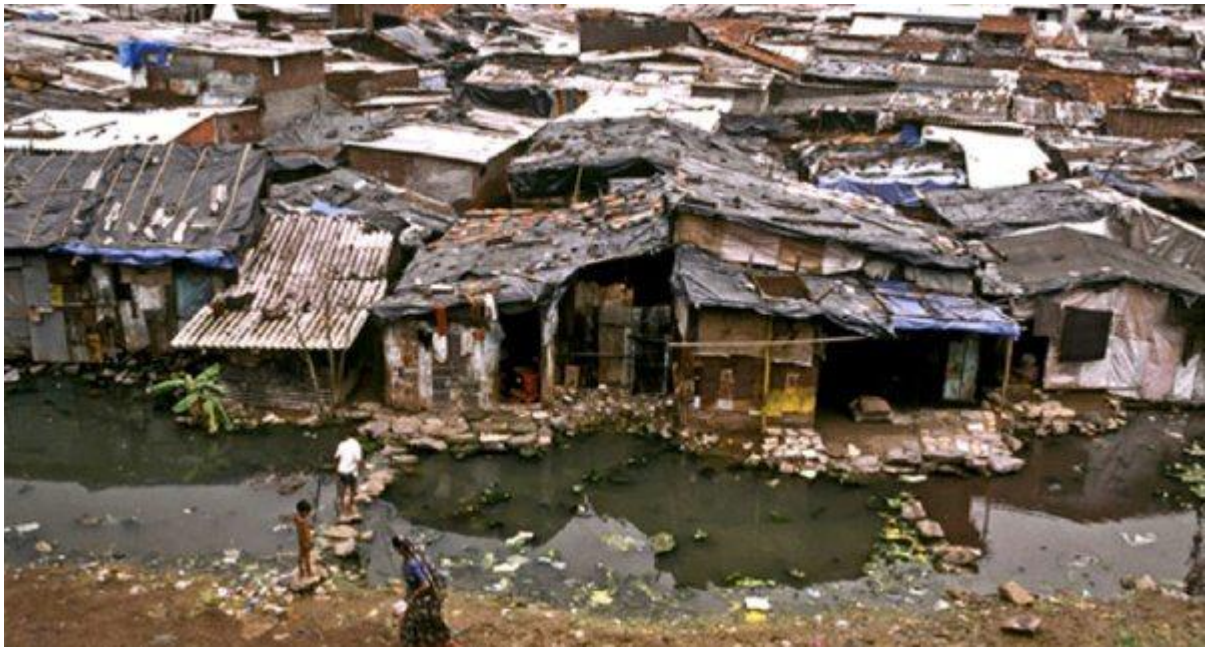


Fig. 3

(Source: https://www.statista.com/chart/10211/where-does-commuting-cost-the-most/)

Describe three characteristics of slums that can be seen in the photo in Fig. 3. [3]

Homes are made of scrap materials such as zinc sheets, wooden planks and canvas. [1]

The homes are built extremely close to each other in a dense and disorderly manner. [1]

The surroundings are very unhygienic with pools of stagnant water and rubbish on the ground. [1]

There is a lack of basic services such as electricity supply as there are no electrical power lines seen. [1]

[any three / accept other possible answers]

4. Fig. 4 shows the average number of kilometres clocked by passenger cars per year in Singapore.

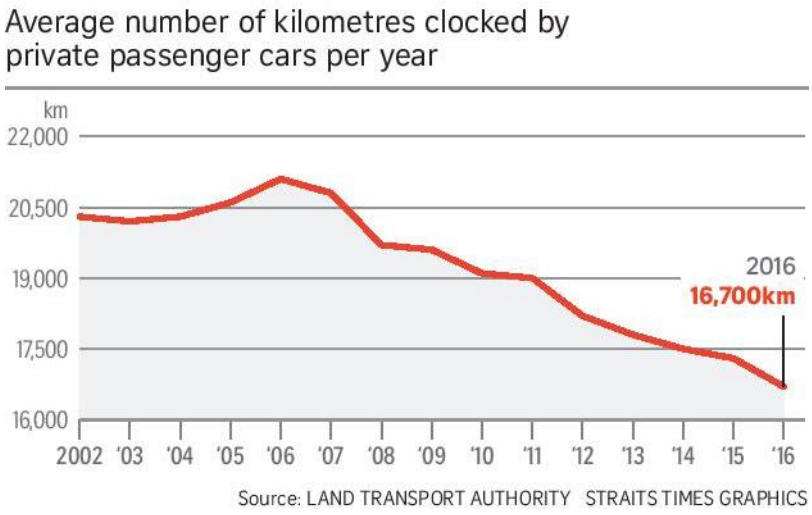



Fig. 4

(Source: http://www.torque.com.sg/18301/singapore-motorists-clocking-fewer-kilometres/)

(a) Describe the trend in the data shown in Fig. 4. [2]

The number of kilometres clocked by passenger cars has generally decreased considerably over the years [1] from about 20,400km in 2002 down to about 16,700km in 2016. [1] There was an increase in kilometres clocked in 2006 when the distance increased to a high of about 21,000km. [1]

(b) Explain two possible reasons for the trend in the data shown in Fig. 4. [4]

Note: Focus of answer must be on the decreased usage of cars based on the drop in AVERAGE number of kilometres clocked by passenger cars and not on the decreased number of cars.

The drop in the average kilometres clocked by passenger cars could be due to the increase in cost of petrol in Singapore. [1] This is due to the drop in supply of crude oil which led to prices rising. [1] Thus drivers may choose to be more careful in how much they drive around Singapore.

The drop in the average kilometres clocked by passenger cars could also be due to the increase in cost of parking [1] which discourages drivers from driving to certain areas which have increased their parking charges such as those in the CBD. [1]

The drop in average kilometres clocked by passenger cars could also be due to the success of the public transport system being more efficient and thus a

choice mode over cars. [1] The cheap and efficient network of public transportation options means that drivers do not need to drive their cars everywhere they go and could take public transport instead. [1]

[any two / accept other possible answers]

5. With reference to specific examples you have studied, explain two impacts of traffic congestion. [4]

Traffic congestion will cause a reduction in productivity as workers spend a lot of time wasted in traffic instead of working. [1] For example, the Philippines loses about $70 million a day in potential income due to traffic congestion. [1]

Traffic congestion will increase the air pollution levels in a city due to the cars which release greenhouse gases such as carbon dioxide and carbon monoxide which can also develop into smog. Beijing, China is an example of a city where the smog has also reached toxic levels that can harm human health. [1]

Traffic congestion can also lead to noise pollution when the noise from vehicles sounding their horn may disturb the surrounding environment. [1] For example, in Kolkata, India, drivers would sound their horn once every five seconds, and each honk is 65 decibels which is over the 55 decibel limit for residential areas in India. [1]

Traffic congestion can also lead to stress and anxiety which can affect people's health negatively. [1] Exhaust fumes from idling vehicles stuck in traffic can also cause lung problems when the fine particulate matter is breathed in. [1] Such incidents happened in Indonesia where there were deaths reported due to extreme traffic congestion during the last day of Ramadan before Hari Raya when people were driving home to their hometowns. [1]

[accept other possible answers]

6. Fig. 5 shows a measure to manage traffic congestion in Singapore.

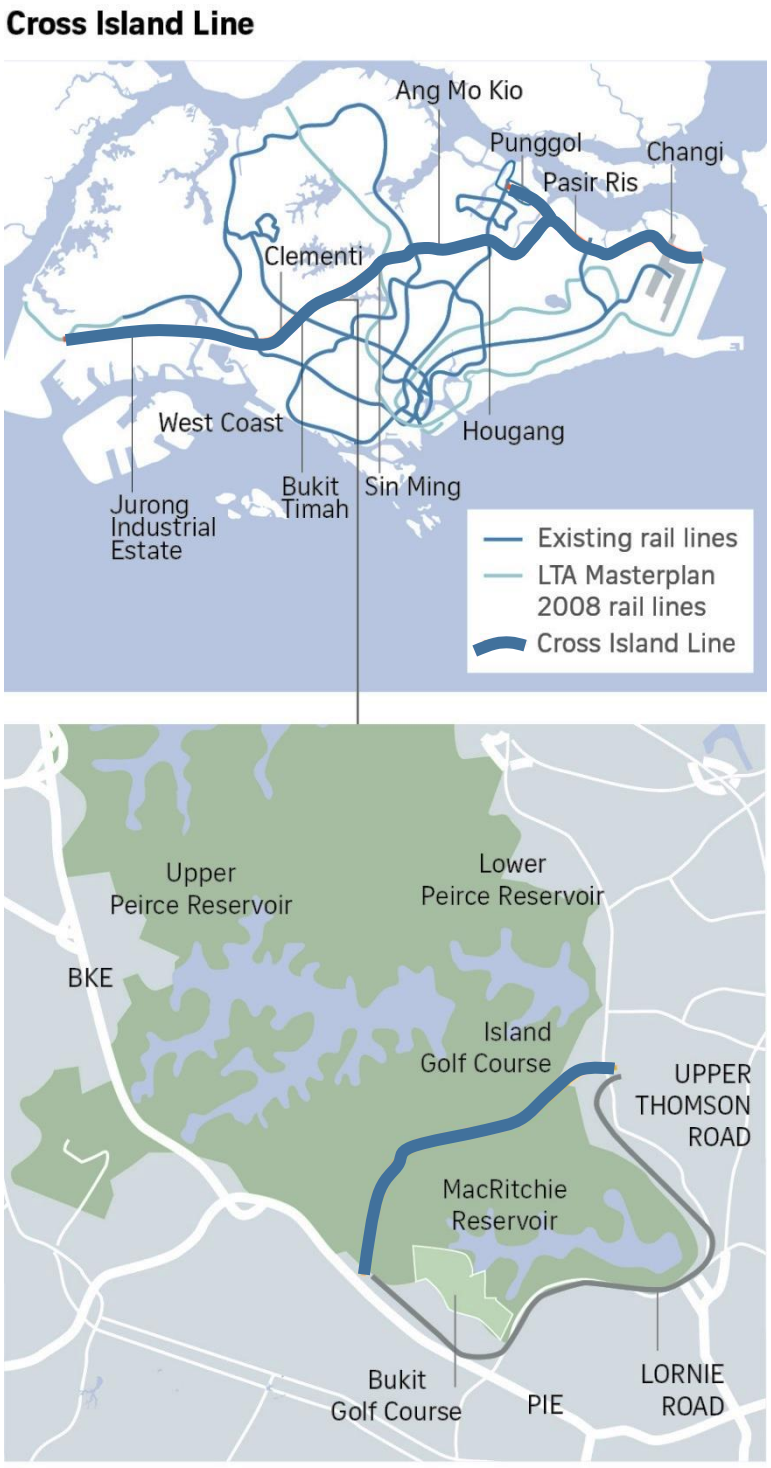



Fig. 6

(Source: http://www.straitstimes.com/singapore/transport/2b-extra-cost-if-cross-island-line-skirts-central-catchment-nature-reserve)

Describe two challenges faced implementing the measure shown in Fig. 6.

[4]

Note: This is not the same as describing the negative impact of the measure. Students must describe how it poses a challenge which has to be overcome.

One challenge is that construction of the Cross Island Line MRT will cut through the Central Catchment Nature Reserve and this will cause the destruction of the habitats of many species of plants and animals. [1] The construction companies will need to find ways to carry out the construction with minimal impact to the biodiversity. [1]. The challenge faced by the government is to balance between the value of biodiversity conservation vs development of the country's infrastructure. [1]

Another challenge is the high cost of constructing the MRT line. [1] The government will have to invest millions and billions of dollars to build the MRT line and this might cause the government to need to increase taxes to pay for the cost of construction. [1] Fares may also be increased to pay for the construction of the MRT line. [1]

[accept other possible answers]

7. Fig. 7 below is an online article about London's traffic management efforts.

# Traffic in London Is Still Out of Control. Now What?

## The U.K. capital was a global leader in taming congestion 13 years ago. But the traffic has come back, with a vengeance.

In 2003, the city of London made a bold move in an effort to tame traffic: It instituted a congestion charge, making motorists pay a fee in order to drive into the city core. The law was the first of its kind in a major city, and similar schemes were later adopted in Stockholm, Milan, and other cities.

Today, 13 years later, the U.K. capital is drowning in vehicles: London has the worst road delays in Europe. What happened?

**The Limits of Congestion Charging**

London cars may now be moving "slower than a horse and cart" but that doesn't necessarily mean the congestion charge was a failure. When introduced, it was designed largely to slash the number of private cars driving in to central London. In this, it has proved very successful. As the Financial Times reports, private car use has indeed dropped off sharply.

The problem is that the space vacated by those private cars has since been filled up (and then some) by other vehicles—specifically, private-hire cabs and online shopping delivery vans from the likes of Uber and Amazon. The on-demand economy is choking the city.

They weren't a major factor in London traffic 13 years ago, and they are not deterred by the current £11.50 ($14) daily charge to drive into the zone. Because they count as public transit, Uber drivers don't even pay the fee.

Fig. 7

(Source: https://www.citylab.com/solutions/2016/10/traffic-in-london-is-out-of-control-what-happened/505454/)

With reference to Fig. 7, discuss your opinion on the success of London's efforts to reduce traffic congestion. **In not more than 80 words**, support your opinion with reasons and examples. [5]

| | | |
|---|---|---|
| Level 1 | 1-2 marks | Strategy / opinion is not explained clearly.<br>Reasons/pros/cons and examples are not evident in support of the discussion. |
| Level 2 | 3-4 marks | Strategy / opinion is explained clearly.<br>Reasons/pros/cons and examples are evident in support of the discussion. |
| Level 3 | 5 marks | Strategy / opinion is explained clearly.<br>Reasons/pros/cons and examples are evident in support of the discussion.<br>Conclusion is well discussed, evaluating the strategy from the short-term and long-term point of view. |

Answers would include a brief description of the traffic management measures with reference to examples from the article to demonstrate success. Answers should also provide a discussion on the limitations of the measures as discussed in the article.

Sample answer:

London's traffic management efforts were successful in the short term when congestion charges helped to reduce private car use as reported by Financial Times.

However, in the long term, the measure is no longer as effective as there are other vehicles such as UBER and online-shopping delivery vans from Amazon that either do not need to pay the congestion charge or can afford to pay the daily charge of $14. Thus the charges do not deter them.

Thus, while the measures were successful in the short term, changes to transportation methods in the long term made the measures less successful.

(100 words)

END OF PAPER