

# AHMAD IBRAHIM SECONDARY SCHOOL GCE O-LEVEL PRELIMINARY EXAMINATION 2019

# **SECONDARY 4 EXPRESS & 5 NORMAL (ACADEMIC)**

Name:	Class:	Register No.:	
HUMANITIES	227	2/01 & 2273/01	
Paper 1 Social Studies		26 August 2019 1 hour 45 minutes	

Additional Materials: Writing Papers

#### **READ THESE INSTRUCTIONS FIRST**

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

Write down your name, class and register number on this page and on all the work you submit. Write in dark blue or black pen on both sides of the paper.

Do not use staples, paper clips, highlighters, glue or correction fluid.

## Section A

You must answer Question 1.

#### Section B

You must answer Question 2.

Write all answers on the writing papers provided.

Candidates should support their answers with the use of relevant examples.

At the end of the examination, fasten all your answers securely together.

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

Submit the Question Paper, Section A and Section B answers separately.

Section	Marks	
A		
- 1	35	
В	1.	
	15	
Total	50	

## **Section A (Source-based Case Study)**

Question 1 is compulsory for all candidates.

## 1 Being Part of a Globalised World

Study the Background Information and the sources carefully, and then answer <u>all</u> the questions.

You may use any of the sources to help you answer the questions, in addition to those sources which you are told to use. In answering the questions you should use your knowledge of the issue to help you interpret and evaluate the sources.

a)	Study Source A.	
	What can you infer from the cartoon about the use of internet?	[5]
b)	Study Source B.	
	What is the cartoon trying to achieve? Explain your answer.	[6]
c)	Study Sources C and D.	
	How far do these two sources agree with each other? Explain your answer.	[7]
d)	Study Sources E and F.	
	Having read Source E, are you surprised by Source F in saying that Singapore's cybersecurity is not sufficiently strong? Explain your answer.	[7]
e)	"Singapore is capable of managing cybersecurity challenges".	
	Using sources in this case study, explain how far you would agree with this statement.	[10]

## How serious are the challenges facing Singapore's cybersecurity efforts?

#### **BACKGROUND INFORMATION**

Read this carefully, it may help you answer some of the questions.

Globalisation has made it easier for people to access information virtually and this has led to computers, networks and information becoming more vulnerable to cyber-attacks. A cyber-attack is an attempt by hackers to damage or destroy a computer network or system. As a highly interconnected country, Singapore is not spared from cyber-attacks.

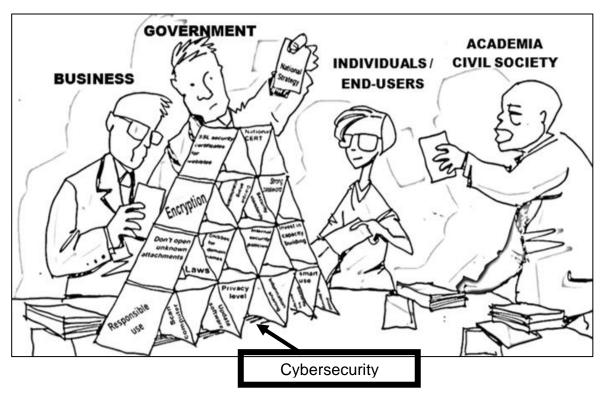
Cybersecurity is the practice of protecting systems, networks, and programs from cyberattacks. To strengthen Singapore's cybersecurity, numerous laws and initiatives have been introduced and implemented. For example, the National Cyber Security Master Plan 2018 was introduced and the Cyber Security Agency (CSA) was set up to oversee and coordinate activities to strengthen Singapore's cybersecurity. However, despite the nation's best efforts, reports on cyber-attacks continued to surface with the latest incident being the theft of 1.5 million patients' data from Singhealth.

Study the following sources to assess the severity of these challenges to Singapore's cybersecurity efforts.

**Source A:** A cartoon posted on the Cyber Security Agency (CSA) website.



**Source B:** A cartoon showing Singapore's efforts to strengthen its cybersecurity published on a government website in 2018.



**Source C:** An online article published after a series of cyber-attacks on the Cyber Security Agency (CSA) website, September 2017.

Government agencies, universities and companies in Singapore have been targets of cyber-attacks in recent years. In February, there was a cyber-attack on the Ministry of Defence (MINDEF) where the personal details of 850 national servicemen and personnel were leaked. As a commercial hub with high interconnectivity, Singapore is undoubtedly an attractive target for cybercriminals. Singapore residents should be vigilant about cyber security and not assume that cyber-attacks happen only to large organisations. Individuals do need to be mindful with e-mail attachments and links they open, apps they download and Wi-Fi hotspots they connect to.

**Source D:** An article published on a local financial blog, 2017.

Cybercrime is the only crime that's increasing in Singapore. In the last few years, the following cyberattacks took place:

- SingPass (1,500 passwords compromised)
- Standard Chartered (data for 647 wealthy clients stolen)
- Diners Singapore (unknown number of cardholders' data was stolen)

What's scary is that even if you protect your personal data from a hacker with the best cyber security software money can buy; you're still vulnerable to hacker groups that target the companies and government agencies that also hold your personal data. The best way to combat today's increasingly dangerous cyber environment is to take a more strategic approach to detecting cybercrime and fraud as quickly as possible.

**Source E**: Extract from a Straits Times article published in 2017.

Singapore has topped the Global Cybersecurity Index (GCI) 2017 released by the United Nations, beating other member states such as the United States, Australia and France. The GCI is a survey that measures the commitment of UN member states to cybersecurity. The GCI report noted that Singapore has a long history of cybersecurity initiatives. The Cyber Security Agency (CSA) of Singapore was created in 2015 as a dedicated entity to oversee cybersecurity and the country issued a comprehensive and coordinated national cybersecurity strategy in 2016. In May this year, the Government announced that it is pumping as much as \$528 million into cybersecurity spending, which includes a new Government Security Operation Centre to detect cyber threats.

**Source F**: Comments by Mr David Koh, the Chief Executive Officer of Singapore's Cyber Security Agency (CSA) in December 2017.

In 2017, while companies and agencies in Singapore, including the defence ministry, suffered security breaches, the country as a whole escaped the brunt of global malware attacks like the WannaCry ransomware attack. But it was by sheer chance that we escaped largely unscathed. It is not that Singapore is particularly good or that Singaporeans are very alert with respect to malware; we were just lucky. Singapore ducked the bullet because the ransomware affected older versions of the Windows operating system, which are not widely used in Singapore. Also, the attackers meant to target a particular country and a particular region of the world. If it had been targeted at Singapore, the results might have been quite different. The attackers are nimble, well-resourced and world-class. So, realistically, we can't prevent a cyberattack, but what we need to do is to continuously harden our defences and make sure that our systems are robust so that even if we are under attack, we will still be able to operate, even if at a degraded mode.

## Acknowledgements

Source A - https://www.csa.gov.sg/gosafeonline/go-safe-for-me/homeinternetusers/essential-security software

Source B - https://www.diplomacy.edu/cybersecurity#ff2-80

Source C - https://www.tnp.sg/news/singapore/singapore-leads-world-cyber-attacks

Source D - <u>https://blog.moneysmart.sg/career/can-singapore-companies-really-protect-your-personal-information-from-hackers/</u>

Source E - https://www.straitstimes.com/tech/spore-takes-top-spot-in-un-cyber-security-index

Source F - https://www.channelnewsasia.com/news/singapore/we-were-just-lucky-cybersecurity-chief-on-attacks-in-singapore-9504336

## **Section B (Structured-Response Questions)**

Question 2 is **compulsory** for all candidates.

## 2 Living in a Diverse Society

Study the extracts carefully, and then answer the questions.

#### Extract 1

"Unlike in the 1960s when racial harmony was linked to security and safety issues, our concerns today are centred on building deeper acceptance and personal friendships across different races. As I reflect on recent incidents such as the debate on the reserved presidential election for Malay candidates, threats of terrorism and racial slurs surface. I am reminded again on how race is a sensitive issue and a potential fault line that could divide us as a nation", by James Goh, Chairman, People's Association Youth Movement Central Youth Council 2019.

## Extract 2

Singapore has been categorized as a "Seriously Unaffordable" place for housing. The increase in demand for housing by foreigners was cited as a main cause for the rising cost of housing in Singapore.

#### Extract 3

Differences in cultural background can lead to the development of prejudice and misconceptions among different communities in society.

(a) Extract 1 talks about the lack of harmony in the Singapore society.

In your opinion, how can Singapore promote greater harmony in a diverse society? Explain your answer using **two** ways. [7]

**(b)** Extract 2 and Extract 3 highlight the issues of competition for resources as well as prejudice and misconceptions between the locals and foreigners.

Do you think that competition for resources is a greater challenge than prejudice and misconceptions in a diverse society? Explain your answer. [8]

Setter: Ms Chow CW