

# **BOON LAY SECONDARY SCHOOL**

# PRELIMINARY EXAMINATION

# 2019

Name		)
Class		

Subject	:	HUMANITIES (SOCIAL STUDIES)
Paper No	:	1
Subject Code	: :	2272/01, 2273/01, 2274/01
Level	:	SECONDARY FOUR EXPRESS
	,	SECONDARY FIVE NORMAL ACADEMIC
Date/Day	: :	29 August 2019 / Thursday
Time	:	0800 - 0945
Duration	:	1 HOUR 45 MINUTES

## **READ THESE INSTRUCTIONS FIRST**

Write all answers in the Answer Booklet.

Write in dark blue or black pen.

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

#### **Section A**

Answer all parts of Question 1.

#### **Section B**

Answer both parts of question 2.

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

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

This paper carries a total of 50 marks.

This question paper consists of 7 printed pages and 1 blank page.

Section A (Source-Based Case Study) [35 marks]

Question 1 is compulsory for all candidates.

2019/PRELIMS/4E5N/SS

## 1 Being Part of a Globalised World

Study the Background Information and the sources carefully, and then answer all 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.	
	Why did the cartoonist publish this cartoon? Explain your answer.	[5]
(b	Study Sources B and C.	
	How far does Source B disagree with Source C? Explain your answer.	[6]
(c	Study Source D.	
	How useful is this source in helping you understand the consequences of the restrictions placed on Huawei? Explain your answer.	[7]
(d	Study Sources E and F.	
	Having read Source E, are you surprised by Source F? Explain your answer.	[7]
(е	) 'The restrictions placed on Huawei are justified.'	
	Using sources in this case study, explain how far you would agree with this statement.	[10]
		1

How would the trade restrictions placed on Huawei's equipment impact the US economy?

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

Huawei, the world's biggest telecommunications equipment and services providers, has been placed under scrutiny. There were concerns about its coziness with the Chinese government, especially when Huawei's founder Mr Ren Zhengfei joined China's Communist Party\* in 1978 and was also a member of the People's Liberation Army\*. Although Mr Ren Zhengfei dismissed and denied any association with the Chinese government, fear continue to arise that Huawei's equipment could be used to spy on other countries and companies.

In January 2019, the United States Justice Department charged Huawei with theft of trade secrets and obstruction of justice. These charges include Huawei stealing trade secrets from US carrier T-Mobile in 2012. In light of recent events, a number of countries, Australia and New Zealand included, has banned the use of Huawei networking equipment.

In May 2019, US President Donald Trump passed an executive order on Securing the Information and Communications Technology and Services Supply Chain. This order limits foreign involvement in the nation's carrier networks, in other words, effectively bans Huawei from the US communications networks. The order was met with mixed responses with people applauding US for securing its communication networks while others feel that it is a move that would spark a trade war, eventually crippling the US economy. Some might even argue that the execution order was implemented in retaliation for the trade conflict that is going on between China and US.

Study the following sources to find out if the trade restrictions placed on Huawei's equipment would impact the US economy.

\*China's Communist Party: The founding and ruling political party of the People's Republic of China.

\*People's Liberation Army: The armed forces of the People's Republic of China and the Communist Party of China.

**Source A:** An American cartoonist's impression of trading with China.



\*AMSC / TVA / AVAGO / Motorola / Dupont / T-Mobile: American companies \*Huawei: Chinese company

**Source B:** An extract from an interview with Huawei founder Ren Zhengfei after Huawei was charged with bank fraud and conspiracy to commit money laundering.

We have maintained a solid track record in security. Huawei is an independent business organisation. When it comes to cybersecurity and privacy protection, we are committed to siding our customers. We will never harm any nation or any individual. Secondly, China's Ministry of Foreign Affairs has officially clarified that no law in China requires any company to install back doors\*. Neither Huawei, nor I personally, have ever received any requests from any government to provide improper information.

It has always been the case that some customers accept Huawei and others don't. Some countries have decided not to buy equipment from Huawei. Therefore, we can shift our focus to better serve countries that welcome Huawei.

\*back door: An undocumented portal that allows an administrator to enter a computer system or software to gain illicit access

**Source C:** A statement made by FBI Director, Christopher Wray, at the FBI National Press Office about the indictments\* of Huawei, on 28 January 2019.

Huawei also intentionally and systematically sought to steal valuable intellectual property from an American company so it could circumvent hard-earned, time-consuming research and gain an unfair market advantage. In pursuit of their commercial ambitions, Huawei relied on dishonest business practices that contradict the economic principles that have allowed American companies and the United States to thrive.

Such actions are inherently linked to our national security because the immense influence that the Chinese government holds over Chinese corporations like Huawei represents a threat.

As Americans, we should all be concerned by the potential for any company beholden\* to a foreign government—especially one that doesn't share our values—to burrow into the American telecommunications market. That kind of access could give a foreign government the capacity to maliciously modify or steal information, conduct undetected espionage\*, or exert pressure or control.

\*Indictment: A criminal accusation that a person has committed a crime

\*Beholden: Owing thanks or having a duty to someone in return for help or a service.

\*Espionage: the practice of spying, typically by governments to obtain political and military information.

#### Source D:

A report from Huawei Cyber Security Evaluation Centre (HCSEC) Oversight board, an organisation set up by the UK National Cyber Security Centre, published in March 2019. This organisation was set up to identify possible risks before deciding on a ban of Huawei equipment.

HCSEC has continued to find serious vulnerabilities in the Huawei products examined. Several hundred vulnerabilities and issues were reported to UK operators to inform their risk management and remediation in 2018. Some vulnerabilities identified in previous versions of products continue to exist. If an attacker has knowledge of these vulnerabilities and sufficient access to exploit them, they may be able to affect the operation of the network, in some cases causing it to cease operating correctly. Other impacts could include being able to access user traffic or reconfiguration of the network elements.

**Source E:** An extract from an online article on the views of IT experts about the Huawei Ban, published on 4 June 2019.

Cybersecurity experts worry the ban will hurt U.S. tech companies more than it hurts Huawei and will diminish U.S. influence over the security of new technologies. Others were similarly concerned that China would simply build up its domestic technology industry so it doesn't have to rely on U.S. suppliers which will only accelerate China's technological independence and end up impacting the U.S. economy longer term. However, some were optimistic about the effect of U.S. economic pressure. "It is necessary to put economic pressure on China to change its practices that have been gravely damaging to our national security and economic security," said Michael Daly, chief technology officer for cybersecurity and special missions for Raytheon Intelligence, Information and Services.

**Source F:** An interview with Francis Dinha, CEO of Openvpn\*, about Huawei's security threat, published on 17 March 2019

The US is right to treat Huawei as a security threat, but I don't believe any ban on any equipment is the right solution. No matter what equipment we use, there will be security risks. With such an exponentially higher amount of data, there will inherently be an exponentially higher risk. But taking a competitor out of the market could lead other companies to get complacent, which would mean US innovation and development could be slowed — which presents an even more severe security risk overall. Huawei is a risk, certainly — but there are other ways besides a ban to mitigate that risk. No matter who is making our equipment, we need to be proactive about cybersecurity.

<sup>\*</sup>Openvpn: A company that provides flexible solutions for businesses to secure all data communications

#### Section B (Structured-Response Question) [15 marks]

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

## 2 Exploring Citizenship and Governance

Study the extracts carefully, and then answer the question.

#### Extract 1

A study found that Singapore residents use on average of two to four plastic bags for each trip to the supermarket, one to three polyethylene terephthalate (PET) bottles a week, and one to three polypropylene (PP) disposable items such as food take-away containers a week. This amounts to an annual plastic waste burden of 1.76 billion plastic items used by Singapore a year.

#### **Extract 2**

The mission of the Singapore Police Force is to prevent, deter and detect crime to ensure the safety and security of Singapore.

#### **Extract 3**

Singapore's integrated public transport system, which includes MRT and LRT trains, buses and taxis, makes it convenient to get to any point in the city.

- (a) Extract 1 shows challenges that Singapore faces in reducing plastic consumption

  In your opinion, why is it difficult for Singaporeans to change their plastic consumption habits? Explain your answer using **two** reasons.

  [7]
- **(b)** Extract 2 and Extract 3 reflect on the roles of government in maintaining internal order and providing goods and services for the public.
  - How far do you agree that maintaining internal order is more important than providing goods and services for the public in ensuring the good of society? Explain your answer.

[8]

Copyright Acknowledgements:

Source A: https://www.toonpool.com/cartoons/The%20Chinese%20Business%20Partner 324363

Source B: Adapted from <a href="https://www.scmp.com/tech/big-tech/article/2182367/transcript-huawei-founder-renzhengfeis-responses-media-questions">https://www.scmp.com/tech/big-tech/article/2182367/transcript-huawei-founder-renzhengfeis-responses-media-questions</a>

Source C: Adapted from <a href="https://www.fbi.gov/news/press-releases/fbi-director-christopher-wrays-remarks-regarding-indictments-of-huawei-and-wanzhou-meng">https://www.fbi.gov/news/press-releases/fbi-director-christopher-wrays-remarks-regarding-indictments-of-huawei-and-wanzhou-meng</a>

Source D: Adapted from <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/</a> <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/</a> <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/</a> <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/</a> <a href="https://assets.publishing.service.gov.uk/government/uploads/">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/</a> <a href="https://assets.publishing.service.gov.uk/government/uploads/">https://assets.publishing.service.gov.uk/government/uploads/</a> <a href="https://assets.publishing.service.gov.uk/government/uploads/">https://assets.publishing.service.gov.uk/government/uploads/</a> <a href="https://assets.publishing.service.gov.uk/government/uploads/">https://assets.publishing.service.gov.uk/government/uploads/</a> <a href="https://assets.publishing.service.gov.uk/government/uploads/">https://assets.publishing.service.gov.uk/government/uploads/</a> <a href="https://assets.publishing.gov.uk/government/uploads/">https://assets.publishing.gov.uk/government/uploads/</a> <a href="https://assets.publishing.gov.uk/government/uploads/">https://assets.publishing.gov.uk/government/uploads/</a> <a href="https://assets.publishing.gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.uk/gov.

Source E: Adapted from <a href="https://nationalpost.com/news/world/experts-say-trumps-huawei-ban-wont-make-the-u-s-more-secure-hurts-u-s-tech-companies">https://nationalpost.com/news/world/experts-say-trumps-huawei-ban-wont-make-the-u-s-more-secure-hurts-u-s-tech-companies</a>

Source F: Adapted from <a href="https://www.theverge.com/2019/3/17/18264283/huawei-security-threat-experts-china-spying-5g">https://www.theverge.com/2019/3/17/18264283/huawei-security-threat-experts-china-spying-5g</a>

Extract 1: Adapted from <a href="https://www.eco-business.com/news/campaign-asks-singaporeans-to-limit-plastic-bag-habit-to-two-a-day/">https://www.eco-business.com/news/campaign-asks-singaporeans-to-limit-plastic-bag-habit-to-two-a-day/</a>

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# BOON LAY SECONDARY SCHOOL SECONDARY FOUR EXPRESS/ FIVE NORMAL ACADEMIC SOCIAL STUDIES MID-YEAR ANSWERS

# Section A

(a Study Source A.

Why did the cartoonist publish this cartoon? Explain your answer.

[5]

Answers need to be phrased as a reason.

Level of Response	Level Descriptor and Rubrics	Marks Allocation
L1	Because of provenance	1m
	E.g. The cartoonist drew this because he wanted to express his opinion about trading with China	
	Misinterpretation	
	E.g. The cartoonist drew this because he wanted to show his support for China's actions and to disagree with the restrictions placed on Huawei.	
L2	Because of context (Trade restrictions placed on Huawei / Trump's Executive order)	2m
	E.g. The cartoonist drew this because he wanted to show his support for the executive order passed down by President Trump.	
L3	Because of sub-message  USA does not like to trade with China China is involved in Intellectual Property Theft	3m
	E.g. The cartoonist drew this because he wanted to highlight that China is involved in Intellectual Property Theft. This can be seen from the labelled safes behind the man with a China t-shirt. The safes consist of information about specific technology from several companies. This suggests that China is involved in Intellectual Property Theft because it has access to trade secrets and innovations from American companies like Motorola, which it should not have access to.	

# L3 **Because of Message: Content of Source** 3-4m Award 4 marks for more developed answers. China is lying about Intellectual Property Theft USA disapproves of China's actions in stealing trade secrets Dangerous to trade with China E.g. The cartoonist drew this because he wanted to highlight that China is lying about committing Intellectual Property Theft. This can be seen from the labelled safes behind the man with a China t-shirt. Even though the safes consist of information about specific technology from several companies, he denies it by saying "what Intellectual Property Theft". This suggests that China is lying about committing Intellectual Property Theft because they are deliberately hiding the fact that they stole trade secrets by pretending not to know anything about the deed. L5 Because of Purpose: to warn America against trading with China / to 4-5m show support for the restrictions placed on trading with China / to criticize China's action so that they would stop doing so Award 5 marks for more developed answers. E.g. The cartoonist drew this because he wanted to criticize China for denying about stealing trade secrets from US's companies so that China would admit their wrongdoings and respect the intellectual property of America companies. This can be seen from the labeled safes behind the man with a China t-shirt. Even though the safes consist of information about specific technology from several companies, he denies it by saying "what Intellectual Property Theft" and is confronted by the American citizen. This suggests that USA disapproves of China's actions of stealing copyright information because they feel that it isn't lawful and would like China to stop doing so, so that fair competition can take place.

# (b) Study Sources B and C.

How far does Source B disagree with Source C? Explain your answer.

[6]

Level of Response	Level Descriptor and Rubrics	Marks Allocation
L1	Agreement in provenance	1m
	Eg. Both sources agree with each other because they are both comments made by individuals.	
L2	False matching ie. claiming a difference because one source says something which the other does not say.	2m
	Eg. Source B disagrees with Source C because Source B talks about how Huawei is dealing with the loss of business whereas Source C does not.	
L3	Agree/disagree in content  Award 3m for identifying similarity or difference.  Award 4m for explaining similarity or difference with support.	3-4m
	Similarity  Eg. Both sources agree that there are users who do not support the use of Huawei equipment.	
	Difference Eg. Source B disagree with C in terms of Huawei's connection with the Chinese government. Source B says that Huawei is not connected to the Chinese government whereas Source C says Huawei is connected to the Chinese government	
L4	Agree AND disagree in content  Award 4m for identifying similarity and difference.  Award 5m for explaining similarity and difference with support.	4-5m
	Similarity Eg. Both sources agree that there are users who do not support the use of Huawei equipment. This can be seen from Source B which says "It has always been the case that some customers accept Huawei and others don't. Some countries have decided not to buy equipment from Huawei." This suggests that there are users who do not support the use of Huawei equipment because they are not purchasing any Huawei equipment. Similarly, Source C also says that there are users who do not support the use of Huawei equipment. This can be seen from "As Americans, we should all be concerned by the potential for any company beholden* to a foreign government—especially one that doesn't share our values—to burrow into the American telecommunications	

market." This suggests that there are users who do not support the use of Huawei equipment because they are against the use of Huawei in the telecommunications market.

#### Difference

Eg. Source B disagree with C in terms of Huawei's connection with the Chinese government. Source B says that Huawei is not connected to the Chinese government. This can be seen from "Huawei is an independent business organisation." This suggests that Huawei is not connected to the Chinese government because they function independently and are not supported by the Chinese government. However, Source C says Huawei is connected to the Chinese government. This can be seen from "the immense influence that the Chinese government holds over Chinese corporations like Huawei represents a threat." This suggests that Huawei is connected to the Chinese government because the Chinese government has a power and a say over how Huawei operates.

#### L5 Disagreement in purpose/tone

Award 5m for difference in purpose identified Award 6m for difference in purpose explained

#### Purpose

Eg. Both sources are different in their purposes. Source B wanted to convince the international community that Huawei is committed to security and that their equipment is safe for all users so that the international community would trust them and their equipment and would continue to purchase Huawei products. This can be seen from "when it comes to cybersecurity and privacy protection, we are committed to siding our customers. We will never harm any nation or any individual." Hence, this shows that Huawei is trying to persuade their customers by assuring and promising them that they will exhaust everything that they can to protect their well being. However, Source C wanted to criticize Huawei for committing fraud and stealing intellectual property from businesses so that Huawei would be pressured to admit its wrongdoings and cease these unlawful practices. This can be seen from "Huawei also intentionally and systematically sought to steal valuable intellectual property from an American company." This shows that the FBI director wanted to criticize Huawei for being unlawful and not trustworthy in their business dealings.

#### Tone

E.g. Both sources have a different tone. The author's tone in Source B is reassuring and confident. This can be seen from phrases such as "We will never harm" and "solid track record". Such phrases suggest reassurance and confidence as Huawei promises and pledges their integrity to their customers. However, the author's tone in Source C is disapproving and critical. This can be seen from the usage of words like "dishonest", "unfair" and "steal". Such words express the director's displeasure and disdain towards the practices of Huawei.

5-6m

# (c) Study Source D.

How useful is this source in helping you understand the consequences of the restrictions placed on Huawei? Explain your answer.

[7 ]

Level of Response	Level Descriptor and Rubrics	Marks Allocation
L1	Undeveloped assertions on provenance  E.g. It is useful because it is a report from Huawei Cyber Security Evaluation Centre (HCSEC) Oversight board, an organisation set up by the UK National Cyber Security Centre.	1m
L2	Useful because of the information it provides about the potential positive consequences of the restrictions placed on Huawei Award higher mark for better developed answer.  E.g. It is useful in telling us about the consequences of the restrictions placed on Huawei because it states that placing restrictions on Huawei equipment will safeguard the operation of the network. This can be seen from "If an attacker has knowledge of these vulnerabilities and sufficient access to exploit them, they may be able to affect the operation of the network, in some cases causing it to cease operating correctly." This suggests that placing restrictions on Huawei equipment will safeguard the operation of the network because it would prevent users from using Huawei equipment whose security has been compromised.  OR  Not useful because of missing information about the potential negative consequences of the restrictions placed on Huawei  E.g. It is not useful in telling us about the consequences of the restrictions placed on Huawei because it does not tell us the possible negative consequences that might occur from restrictions placed on Huawei. This can be seen from "HCSEC has continued to find serious vulnerabilities in the Huawei products examined". This suggests that the report was focused on looking at the security breaches of Huawei equipment rather than the possible economic impacts that would stem from a ban.  Cross-reference with no link to reliability: L2/3m	2 - 3m
L3	Both aspects of L2	4m
L4	Useful OR/AND Not Useful, supported with cross reference Award 5m for 1 perspectives. Award 6m for 2 perspectives.	5 - 6m

# Valid Cross-reference Sources: Source A and C 1<sup>st</sup> perspective (positive consequences)

Source D is useful in telling us about the consequences of the restrictions placed on Huawei because it states that placing restrictions on Huawei equipment will safeguard the operation of the network. This can be seen from "If an attacker has knowledge of these vulnerabilities and sufficient access to exploit them, they may be able to affect the operation of the network, in some cases causing it to cease operating correctly." This suggests that placing restrictions on Huawei equipment will safeguard the operation of the network because it would prevent users from using Huawei equipment whose security has been compromised. Source D is useful because it is reliable as it is supported by Source C, which also tells us that placing restrictions on Huawei equipment will safeguard the operation of the network. This can be seen from "That kind of access could give a foreign government the capacity to maliciously modify or steal information, conduct undetected espionage\*, or exert pressure or control." This suggests that placing restrictions on Huawei equipment will safeguard the operation of the network because it will prevent Huawei from accessing the network illegally and disrupting its operations.

#### AND/OR

Valid Cross-reference Sources: Source E and F 2<sup>nd</sup> perspective (negative consequences)

Source D is not useful in telling us about the consequences of the restrictions placed on Huawei because it is not reliable as it is contradicted by Source E. Source D states that placing restrictions on Huawei equipment will protect the citizens. This can be seen from "If an attacker has knowledge of these vulnerabilities and sufficient access to exploit them, they may be able to affect the operation of the network, in some cases causing it to cease operating correctly." This suggests that placing restrictions on Huawei equipment will protect the citizens because it would prevent Huawei from conducting illegal activities, which can compromise the security of citizens. However, Source D is contradicted by Source E, which says that placing restrictions on Huawei equipment will not protect the citizens. This can be seen from "Cybersecurity experts worry the ban will hurt U.S. tech companies more than it hurts the Huawei and will diminish U.S. influence over the security of new technologies." This suggests that placing restrictions on Huawei equipment will not protect the citizens because it will not benefit companies which could in turn affect citizens negatively.

#### L5 Not useful because of provenance

E.g. It is not useful in telling us about the consequences of the restrictions placed on Huawei as it is unreliable. Since it is a report from Huawei Cyber Security Evaluation Centre (HCSEC) Oversight board, an organisation set up by the UK National Cyber Security Centre to investigate the potential risks of Huawei equipment, it might be unreliable because it may be biased. It has an ulterior motive in stating how Huawei is unsafe for use due to its security breaches because the report aims to convince UK governments that Huawei equipment poses a threat to national security so that they would proceed with the ban of the equipment. This can be seen from "If an attacker has knowledge

of these vulnerabilities and sufficient access to exploit them, they may be able

6m

	to affect the operation of the network, in some cases causing it to cease operating correctly." This suggests that Huawei's equipment are unsafe and vulnerable to cyber attacks and could pose a security threat to its users.	
L6	L5 plus still useful as evidence about the perceived threat of Huawei that a HCSEC has to be set up.  E.g. However, it is still useful in telling us how Huawei is perceived as a security threat to nations such that a HCSEC has to be set up to investigate Huawei's practices. This also highlights that there might be several complaints of malpractices being filed against Huawei and there could be some truth in	7m
	the vulnerabilities of Huawei products mentioned.	

# 1 (d) Study Sources E and F

Having read Source E, are you surprised with Source F? Explain your answer.

7]

L1	Valid comparison of the sources, but failing to address element of surprise	[1]
	E.g. The two sources agree about how a ban in Huawei is not the best solution.	
L2	Surprised/Not Surprised based on provenance	[2]
	E.g. Having seen Source E, I am not surprised by Source F that they are different in terms of provenance. Source E is an extract from an online article on the views of IT experts about the Huawei Ban whereas Source F is an extract from an interview with Francis Dinha, CEO of openvpn, about the Huawei's security threat. Given that they are said by two different individuals, it is not surprising for the sources to disagree with each other.	
L3	Surprised / Not surprised by F: no comparison with E	[3]
	E.g. I am surprised by Source F because I would not expect Francis Dinha, CEO of Openvpn to be against the ban. This can be seen from "The US is right to treat Huawei as a security threat, but I don't believe any ban on any equipment is the right solution." This is surprising because as a CEO of a company that deals with data security, security should be the primary focus of all decisions and he should support the ban given that Huawei has breaches in security.	
	I am not surprised by Source F because I would expect Francis Dinha, CEO of Openvpn to agree with viewing Huawei as a security threat. This can be seen from "The US is right to treat Huawei as a security threat." This suggests that Francis is aware of Huawei's security breach and is supportive of being cautious about using Huawei's equipment.	
L4	Surprised because they disagree: Comparison of content	[4-5]
	Award the higher mark for evidence.	
	E.g. Having read Source E, I am surprised by Source F because both Sources E and F contradict each other in terms of whether the ban of Huawei equipment is effective in protecting US's cyber security. Source F says that the ban of Huawei equipment is ineffective in protecting US's cyber security. This can be seen from "But taking a competitor out of the market could lead other companies to get complacent, which would mean US innovation and development could be slowed — which presents an even more severe security risk overall." This suggests that the ban of Huawei equipment is ineffective in protecting US's cyber security because it would lead to US tech companies being complacent and unwilling to innovate to tighten cyber security which could put its systems at risk.	
	However, this is contradicted by Source E which says that the ban of Huawei equipment is effective in protecting US's national security. This can be seen from "It is necessary to put economic pressure on China to change its practices that have been gravely damaging to our national security." This suggests that the ban of Huawei equipment is effective in	

protecting US's cyber security because it forces Huawei to tighten its security policies which would safeguard US's cyber security in return.

Therefore, I am surprised by Source F because both Source E and F contradict each other in terms of whether the ban of Huawei equipment is effective in protecting US's cyber security.

## Not Surprised because they agree: Comparison of content

E.g. Having read Source E, I am not surprised by Source F because both Sources E and F agree that banning Huawei equipment will not benefit in the long run. Source F says that banning Huawei equipment will not benefit in the long run. This can be seen from "But taking a competitor out of the market could lead other companies to get complacent, which would mean US innovation and development could be slowed — which presents an even more severe security risk overall." This suggests that banning Huawei equipment will not benefit in the long run because it would lead to US tech companies being complacent and unwilling to innovate to tighten cyber security which could put its systems at risk.

Similarly, this is supported by Source E which also says that banning Huawei equipment will not benefit in the long run. This can be seen from "China would simply build up its domestic technology industry so it doesn't have to rely on U.S. suppliers which will only accelerate China's technological independence and end up impacting the U.S. economy longer term." This suggests that banning Huawei equipment will not benefit in the long run because it will cause Huawei to innovate and become less reliant on US technology, causing the US tech businesses to lose profits.

Therefore, I am not surprised by Source F because both Sources E and F support each other in saying that banning Huawei equipment will not benefit in the long run.

## L5 L4 + Surprised/Not Surprised by provenance

[6]

E.g. After reading Source E, I am not surprised by Source F because both sources have different agendas. The article of Source E aims to look at various views of the IT experts about the Huawei ban. Therefore, it tries to present an objective view of how the ban can possibly impact the US economy. However, Source F is an interview with Francis Dinha, CEO of Openvpn\*, about the Huawei's security threat. With his business dealing with data security, it is unsurprising that the Huawei ban might impact his business negatively and is concerned about how the government deals with cyber security threats. Therefore, he would want the government to relook at the actions taken against Huawei so as to safeguard his business. Therefore, with the different agendas, I am not surprised by the different claims made after reading Source E.

# L6 L4 + Surprised/Not Surprised by Source F on the basis of cross-reference to other sources

[6-7]

Award the higher mark for more fully developed answers

#### Surprised because they disagree: CR with C, A and D

E.g. Furthermore, I am surprised by Source F because it is also contradicted by Source C. Source C says that the ban of Huawei equipment is effective in protecting US's national

security. This can be seen from "That kind of access could give a foreign government the capacity to maliciously modify or steal information, conduct undetected espionage\*, or exert pressure or control." This suggests that banning Huawei equipment is effective in protecting US's national security because it prevents foreign governments from taking advantage of Huawei's vulnerabilities to spy on US's national security.

Therefore, I am surprised by Source F because both Sources E and C contradict it in terms of whether the ban of Huawei equipment is effective in protecting US's cyber security.

#### OR

Not Surprised because they agree: CR to B

E.g.

Furthermore, I am not surprised by Source F because it is supported by Source B which also agrees that banning Huawei equipment will not benefit in the long run. This can be seen from "Some countries have decided not to buy equipment from Huawei. Therefore, we can shift our focus to better serve countries that welcome Huawei." This suggests that banning Huawei equipment will not benefit us in the long run because Huawei will continue improving its technology to better serve countries that trust them and US might lose out as they would not be able to access high quality of goods from Huawei.

Therefore, I am not surprised by Source F because both Sources E and B support it in saying that banning Huawei equipment will not benefit US in the long run.

(e) 'The restrictions placed on Huawei are justified.'

Using sources in this case study, explain how far you would agree with this statement.

[10]

Level of Response	Level Descriptor and Rubrics	Marks Allocation
L1	Writes about statement, no valid source use  E.g. Some feel that the restrictions placed on Huawei are justified because it could lead to the leak of private information.	1m
L2	Yes/ No, supported by valid source use  Award 2 marks for the use of one source  Award 3 marks for the use of two sources  Award 4 marks for the use of three or more sources	2-4m
L3	Yes + No, supported by valid source use  Award 5 marks for use of two sources  Award 6 marks for use of four sources  Award 7 marks for use of four sources  Award 8 marks for use of five or more sources  Justified: A, C, D, E  Because of Intellectual property theft  Because of security breach  Because of the possible leak or misuse of private information  Because of potential vulnerabilities to cyber attacks  Because of close relations with Chinese government  Because of Huawei dishonest business practices  Because of the lack of ability to improve the security of Huawei products  I agree that the restrictions placed on Huawei are justified because Huawei has been stealing intellectual property from US companies. This can be seen from Source A which shows Huawei owning secrets from US companies such as Motorola and T-mobile. This suggests that the restrictions placed on Huawei are justified because the restrictions would stop them from stealing trade secrets from US companies, hence protecting the interests of US companies.  I agree that the restrictions placed on Huawei are justified because Huawei has close relations with the Chinese government. This can be seen from	5-8m

over Chinese corporations like Huawei represents a threat." This suggests that the restrictions placed on Huawei are justified because with Huawei's connections with the Chinese government, the information that they have accessed to, can be sold to the Chinese government, compromising the national security of the country.

I agree that the restrictions placed on Huawei are justified because Huawei equipment is vulnerable to cyber attacks. This can be seen from Source D which states "HCSEC has continued to find serious vulnerabilities in the Huawei products examined." This suggests that the restrictions placed on Huawei are justified because Huawei's equipment consists of vulnerabilities and flaws which make it vulnerable to cyber attacks, compromising the security of its users.

I agree that the restrictions placed on Huawei are justified because Huawei equipment poses a threat to national security. This can be seen from Source E which states "It is necessary to put economic pressure on China to change its practices that have been gravely damaging to our national security and economic security." This suggests that the restrictions placed on Huawei are justified because Huawei's practices have been a threat to a country's national security which can put its citizens in danger.

#### Not Justified: B, E, F

- Because of harm to US economy
- Because there are other solutions available
- Because of its lack of connections with the Chinese government
- Because of its pledge to protect information
- Because of its track record in security
- Because it would slow down the technological progress of US
- Because it would worsen security threats

I disagree that the restrictions placed on Huawei are justified because the allegations of Huawei's connection with the Chinese government are unfounded. This can be seen from Source B which states that "Neither Huawei, nor I personally, have ever received any requests from any government to provide improper information." This suggests that the restrictions placed on Huawei are not justified because Huawei has no collaborations with the Chinese government and have not done anything to compromise the data of its users.

I disagree that the restrictions placed on Huawei are justified because the ban would affect the US economy negatively. This can be seen from Source E which states that "Cybersecurity experts worry the ban will hurt U.S. tech companies more than it hurts the Huawei." This suggests that the restrictions placed on Huawei are not justified because banning Huawei would affect US tech businesses which would impair the US economy.

I disagree that the restrictions placed on Huawei are justified because the ban would slow down the technological progress of US. This can be seen from Source E which states that "Cybersecurity experts worry the ban will hurt U.S. tech companies more than it hurts the Huawei." This suggests that the

restrictions placed on Huawei are not justified because banning Huawei would affect US tech businesses which would impair the US economy.

# Through analyzing at least one source in relation to reliability, utility or sufficiency

+2m

\*Do not award for those who analysed provenance of Source D.

I agree that the restrictions placed on Huawei are justified because Source C agrees that the restrictions placed on Huawei are justified and it is reliable. The FBI Director, Christopher Wray, is reliable, because as a FBI Director, necessary investigations must have taken place and concrete evidence of Huawei stealing intellectual property must have been gathered before allegations and indictments are placed. Being a director of a trusted organisation like the FBI, his statements must be reliable because they are backed with evidence and investigations and free from bias. Hence, I agree that the restrictions placed on Huawei are justified.

## • By sharing example(s) from their contextual knowledge

I disagree that the restrictions placed on Huawei are justified because according to my contextual knowledge, placing a ban on Huawei equipment could severely impact the tech industries. Globalisation has led to an interdependence between nations and corporations, by placing a ban on Huawei, could impact corporations that have business dealings with the company, affecting the economy negatively.

#### • By giving a balanced conclusion

The sources show that there are two sides to the argument and the perspective for each side is valid and reasonable. Even people with similar professions (e.g. IT experts) as seen in Source E have different opinions about the issue. Some of them agree to the ban in fear of the potential risks that Huawei can bring to national security while others disagree with the ban because of the potential impact it might bring to businesses and industries.

**2(a)** Extract 1 shows challenges that Singapore faces in reducing plastic consumption.

In your opinion, why is it difficult for Singaporeans to change their plastic consumption habits? Explain your answer using **two** reasons. [7]

Level of Response	Level Descriptor and Rubrics	Marks Allocation
L1	Describes the topic, i.e. plastic consumption in Singapore	1m
	e.g. Singaporeans use a lot of plastics in their daily lives	
L2	Identifies/Describes reasons Award 2 marks for identifying one reason. Award 3 marks for identifying two reasons. Award 4 marks for describing two reasons.	2-4m
L3	L2+ Explains reason Award 5-6marks for explaining one reason. Award 6-7marks for explaining two reasons.  Note: An explanation is showing how the reason results in high plastic consumption or a reluctance to change current habits	5-7m
	Plausible reasons  Lack of educational efforts: not fully aware about which types of plastics are recyclable Inconvenient to recycle plastic Lack of recycling facilities, like appropriate recycling bins Insufficient legislation, e.g. tax or charges on use of plastic bags  Accept any other plausible reasons.	
	e.g. Singaporeans find it difficult to change their plastic consumption habits because they lack knowledge about how to do it properly. For example, although recycling bins can be found at accessible locations like at the foot of escalators in Westgate mall, people often throwing plastic bags filled with food waste or sweet drinks into the bin labelled "for plastic recycling". Over time, these bins become general waste bins instead of fulfilling its original purpose of encouraging people to recycle plastics. This suggests that Singaporeans are unaware about which types of plastics are recycle, or what steps one should take to ensure plastic items are ready for recycling before throwing them into these bins. Such lack of knowledge would thus mean that Singaporeans remain reluctant to use recycling facilities provided, causing these recycling attempts introduced by the government to fail.	
	e.g. Another reason behind Singaporeans' plastic consumption habits lies in the fact that there is insufficient enforcement of low plastic usage by the government. For example, in other countries like Hong Kong or Australia, consumers have to pay for plastic bag usage at check-out counters in supermarkets. This additional charge discourages consumers from using	

plastic carriers and bring their own recyclable bags to store purchased products instead. In Singapore however, consumers are given plastic carriers freely and at self-checkout counters at NTUC, they are even allowed to bag their goods themselves, using as many plastic bags provided as they wish without any extra charge. The lack of monetary disincentives for using plastic bags in Singapore would thus result in high plastic consumption with no desire or any attempt to reduce them, as consumers can still choose the more convenient route of using plastic bags without any restraint.

**(b)** Extract 2 and Extract 3 reflect on the roles of government in maintaining internal order and providing goods and services for the public.

How far do you agree that the maintaining internal order is more important than providing goods and services for the public in ensuring the good of society? Explain your answer. [8]

Level of Response	Level Descriptor and Rubrics	Marks Allocatio n
L1	Writes about the topic (i.e. role of government in society) without addressing the question.	1-2m
	e.g I agree that maintaining internal order is important for ensuring the society stays safe.	
L2	Describes factors  Award 3 marks for describing one factor.  Award 4 marks for describing two factors.	3-4m
L3	Explains factors Award 5-6 marks for explaining one factor. Award 6-7 marks for explaining both factors.	5-7m
	Note: An explanation is showing how the factor ensures the good of society	
	e.g. Maintaining internal order is important in ensuring the good of society. In maintaining internal order, agencies such as the police, prisons and civil defence forces protect citizens, property and whatever society believes should be protected. For example, the Singapore Civil Defence Force (SCDF) ensures that Singaporeans' lives and properties are protected. It provides fire-fighting, rescue and emergency medical services; as well as formulate, implement and enforce regulations on fire safety and civil defence shelter matters. With such agencies in place, the people of Singapore would feel safe because their lives and valuables are guarded. This would then mean that the country becomes stable and safe enough to function economically to achieve progress.	
	And/Or	
	e.g. Providing goods and services for the public ensures the good of society. The government devotes significant resources to improving the well-being of their citizens. Citizens enjoy benefits from the goods and services provided for or subsidised by the government. An example of a provision of service is transportation. In Singapore, the government has worked towards developing a people-centred public transport system with more connections and better services. Henceforth, all citizens have access to transportation and other public services, such as education and housing and feel a sense of belonging to the nation as the people's basic welfare is taken care of.	

# e.g. Only when internal order is maintained, can there be peace and stability. A country needs to be strong internally so as to progress and avoid being manipulated by external forces. The provision of goods and services adds value to the already peaceful lives of the people, improving their quality of lives and giving them more motivation to work harder, achieving more progress. Hence, the chief priority for the government is to maintain internal order rather than provide goods and services for the people.