



CATHOLIC JUNIOR COLLEGE

JC2 Preliminary Examinations

Higher 2

ECONOMICS

9757/01

Paper 1

23 Aug 2019

Additional Materials: Writing Paper

2 hour 15 min

READ THESE INSTRUCTIONS FIRST

Write your name, class and question number on **all** the work you hand in.

Write in dark blue or black pen on both sides of the paper.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use highlighters, glue or correction fluid.

Begin each question on a new sheet of paper.

Answer **ALL** questions.

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

Submit each question **separately**.

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

Answer **all** questions

Question 1

The Market for Pharmaceutical Drugs

Extract 1: Prescription drug prices jumped more than 10% in 2015

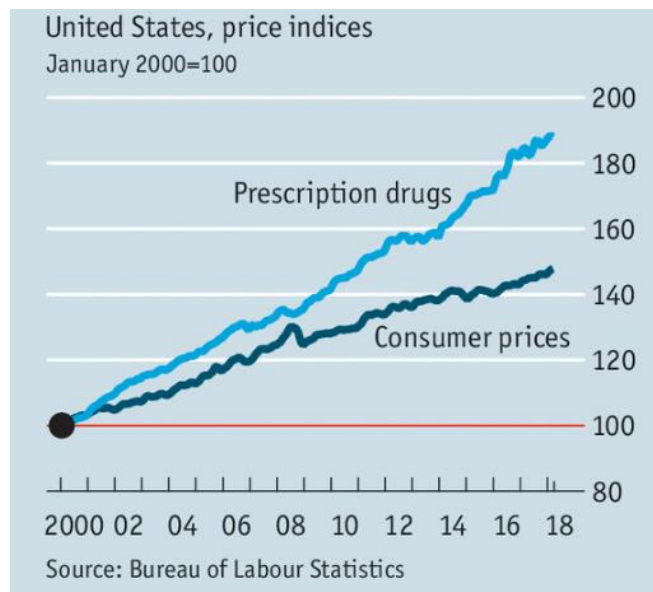
Drug prices were big news in 2015, thanks to “Pharma bro” Martin Shkreli, who drew outrage for hiking the price of a life-saving drug by 5,000%. So how much did prescription drug prices rise overall in 2015?

More than 10%, according to an analysis released on Monday by TruVeris, a healthcare data company that tracks drug prices. “We’re in our third year of double-digit increases,” said the firm’s chief innovation officer, adding that the increases occurred across virtually every drug category. “Double-digit inflation is concerning.”

TruVeris found that over the past year, the price of prescriptions drugs rose 14.77%. Last month, prescription drug spending hit \$297.7 billion — part of the country’s \$3 trillion in health spending. That’s a jump of more than 12%, the largest annual increase in more than a decade. Officials have predicted that annual expenditure on medications will grow 6.3% on average through 2024.

Source: Adapted from *The Washington Post*, 11 January 2016

Figure 1: Price indices for prescription drugs and consumer prices



Source: *The Economist*, 2018

Extract 2: Priced out

Many Americans think they pay over the odds for drugs—particularly for cancer drugs. Some go so far as to suggest that other countries free-ride on their generosity, and that Americans are thus subsidising drug development, which needs to be fixed by changing trade agreements.

Dr. Daniel Goldstein of the Rabin Medical Centre examined the prices of various prescription drugs in six countries (America, Australia, Britain, China, India and South Africa). He found that the highest prices were, indeed, paid by Americans whereas India paid the least. However, Dr. Goldstein recognized the need to look at prices in relation to the citizens' level of income and calculate the affordability of these drugs. He found that America did moderately well while India and China were the least able to afford drugs.

The morals of this story seem twofold. First, just because drugs are cheaper elsewhere does not mean that people who live there can afford to pay for them, let alone pay more than they already do. Should prices be higher in China and India, sales might well be lower. Drug companies know that, and set their prices accordingly. Second, it helps when governments intervene with national purchasing arrangements, as Australia, Britain and South Africa all do. If Americans truly want lower drug prices, they should stop grumbling and become better negotiators, not blame those foreigners who are.

Source: *The Economist*, 11 June 2016

Extract 3: What's behind the sharp rise in prescription drug prices?

Prescription drug prices are skyrocketing in the U.S. due in large part to government regulations. These regulations allow drug manufacturers to charge monopolistic prices that are not opposed by competing market forces. Drug makers charge high prices for drugs thanks largely to "market exclusivity" regulations intended to allow them to recoup the research and development costs for new breakthrough medications. The companies can do this largely unopposed because the nation's largest health insurers -- Medicare and Medicaid -- aren't allowed to negotiate prices.

Those insurance programmes cover one out of every three Americans, but under federal law must pay whatever price the drug makers charge. These high prices affect consumers, even those with insurance, an economic analyst said. Insurance companies have started placing more high-dollar drugs onto higher tiers of their medication coverage, which requires a larger co-pay for each prescription. "That is hitting consumers hard," he said, noting that the result is poorer health. The higher the cost of the medication, the poorer the adherence to the medication because people can't afford to take their medicines."

Upon approval of a new drug, the U.S. Food and Drug Administration (FDA) sets a period of market exclusivity that can last from 5 to 12 years, the authors said. During that period, no low-cost generic version of that drug can be sold. Exclusivity regulations are being exploited through tactics like evergreening. Evergreening refers to the drug company making a trivial change to a drug they have on-patent, and then promote that newer medicine as being superior to the earlier version, even though it has limited clinical benefits.

Source: *CBS News Online*, 24 August 2016

Extract 4: Cost control – drug pricing policies around the world

Despite sustained scrutiny on the cost of medicines across the globe, there is little consensus on the optimal balance between protecting industry innovation and ensuring adequate access to effective treatments.

The U.S. doesn't directly regulate drug prices, meaning that drug companies can set whatever price they deem fit. The U.S. government regulates the market only through patents. However, U.S. legislators are reportedly considering a new measure to stop drugmakers unfairly delaying the launch of generic substitutes to their products once their patents expire.

Furthermore, the government is seeking to curb drug companies' marketing costs, which for most firms, outweigh R&D costs.

Source: *Pharmaceutical Technology*, 12 February 2018

Questions

- (a) (i) Using Figure 1, compare the trend in the price of prescription drugs and consumer prices in the U.S. between 2000 and 2018. [2]

- (ii) According to Extract 1, "annual expenditure on medications will grow 6.3% on average through 2024".

Explain **one** possible reason for this trend. [2]

- (b) Using a diagram, explain the source of market failure leading to high price of prescription drugs in the U.S. [4]

- (c) Explain **two** factors that firms would consider in making decisions on the price of their drugs across different countries. [4]

- (d) Consider the possible implications of the rising cost of prescription drugs in a developed country like the U.S. on the standard of living of its citizens. [8]

- (e) Assess whether government regulation in the form of patents is sufficient to achieve the 'optimal balance between protecting industry innovation and ensuring adequate access to effective treatments'. [10]

[Total: 30]

Question 2

The Economic Woes of Brazil

Table 1: Brazil, selected economic indicators (2011 – 2016)

Indicator / Unit	2011	2012	2013	2014	2015	2016
Real GDP growth / %	4.0	1.9	3.0	0.5	-3.5	-3.3
Government budget / % of GDP	-2.5	-2.3	-3.3	-5.9	-7.8	-7.2
Inflation rate / %	6.6	5.4	6.2	6.3	9.0	8.7
Exchange rate / Brazilian Real per US\$	1.67	1.95	2.16	2.35	3.33	3.49
Unemployment rate / %	6.69	7.19	6.99	6.67	8.44	11.61

Source: *OECD & World Bank*, 2016

Extract 5: Brazil's recession worst on record

Brazil, one of the world's top commodity exporters, has been in recession for two years. The latest figures show that the economy contracted by 3.6% in the last quarter, which also marked the deepest economic decline since records began. The country has been hard hit by a slowdown in China, the fall in commodity prices and an internal political crisis that has undermined business confidence.

The two-year slump has seen the number of unemployed rise to 12.9 million in 2016, a rate of about 12%. Brazil was once one of the fastest-growing economies in the world, the 'B' in the 'BRICS' group of nations, regarded by many investors as having the world's best growth potential. Its key exports - including oil, soy and metals, were in hot demand. But as growth in the biggest element of that grouping - China - began to slow, so did demand for commodities and their prices.

Another drag factor has been the fall in investors' confidence stemming from corruption, which has engulfed Brazilian society at the highest levels.

Source: Adapted from *BBC*, 7 March 2017

Extract 6: Monuments to environmental waste in Brazil

Brazil's economic troubles continue to defy easy explanation. The degraded state of the national infrastructure and the low quality of infrastructural services translate into dismal levels of economic competitiveness and growth. Yet the crux of the matter is not merely the scarcity of money, but how resources have been used.

In a broad context of negligence and mishandling, the most silent victim is the environment — and also the one with an innate ability to inflict serious revenge. In order to maintain productive activities and to sustain the advance of the economic frontier over the best-preserved parts of the Amazon and the Centre-West regions, numerous new roads, dams and port construction projects have been proposed. Such large-scale infrastructure schemes typically dramatically affect hydro-ecological dynamics and severely affect local social groups. Roads may help people's mobility and the transportation of goods, but they also seriously accelerate deforestation and the loss of biodiversity.

Source: *Financial Times*, 20 September 2017

Extract 7: Brazil surprises with aggressive rate cut to rescue economy

Brazil surprised markets with a larger-than-expected interest rate cut on Wednesday, as the worst recession in Brazilian history threatens to stretch into a third year. In a unanimous vote, the central bank has decided to cut its benchmark interest rate by 75 basis-points to 13% after two straight cuts of 25 basis-points each.

Lower interest rates should help Brazil's economy accelerate after its worst recession on record ended in the first quarter. The sharp slowdown in inflation, which ended 2016 below the 6.5% target ceiling after starting the year at double digits, paved the way for the central bank to slash rates.

"This is an aggressive easing cycle. But political uncertainty is limiting the recovery in investments, and the fact that the labour market is very deteriorated is hindering the recovery in consumption," said Juan Jensen, a partner with E4 consultancy. President Michel Temer, who took over the presidency last year, is expected to rely on rate cuts as a fiscal crisis limits his ability to provide other stimulus.

Source: Adapted from *Reuters*, 12 Jan 2017

Extract 8: Brazil raises taxes, freezes spending to meet target

Brazil's government on Thursday increased a spending freeze and raised taxes to cover a budget gap this year, reinforcing its commitment to fiscal discipline but dealing a potential blow to fragile economic growth. The government said it will freeze an additional 5.9 billion reais (\$1.9 billion) in federal spending this year.

The country's renewed austerity effort has weighed on public investments in infrastructure and disrupted services such as passport issuance. This has been justified by President Michel Temer's year-long administration as a necessary step to rebuild trust with investors and curb the growth of public debt.

Brazil targets a budget deficit of 139 billion reais this year before interest payments. The deficit in the 12 months through May reached 167.6 billion reais, equivalent to 2.59% of gross domestic product.

Source: *Reuters*, 20 July 2017

Extract 9: Trade policy in the U.S. and Brazil

Just as the U.S. looks to take a more protectionist tilt, Brazil is talking up its push towards free trade. In recent years, the U.S. has negotiated agreements with foreign steelmakers, such as Japan and South Korea, to restrict their exports or face anti-dumping tariffs. It has repeatedly accused China of unfair trade practices, and it's likely that it will take an aggressive stance toward international trade and imports. President Trump's team share a view that a country that imports more products than it exports is uncompetitive, with the U.S. running a trade deficit for the last 40 years.

At this weekend's meeting of G-20 finance ministers, Brazil was one of several nations to point out the dangers of anti-globalization — a message crafted largely for listeners in the U.S. The country's finance minister, Henrique Meirelles, said in an interview with *The Wall Street Journal*, "we had adopted during the last years some protectionist measures for some sectors of the economy, and the net result was not positive. At the end of the day, our products became more expensive and Brazilian exports became less competitive," he told the newspaper. "In Brazil, we are moving towards a more open trade policy."

"The new rhetoric towards more trade openness in Brazil is important," he said. But, "Brazil remains a relatively closed economy as opening up takes time."

Source: Adapted from *CNBC*, 20 Mar 2017 and *The Atlantic*, 9 Jan 2017

Questions

- (a) (i) With reference to Table 1, state what happened to Brazil's Real GDP from 2014 to 2016. [1]
- (ii) Using Extract 5, explain **one** factor that could have led to the above trend. [2]
- (b) (i) With reference to Table 1, how does the value of the Brazilian Real in 2011 compare to its value in 2016? [1]
- (ii) With reference to Extract 7 and using a diagram, explain the change identified in (bi). [4]
- (c) Using the production possibilities curve diagram(s), explain how fiscal austerity would impact the Brazilian economy in both the short run and long run. [4]
- (d) Evaluate possible arguments as to why the U.S. may want to "take a more protectionist tilt". [8]
- (e) Discuss if interest rate policy is the best way of achieving the Brazilian government's goal of sustainable economic growth. [10]

[Total: 30]

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Catholic Junior College
JC2 Preliminary Examinations
Higher 2

ECONOMICS

9757/02

Paper 2

28 Aug 2019

Additional Materials: Writing Paper

2 hours 15 min

READ THESE INSTRUCTIONS FIRST

Write your name, class and question number on **all** the work you hand in.

Write in dark blue or black pen on both sides of the paper.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use highlighters, glue or correction fluid.

Begin each question on a new sheet of paper.

Answer **three** questions in total, of which **one** must be from Section A, **one** from Section B and **one** from **either** Section A or Section B.

At the end of the examination, **hand in ALL questions separately.**

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

Answer **three** questions in total.

Section A

One or two of your three chosen questions must be from this section.

- 1** It takes several seasons to get any harvest of quinoa, grown by Andean farmers, which has become popular among health-conscious and affluent consumers worldwide over. Despite increasing the number of land plots devoted to growing quinoa, farmers are not supplying enough.

(a) Explain how the above events would lead to a spike in quinoa prices. [10]

With other countries' researchers developing new variants of the crop, the worry is now about maintaining a steady income level of the Andean farmers when production takes off around the world.

Source: The Washington Post

(b) Discuss the strategies that may be undertaken by the government and farmers of the Andean nations to maintain the income level of the Andean farmers. [15]

- 2** The successful exploitation of new ideas is crucial to a business being able to improve its processes, bring new and improved products and services to market, increase efficiency and, most importantly, improve its profitability.

(a) Explain how innovation may affect efficiency in a market. [10]

(b) Discuss whether a firm's decision to innovate is dependent solely on the barriers to entry in the market. [15]

- 3** The Singapore government strongly emphasises shared responsibility between the government and people in the healthcare market. Individuals use monies in their Medisave accounts, government subsidy, medical insurance like Medishield Life and cash to pay for treatments. In recent times, the affordability of healthcare services has come under the spotlight.

In the light of the aging population in Singapore, assess the effectiveness of policies available to the government in addressing the different sources of market failure in the healthcare market in Singapore. [25]

Section B

One or two of your three chosen questions must be from this section.

- 4** A country's social expenditure is made up of cash handouts, rebates, subsidies and social welfare in areas such as home ownership, healthcare and education to improve the standard of living of its citizens.

Source: *The Straits Times*, 30 April 2018

- (a) Explain the consequences of a government not achieving its macroeconomic aims. [10]
- (b) Assess whether a government injection on social spending is likely to have a significant impact on the standard of living of its citizens. [15]

- 5** As much as one-third of the United States workforce could be out of a job by 2030 thanks to automation, according to new research from McKinsey. Meanwhile in Samoa, a small developing country, the tourism industry is badly hit with poor outlook globally.

Source: *CNBC*, 29 Nov 2017 & *Samoa Observer*, 26 May 2017

- (a) Explain the various causes of unemployment across different countries. [10]
- (b) Discuss the extent to which the nature of an economy affects a government's choice of macroeconomic policies in addressing unemployment. [15]

- 6** On 8 March 2018, Singapore and 10 other countries signed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), a free trade agreement. Minister for Trade and Industry Chan Chun Sing said, "The CPTPP will strengthen trade among countries in the Asia-Pacific, resulting in a more seamless flow of goods, services and investment."

Source: Ministry of Trade & Industry, accessed 17 July 2019

Discuss the impact of Singapore's policies to promote free trade on consumers and producers in Singapore. [25]

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**Catholic Junior College
H2 Economics 9757
2019 JC2 Preliminary Exam
Answer Package**

Paper 1

Case Study Question 1: The Market for Pharmaceutical Drugs

(a)	(i)	<p>Using Figure 1, compare the trend in the price of prescription drugs and consumer prices in U.S. between 2000 and 2018.</p> <p><u>Suggested Answer:</u> <i>Similarity – Both prices of prescription drugs and consumer prices increased from 2000 to 2018 – 1m</i> <i>Difference – The prices of prescription drugs rose at a faster/higher rate than consumer prices – 1m</i> <i>** “more than” / “larger increase” are also accepted</i></p>	[2]
	(ii)	<p>According to Extract 1, “annual expenditure on medications will grow 6.3% on average through 2024”.</p> <p>Explain one possible reason for this trend.</p> <p><u>Suggested Answer:</u> <u>Extract Evidence</u> <i>According to extract 1, price “increases occurred across virtually every drug category”</i> <i>Any non-price determinant causing an increase in DD explained – 1m</i> <ul style="list-style-type: none"> • <i>Unhealthy lifestyles, e.g. poor eating habits</i> • <i>More well-informed about available drugs (taste and preferences)</i> • <i>Any other possible non-price determinant</i> <i>Leading to an increase in demand -> price and quantity increase -> TE increases.</i> <i>– 1m for these explicit links</i></p> <p>OR</p> <p><i>Any non-price determinant causing a decrease in SS explained – 1m</i> <i>Application of PED – 1m</i> <i>Since drugs are a necessity in treating medical conditions, demand for them would be price inelastic. Since consumer expenditure is the product of quantity demanded and price, it would rise given that quantity demanded falls less than proportionately to price increases.</i> <i>Explicit link to TE expected, determinant of PED not necessary – as long as PED inelastic.</i> <i>**PES irrelevant since TE would definitely increase given an increase in DD</i></p>	[2]
(b)		<p>Using a diagram, explain the source of market failure leading to high price of prescription drugs in the U.S.</p> <p><u>Suggested Answer:</u> <i>Market failure due to market dominance</i> <i>High BTE and market power made possible by government regulation, Extract 3 “market exclusivity” regulations intended to allow them to recoup the research and development costs for new breakthrough medications or</i> <i>→ PED < 1 due to lack of substitutes (monopoly) -> high price setting ability OR “charge monopolistic prices..”(Extract 3) + price setting [1m]</i> <i>→ Restrict output where MC=MR to set high prices</i> <i>→ At Q* -> P > MC, i.e. consumers’ valuation of the next additional good is higher than the marginal cost of producing it [1m]</i> <i>→ Q* < Q_{AE} where P=MC OR underproduction -> DWL [1m]</i> <i>[1m for diagram containing Ps, Qs compared to Qs, Qm]</i></p>	[4]

(c)	<p>Explain two factors that firms would consider in making decisions on the price of their drugs across different countries.</p>	[4]
	<p><u>Suggested Answer:</u> 2m for any one of the factors from the Decision Making Framework</p> <ol style="list-style-type: none"> BENEFITS Firms will engage in 3rd degree price discrimination in order to maximise profits, "Should prices be higher in China and India, sales might well be lower. Drug companies know that, and set their prices accordingly" (Extract 2) <ul style="list-style-type: none"> No possibility for resale Profit maximizing: $MC=MR \rightarrow$ total Q PED in each country \rightarrow TR <ul style="list-style-type: none"> PED may be cited as a point even if without price discrimination explicitly mentioned but must be compared across countries and with differing PEDs substantiated with relevant determinants (proportion of income) Government PERSPECTIVE <ul style="list-style-type: none"> National purchasing agreements, "it helps when governments intervene with national purchasing arrangements, as Australia, Britain and South Africa all do." (Extract 2). This type of policy would help to regulate the prices of drugs from excessive volatility. COSTs of production <ul style="list-style-type: none"> There may be differences in costs of production in different countries. State of the economy (CONSTRAINTS) <ul style="list-style-type: none"> Income per capita – affordability across countries Higher prices for countries with higher income per capita (e.g. developed) vs lower prices for developing countries with lower income per capita – substantiated with links to purchasing power or ability to buy. Even though "India paid the least", "India were the least able to afford drugs" (Extract 2) <p>*Pure Price Discrimination factors – 2m</p>	
(d)	<p>Consider the possible implications of the rising cost of prescription drugs in a developed country like the U.S. on the standard of living of its citizens.</p> <p><u>Suggested Answer:</u> Extract 2 – "highest prices were, indeed, paid by Americans"</p> <p>Lower Material SOL</p> <ul style="list-style-type: none"> Higher drug prices \rightarrow larger proportion of income spent on drugs \rightarrow less income left to spend on other consumer goods \rightarrow lower material SOL This impact would be larger on the lower income groups who are sick but unable to afford these drugs. This impact would be larger for those who cannot afford insurance to offset the cost of these drugs. <p>Lower Non-material SOL</p> <ul style="list-style-type: none"> Higher drug prices \rightarrow less access to medication because of consumers' inability to pay \rightarrow poorer health \rightarrow lower non-material SOL A point about higher drug prices causing stress would be considered a superficial pt (4m with an AT and T on material SOL) <p>Material and Non-material SOL may not decrease</p> <ul style="list-style-type: none"> Should U.S. citizens' income rise faster than the rise in cost of drugs, drugs would remain affordable \rightarrow their health issues would be resolved and they 	[8]

	<p>have sufficient income left for other expenditures -> higher material and non-material SOL</p> <ul style="list-style-type: none">When pharmaceutical companies earn more profits, they would also increase their output and hire more workers, the reduction in unemployment would lead to an increase in material SOL for workers hired in the industry. <p>Overall synthesis: [Criteria: SR/LR, Costs, Citizens' income/budget constraints]</p> <ul style="list-style-type: none">Synthesis should be either a recommendation improving SOL or weighing of impacts on SOL.Stand - Higher cost of drugs needs to be compared to change in citizens' incomeJustification - Rising cost of drugs may be justified if it helps to improve R&D outcomes (leading to better drugs in the LR) and provide more jobs in the pharmaceutical sectorThis would help to improve US citizens' SOL in the LR. <table><tr><th>Level</th><th>Descriptors</th><th>Marks</th></tr><tr><td>L2</td><td><p>Answer is able to explain the impact of drug costs on both material and non-material SOL</p><p>Provides a balanced argument by considering both positive and negative impacts on either material or non-material SOL, i.e. 2T, 1AT.</p><p>2 Strong T covering M and non-M – max 4m</p></td><td>4-6</td></tr><tr><td>L1</td><td><p>Answer that considers superficially the impact of drug costs on either material OR non-material SOL</p><ul style="list-style-type: none">With descriptive illustrations lacking economic analysis<p>Only 1 thesis – 2m</p></td><td>1-3</td></tr><tr><td>E2</td><td>Provides a well-reasoned stand through the use of explicit criteria</td><td>2</td></tr><tr><td>E1</td><td>Unsubstantiated stand without considering the context</td><td>1</td></tr></table>	Level	Descriptors	Marks	L2	<p>Answer is able to explain the impact of drug costs on both material and non-material SOL</p> <p>Provides a balanced argument by considering both positive and negative impacts on either material or non-material SOL, i.e. 2T, 1AT.</p> <p>2 Strong T covering M and non-M – max 4m</p>	4-6	L1	<p>Answer that considers superficially the impact of drug costs on either material OR non-material SOL</p> <ul style="list-style-type: none">With descriptive illustrations lacking economic analysis <p>Only 1 thesis – 2m</p>	1-3	E2	Provides a well-reasoned stand through the use of explicit criteria	2	E1	Unsubstantiated stand without considering the context	1	
Level	Descriptors	Marks															
L2	<p>Answer is able to explain the impact of drug costs on both material and non-material SOL</p> <p>Provides a balanced argument by considering both positive and negative impacts on either material or non-material SOL, i.e. 2T, 1AT.</p> <p>2 Strong T covering M and non-M – max 4m</p>	4-6															
L1	<p>Answer that considers superficially the impact of drug costs on either material OR non-material SOL</p> <ul style="list-style-type: none">With descriptive illustrations lacking economic analysis <p>Only 1 thesis – 2m</p>	1-3															
E2	Provides a well-reasoned stand through the use of explicit criteria	2															
E1	Unsubstantiated stand without considering the context	1															
(e)	Assess whether government regulation in the form of patents is sufficient to achieve the 'optimal balance between protecting industry innovation and ensuring adequate access to effective treatments'.	[10]															
	<p><u>Suggested Answer:</u></p> <p>Patents are sufficient because...</p> <ul style="list-style-type: none">Ability + incentive to undertake R&D -> Dynamic efficiency<ul style="list-style-type: none">Patents allow firms to recoup R&D costs through supernormal profits during patent period, i.e. not competed away through the entrance of firmsmore innovation and new drugs in the LR -> increase access to new cures in the LR <p>Patents are insufficient because...</p> <ul style="list-style-type: none">Less access in the SR due to allocative inefficiency as explained in part bLess access due to inequity – high P, pricing some out of the market; high supernormal profit (redistribution of income from consumers to producers).Less access due to excessive marketing costs – drives P higher and incurs the o/c of R&D spending -> less development of new drugs <p>Governments could...(extract 4)</p> <ul style="list-style-type: none">Regulate the price that firms could set (impose price ceiling or AC/MC pricing)																

- Subsidies to increase consumers' access to drugs
- Curb drug marketing cost (regulation to decrease TC)
- Ensure patent period is upheld or not excessively long (limit amount of supernormal profits firms can earn)

Synthesis:

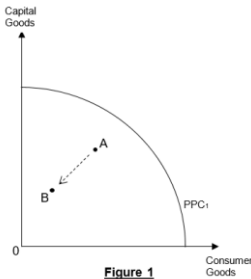
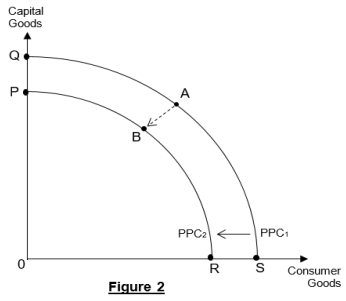
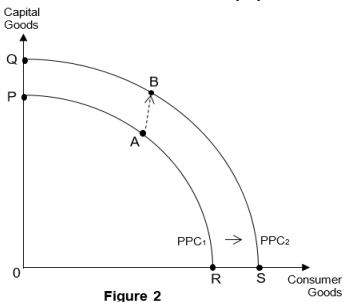
Stand: insufficient

Justification: need to be supported with other policies to regulate price and prevent excessively high cost or excessively long patent periods that more than compensate the cost of R&D.

Level	Descriptors	Marks
3	<p><i>Well-reasoned, balanced answer discussing whether patents lead to the development of drugs and consumers' access to them.</i></p> <p><i>Answer considers other government regulations where patents may be lacking.</i></p> <p><i>No Extract Evidence- max 6 marks</i></p>	6 – 7
2	<p><i>Two-sided but underdeveloped analysis (1 side well developed; the other underdeveloped - 5m)</i> <i>(2 sides underdeveloped – 4m)</i> OR <i>Answer may consist of one-sided but well developed analysis of how patents lead to the development of drugs and consumers' access to them.</i></p> <p><i>Answer may not have considered other government regulations.</i> <i>Answer may also be without any reference to extract evidence.</i></p>	3 – 5
1	<i>Answer may include only partially relevant links to innovation and consumers' access. No reference to extract evidence given.</i>	1 – 2
E2	<i>Well justified evaluative comments about attaining both innovation and access and assessing sufficiency of policies</i>	2 – 3
E1	<i>Unjustified evaluative comments</i>	1

Case Study Question 2: The Economic Woes of Brazil

(a)	(i)	With reference to Table 1, state what happened to Brazil's Real GDP from 2014 to 2016.	[1]
		<u>Suggested Answer</u> <i>Brazil's Real GDP has fallen from 2014 to 2016.</i>	
	(ii)	Using Extract 5, explain one factor that could have led to the above trend.	[2]
		<u>Suggested Answer</u> 1. <i>Slowdown of China (Evidence) → fall in dd for Brazil's exports → c.p. fall in net exports and AD → fall in real GDP, assuming Brazil is operating below full employment;</i> <u>Or</u> 2. <i>Fall in commodity prices (for eg oil, soy & metals) (Evidence) → fall in export revenue from commodities assuming demand for commodities falls due to fall in demand from China → c.p. fall in net exports and AD → fall in real GDP, assuming Brazil is operating below full employment;</i> <u>Or</u> 3. <i>Political crisis (Evidence) → loss of investor confidence → fall in I → c.p. fall in AD → fall in real GDP, assuming Brazil is operating below full employment</i>	
(b)	(i)	With reference to Table 1, how does the value of the Brazilian Real in 2011 compare to its value in 2016?	[1]
		<u>Suggested Answer</u> <i>The value of the Brazilian Real against the USD is lower in 2016 compared to 2011.</i>	
	(ii)	With reference to Extract 7 and using a diagram, explain the change identified in (bi).	[4]
		<u>Suggested Answer</u> <i>Fall in interest rate (Evidence) (1m)</i> <i>→ Increased outflow in hot money and/or reduced inflow of hot money → Increase in SS of Brazilian Real and/or fall in demand for Brazilian Real in the Foreign Exchange Market (1m)</i> <i>Surplus of Brazilian Real in the market → downward pressure on price → lower value of the Brazilian Real in 2016 (1m)</i> <i>DD/SS in Forex Mkt Diagram (1m)</i>	

		<p><u>Or</u></p> <p><i>Uncertainty (Evidence) (1m)</i> → reduced inflow of FDI → fall in demand for Brazilian Real in the Foreign Exchange Market (1m) Surplus of Brazilian Real in the market → downward pressure on price → depreciation of the Real (1m) DD/SS in Forex Mkt Diagram (1m)</p>	
(c)		<p>Using the production possibilities curve diagram(s), explain how fiscal austerity would impact the Brazilian economy in both the short run and long run.</p>	[4]
		<p><u>Suggested Answer</u></p> <p><i>SR – fall in public investment → fall in output & employment → movement to a point further away from PPC (1) + diagram to show the movement of Pt A to Pt B within the PPC (1)</i></p>  <p style="text-align: center;">Figure 1</p> <p><i>LR – fall in public investment → fall in productive capacity, c.p. → inward shift of PPC (1) + diagram to show inward shift of PPC (1)</i></p>  <p style="text-align: center;">Figure 2</p> <p><u>Or</u></p> <p><i>LR – austerity measures → reduce debt → increase confidence in the economy → increase investment → increase productive capacity → outward shift of PPC (1) + diagram to show outward shift of PPC (1)</i></p>  <p style="text-align: center;">Figure 2</p>	

(d)	Evaluate possible arguments as to why the US may want to “take a more protectionist tilt”.	[8]
	<p><u>Suggested Answer</u></p> <p><u>Intro:</u></p> <p>Define protectionism and state a few common methods:</p> <p>Protectionism is defined as the act of imposing economic policies aimed at restricting trade between countries, designed primarily to protect domestic producers and workers from foreign competition.</p> <p>Countries generally use tariffs, quotas or export subsidies to protect their domestic producers.</p> <p><u>Thesis: Possible justifiable arguments for US taking a “protectionist tilt”</u></p> <p>1. Prevent dumping (unfair competition)</p> <p>Evidence from Extract 9: “anti-dumping tariffs”</p> <p>With free trade, foreign producers might engage in dumping where prices are charged below marginal cost of production through unfair subsidies given by their government. Dumping allows these foreign producers to increase their share of the domestic market. Therefore, this may drive the domestic firms out of the industry resulting in structural unemployment and the foreign company gaining control of the market and subsequently charging high prices, reducing consumer welfare. Thus, government impose trade restrictions on imports so that locally produced goods will be more competitive in the face of unfair competition, protecting domestic employment and consumer welfare.</p> <p>2. Correct BOT deficit</p> <p>Evidence from Extract 9: “US running a trade deficit for the last 40 years”</p> <p>For countries suffering from an acute balance of trade deficit, an unlimited inflow of imports will worsen their condition. This may weaken the BOP position of the country as well as slow down the rate of economic growth. Trade restrictions may thus be required to cut down on the import of non-essentials when a country has a serious trade deficit, reducing the deficit, thus improving the BOT position. The improvement in BOT will improve the BOP position and the rate of growth in the economy.</p> <p>Others possible arguments (will not get full credit):</p> <p>Strategic argument</p> <p>Protect infant industries</p> <p>Protect declining industries</p> <p><u>Anti-Thesis: Possible arguments against US taking a “protectionist tilt”</u></p> <p>1. Adverse effects on Brazil’s economy</p> <p>Evidence from Extract 9: the products became more expensive and Brazilian exports became less competitive.</p> <p>Net exports & BOT may deteriorate → c.p. adverse effects on EG, unemployment & BOP.</p> <p>Others:</p> <ul style="list-style-type: none"> - Retaliation, - Beggar-thy-neighbour effect - Welfare loss to society and misallocation of world resources when inefficient firms are protected <p><u>Overall Synthesis:</u></p> <p><u>Stand:</u> Whether justifiable or not depends on the product protected and how long the protection is for</p> <p><u>Substantiation:</u></p>	

	<p>Protection of raw material → higher COP → higher prices → DWL to society. Extended protection → retaliation → lower world trade → misallocation of world resources</p> <p><u>Recommendation:</u> Protectionism should only be used as a short term measure which governments while using supply side policies to improve competitiveness by addressing fundamentals to make US goods more price competitive and improve quality.</p> <p>Mark Scheme:</p> <table border="1"> <thead> <tr> <th colspan="3">Knowledge, Understanding, Application and Analysis</th> </tr> </thead> <tbody> <tr> <td>L2</td><td> <ul style="list-style-type: none"> Question requirements are interpreted accurately. Well-elaborated 2-sided discussion of rationale for and against protectionist measures and how they will impact the US economy. Economic analysis is accurate, complete and well supported by contextual evidence. <p>Well-elaborated one sided only: max 4m</p> </td><td>4 – 6</td></tr> <tr> <td>L1</td><td> <ul style="list-style-type: none"> Question requirements are interpreted inaccurately. One-sided or sketchy answer. Inappropriate economic concepts, theories and principles are used. Inaccurate economic analysis. </td><td>1 – 3</td></tr> <tr> <th colspan="3">Evaluation</th></tr> <tr> <td>E</td><td>Evaluative comments are well-explained and supported by economic analysis.</td><td>2</td></tr> <tr> <td></td><td>Unexplained evaluative comments.</td><td>1</td></tr> </tbody> </table>	Knowledge, Understanding, Application and Analysis			L2	<ul style="list-style-type: none"> Question requirements are interpreted accurately. Well-elaborated 2-sided discussion of rationale for and against protectionist measures and how they will impact the US economy. Economic analysis is accurate, complete and well supported by contextual evidence. <p>Well-elaborated one sided only: max 4m</p>	4 – 6	L1	<ul style="list-style-type: none"> Question requirements are interpreted inaccurately. One-sided or sketchy answer. Inappropriate economic concepts, theories and principles are used. Inaccurate economic analysis. 	1 – 3	Evaluation			E	Evaluative comments are well-explained and supported by economic analysis.	2		Unexplained evaluative comments.	1	
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(e)	Discuss if interest rate policy is the best way of achieving the Brazilian government's goal of sustainable economic growth.	[10]																		
	<p><u>Suggested Answer</u></p> <p>Intro:</p> <p>Define Sustainable Growth:</p> <ol style="list-style-type: none"> Sustained EG (Actual & Potential EG) <ol style="list-style-type: none"> Minimize negative economic impact on future generations: Lower negative consequences on the environment reduced rate of resource depletion improve fiscal sustainability <p>Evidences of unsustainable growth in Brazil:</p> <ol style="list-style-type: none"> Extract 5: Deep Recession for 2 years → negative growth Extract 6: Environmental degradation as a result of growth → poorer environment for future generations Extract 8: High government debt → higher tax burden on future generations <p>Lowering of interest rates (Exp MP) can solve Point 1 and Point 2c directly, but with limited effectiveness due to its inherent limitations. Point 2a and 2b will need to be addressed/complemented by SSP directly.</p> <p>Thus, will need to use a criteria to justify 'best' – Urgency of Problems/Priority of Govt, Time, addressing Root Cause etc</p>																			

Thesis: Use of Exp MP can help achieve sustainable growth to some extent

1. Lowering of $i/r \rightarrow$ reduce COB \rightarrow boost C & I \rightarrow increase AD and increase RNY as real output increases \rightarrow demand for labour rises \rightarrow unN falls \rightarrow This will solve the macro problem of recession (Point 1)
2. The rise in RNY will also raise tax revenue, c.p., this will improve the issue of high government debt (Point 2c)

Benefit:

1. Policy can be implemented quickly without impacting the government's budget

Anti-thesis 1: Use of Exp MP might not achieve sustainable growth

1. The effectiveness of Exp MP depends on interest-elasticity of C & I, which are affected by the overall business confidence in the economy. Evidence: Confidence in investors was negatively impacted by the high government debt
2. Conflict of macro objectives: Higher rates of growth \rightarrow likely will worsen environmental degradation \rightarrow EG thus may not be sustainable
3. Conflict of macro objectives: AD rises \rightarrow GPL will rise as economy approaches Y_f and beyond \rightarrow Inflation will make exports lose price competitiveness, thus dampening rate of growth
However, this may not happen in Brazil which is suffering from high rates of unemployment.

Thus, the use of Exp MP on its own is clearly not best in terms of effectiveness.

Anti-thesis 2: Use of other policies as a combination to achieve sustainable growth

1. Contractionary FP: To curb the rising government debt in order to improve business confidence
2. Trade Policies: To reduce trade restrictions to boost price competitiveness of Brazilian exports as a pillar of growth to reduce reliance on government spending as well as to reduce dependence on China
3. Supply-side policies: To rely on clean technology to improve the efficiency of resource usage to minimize environmental degradation to achieve sustainable growth; SSP is crucial to increase LRAS to achieve sustained EG; and innovation to raise the quality of Brazilian exports to boost competitiveness

(Explain & evaluate in terms of benefits and limitations of any 1-2 other policies)

Overall Synthesis:

Stand + Substantiation: Exp MP, on its own, is highly unlikely the best to achieve sustainable growth in Brazil due to weakness in investor and consumer confidence.

Something Special: In theory, according to Tinbergen's Principle – Brazil will need the same number of macro policies to combat the myriad of macro problems faced. Thus a combination of policies could potentially work together to resolve the issues

However, in reality, the competence of government (inherent problem of corruption and inefficiency in macro planning etc) will result in uncertainty

and loss of confidence that will offset effectiveness of any policy. Govt must work on reducing political uncertainty to see positive results.

Mark Scheme:

Knowledge, Understanding, Application and Analysis		
L2	<ul style="list-style-type: none"> Question requirements are interpreted accurately. Well-elaborated 2-sided discussion of how expansionary interest rate policy and one other policy will seek to address the various macroeconomic problems in Brazil. Economic analysis is accurate, complete and well supported by contextual evidence. Appropriate AD-AS diagrams are used to support economic analysis, where relevant. <p>2 sided discussion of only one policy to address 2 of the issues related to sustainable growth faced by Brazil - max 5m</p>	5 – 7
L1	<ul style="list-style-type: none"> Question requirements are interpreted inaccurately. One-sided or sketchy answer. Inappropriate economic concepts, theories and principles are used. Inaccurate economic analysis. Inappropriate or wrong diagrams are used. 	1 – 4
Evaluation		
E	<p>Evaluative comments are well-explained and supported by economic analysis with respect to 2 policies discussed. Show good understanding of conflicts between macroeconomic objectives / policies used. Judgement is based on the information provided in the case material.</p> <p>Unexplained evaluative comments.</p>	2 - 3
		1

[Total: 30]

Paper 2 Essay Question 1

It takes several seasons to get any harvest of quinoa, grown by Andean farmers, which has become popular among health-conscious and affluent consumers worldwide over. Despite increasing the number of land plots devoted to growing quinoa, farmers are not supplying enough.

(a) Explain how the above events would lead to a spike in quinoa prices. [10]

With other countries' researchers developing new variants of the crop, the worry is now about maintaining a steady income level of the Andean farmers when production takes off around the world.

Source: The Washington Post

(b) Discuss the strategies that may be undertaken by the government and farmers of the Andean nations to maintain the income level of the Andean farmers. [15]

Question Analysis

Command	Explain how – make clear the cause-effect relationship between events in the question and the effect on quinoa prices spiking
Content	Demand and supply, PES
Context	Quinoa “become popular among the health-conscious” – taste and preferences -> DD increase “affluent consumers” – income increase -> DD increase “Increasing number of land plots” -> SS increase “several seasons to get any harvest” -> PES inelastic
Approach	Explain how non-price determinants of DD/SS (CAUSE) affect the equilibrium price (EFFECT) Explain how PED (applied to SS shift) and PES (applied to DD shift) affect the extent of increase in equilibrium price (EFFECT)

Suggested Answer Scheme

Intro	This essay will explain how the above events affect non-price determinants of demand and supply; thereby affecting the market equilibrium price of the quinoa market. Based on these changes of demand and supply, PES would be applied to explain the large extent of price increase.	Overview
Para #1	A shift in taste and preferences and rising income has led to an increase in demand for quinoa. Due to quinoa being protein rich, an important nutrient in a healthy diet, health conscious consumers have shifted their taste and preferences towards the consumption of quinoa, i.e. consumers are more willing to consume quinoa, quantity demanded has increased at every price level, increasing demand and shifting demand curve from D_0 to D_1 . Likewise an increase in income has led to an increase in consumers' willingness and ability to consume quinoa since quinoa is considered a normal good. This has also caused demand to increase.	Topic sentence Explain non-price determinants
Para #2	An increase in amount of land devoted to quinoa cultivation would lead to an increase in supply of quinoa. Land is considered a factor input in the production of quinoa. As more land is devoted to its production, more output can be produced at each price level, causing supply to increase, shifting right from S_0 to S_1 . Since farmers are not producing enough, it can be expected that the increase in demand has outweighed the increase in supply. At the original equilibrium price, P_0 , there would be a shortage since Q_s is more than Q_d . This would cause an upward pressure in price. As price increases, Q_d would decrease	Topic sentence Explain non-price determinant Explain price adj process based on

	and Q_s would increase, eliminating the shortage. The market will re-equilibrate at a higher price and quantity.	relative magnitude of DD/SS shifts
Para #3	<p>The extent of price increase would depend on price elasticity of supply (PES). <i>PED would not be applicable in this case because the given effect in the question is an increase in price, which will not result from an increase in supply.</i></p> <p>Since quinoa takes several seasons before producing one harvest, it takes a long time to cultivate quinoa – this would make supply price inelastic as producers may not be able to readily increase quantity supplied in response to an increase in prices.</p> <p>As can be seen in Figure 1, when supply is price inelastic, price would increase by a larger extent from P_0 to P_i as compared to P_0 to P_e when supply is price elastic.</p> <p>Hence an increase in demand and PES inelastic has caused a spike in prices.</p>	<p>Topic sentence</p> <p>Explain PES</p> <p>Apply PES</p> <p>Link</p>
Con cl.	Therefore a larger increase in demand (as compared to supply) and supply being price inelastic has led to a spike in quinoa prices	

LORMs

Level	Knowledge, Application/Understanding/Analysis	Marks
L3	Well developed explanations of both non-price determinants of SS and DD Answer shows an awareness of how extent of DD and SS shifts affect the direction of price change; how PES affects the extent of price change	8-10
L2	<p>Explanations of both non-price determinants of SS and DD present but may not be well-contextualised to the events in the preamble. Answer shows an awareness of only two of the following:</p> <ul style="list-style-type: none"> • The need to account of extent of DD vs SS shifts • The need to apply PES • Price adjustment process <p>Or inaccurate applications of the above 2 criteria in determining price change.</p>	5-7
L1	Descriptive narration of DD and SS factors. Invalid links to market equilibrium price.	1-4

(b) Discuss the strategies that may be undertaken by the government and farmers of the Andean nations to maintain the income level of the Andean farmers. [15]

Question Analysis

Command	Discuss – to provide a 2-sided argument about the appropriateness of strategies
Content	<p>Profits = TR – TC</p> <p>Price strategies to increase revenue</p> <p>Non-price strategies to increase revenue or cut cost</p> <p>Govt policy – subsidies or price ceiling or depreciation of currency to increase export price competitiveness</p> <p>Possible application of PED, XED/YED concepts</p>
Context	<p>Quinoa and related products (substitutes/complements)</p> <p>Quinoa and relevant factor inputs</p>
Approach	<ul style="list-style-type: none"> • Explain how pricing strategies (CAUSE) could increase total revenue (EFFECT) • Evaluate pricing strategies • Explain how non-price strategies (CAUSE) could increase total revenue or reduce cost (EFFECT)

	<ul style="list-style-type: none"> Evaluate non-price strategies Conclude how quinoa producers may maximize their chances of increasing profits over time
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Suggested Answer Scheme

Intro	<p>Profits is determined by a producer's total revenue offset by its total cost. This essay will analyse how price and non-price strategies may increase total revenue and decrease cost, thereby increasing profits. Further, the essay will evaluate the appropriateness of these strategies in the context of possible fall in market share (AR) due to the increase in production from other countries.</p>	Overview
Para #1: price strategy	<p>Quinoa producers could use pricing strategies to increase total revenue.</p> <p>In the short run, producers should increase prices of quinoa by restricting output. Given that quinoa is a protein rich grain, it is not easily substitutable as other grains like rice and corn may not contain the same amount of protein. The lack of substitutes would cause demand for quinoa to be price inelastic. Consequently, an increase in price would lead to a less than proportionate decrease in quantity demanded since there are few substitutes that consumers may switch to, hence total revenue would rise.</p> <p>In the long run, other protein rich grains may be discovered or developed. Additionally, more countries may start producing the highly profitable quinoa, hence there would be more substitutes available. Demand for quinoa would become price elastic in the long run. Hence producers should decrease prices in the long run, leading to a more than proportionate increase in quantity demanded, causing total revenue to rise. Assuming total costs remain unchanged or increase at a slower rate, profits would rise.</p>	<p>Topic sentence</p> <p>Explain relationship between PED and TR.</p>
Para #2: Lim. of price strategy [SR/ LR]	<p>However, quinoa producers cannot decrease prices indefinitely in the long run.</p> <p>Quinoa producers may only decrease price up to the point where $P = AVC$, if not it will have to exit the industry due to subnormal profits and the inability to cover some variable costs. Faced with the prospect of the need to decrease prices in the long run, quinoa producers have to turn to other strategies to increase TR or decrease TC.</p>	<p>Topic sentence</p> <p>Explain the shutdown condition</p> <p>Link to the need for other strategies.</p>
Para #3: Non-price strategy	<p>Quinoa producers can rely on non-price strategies to avoid the need to decrease prices over time.</p> <p>The emergence of close and viable substitutes in the long run can be directly dealt with through product differentiation to decrease the substitutability of their products. For example, through research and development, different variants of quinoa have been developed that differ in terms of texture and taste. Developing these variants over time cater to different tastes and preferences (increasing market size and hence demand) while also ensuring that the product is less substitutable should another protein-rich grain or seed is popularized.</p> <p>An increase in demand would directly increase total revenue. Furthermore, should there be a sudden surge in supply for another protein-rich grain, price of this alternative would fall, leading to an increase in quantity</p>	<p>Topic sentence</p> <p>Explain how R&D affects DD of quinoa</p> <p>Apply XED to impact on DD</p>

	<p>demanded. But as long as this alternative is not a strong substitute to quinoa ($0 < XED < 1$), demand for quinoa would fall by a small extent.</p> <p>As long as the increase in demand due to taste and preferences exceed the decrease in demand due to the emergence of a weak substitute, TR of quinoa producers could still rise.</p>	Weigh DD shifts
Para #4: Lim. of non-price strategy [Costs, unintended consequence]	<p>However, research and development is costly and outcomes are uncertain.</p> <p>Assuming quinoa producers have accumulated supernormal profits in the long run and have the ability to undertake R&D, Quinoa producers would still have to weigh the increase in costs (devoted to R&D) against the potential increase in demand from new variants of quinoa.</p> <p>Should the R&D costs be high and the new variant of quinoa is not well received by consumers (limited increase in demand and hence revenue), quinoa producers may not be able to recoup R&D costs in the long run.</p>	<p>Topic sentence</p> <p>Explain the costs of R&D</p> <p>...to be weighed against uncertain increase in DD, TR.</p>
Para #5: Non-price strategy (cost cutting)	<p>The high costs of R&D could also be offset by a reduction in costs.</p> <p>R&D could increase productivity and develop new methods of production. For instance, high yield seeds and drought resistant crops could be developed such that each unit of factor input would produce a greater amount of output, thereby decreasing the cost of production per unit output.</p> <p>Profits would increase if costs fall and revenue rises.</p>	<p>Topic sentence</p> <p>Explain how R&D leads to lower cost</p> <p>Link to profits</p>
Para #6: Govt policy: subsidies	<p>In order to maintain income levels of Andean farmers, the government may choose to subsidise their cost of production</p> <p>Governments may provide indirect subsidies, which directly reduce the farmers' cost of production. In doing so, Andean farmers would be more willing and able to produce quinoa at every price level, leading to an increase in supply and a resultant fall in equilibrium price and increase in equilibrium quantity. Should the demand for Andean quinoa be price elastic given the increasing number of foreign substitutes, the decrease in price would lead to a more than proportionate increase in quantity demanded. Hence, total revenue would rise and given a fall in costs of production, profits would rise.</p> <p>The subsidy would also make Andean exports of quinoa more price competitive relative to its foreign substitutes. This would increase Andean farmers' exports to the international market and increase their revenue from quinoa exports</p>	<p>Topic sentence</p> <p>Explain how subsidies lead to lower costs and higher TR</p> <p>Explain how subsidies affect P_x</p>
Para #7: Unintended consequence of govt subsidy	<p>However, the use of government subsidies may lead to inefficiencies in Andean farmers' production.</p> <p>Export subsidies can be treated as a protectionist measure where Andean farmers come to expect and rely on government help to be protected from external competition. This may result in complacency where Andean farmers are not able to compete with foreign quinoa exports in terms of relative costs of production. This may lead to either a drain on the government budget – where the government has to keep increasing the amount of subsidies as Andean farmers lose competitiveness – or lead to the eventual collapse of the Andean quinoa industry because of the lack of incentive for Andean farmers to be internationally competitive.</p>	<p>Topic sentence</p> <p>Unintended consequence on govt budget, industry / economy</p>

	Other possibilities: Minimum price legislation or depreciation of currency or tariffs	
	<p>Other possible policies that can be analysed and discussed</p> <ul style="list-style-type: none"> • (XED) Sell quinoa that are complementary goods with other produce where demand is rising • (YED) Diversify farm plot use by producing quinoa and other crops (sell inferior goods in times of recession, sell quinoa in times of economic growth or when prices are high) <p>Based on derived demand</p> <ul style="list-style-type: none"> • Vertical integration with, direct wholesale supply to food retail stores e.g. rising demand for poke bowls due to health benefits where quinoa is a factor input in the production of poke bowls (derived demand for quinoa) -> increase in revenue from both quinoa and poke bowl sales <p>Limitations of use of elasticity concepts Cost-cutting strategies</p> <ul style="list-style-type: none"> • Cooperative farms to reap IEOS / EEOS 	
	<p>Overall synthesis: [Stand] Quinoa producers should adopt a 2 pronged approach – strategies to increase TR and decrease TC, while diversifying their source of income</p> <p>[Justification] in the SR, quinoa producers may adopt pricing strategies to increase TR, but in the LR, increased competition within the market and from other alternative grains may erode SR gains. Governments should only subsidise Andean farmers in the SR or subsidise R&D costs instead – in order to incentivize farmers to develop higher quality quinoa or develop more efficient methods of production to remain internationally competitive.</p> <p>[Internal changes] To withstand internal competition, quinoa producers will have to ensure that their costs are reduced over time or the quality of their exports is superior to other fellow exporting producers.</p> <p>[External changes] To withstand external competition, quinoa producers may have to consolidate their market shares through acquiring other quinoa plantations or collude in order to protect their market share.</p>	

LORMs

Level	Knowledge, Application/Understanding/Analysis	Marks
L3	<ul style="list-style-type: none"> • Analysis of producers' strategies that span across 2 types – price and non price – and government policy • Well developed analysis should rely on theoretical concepts related to market structure or elasticity concepts. • 2 sided argument regarding the appropriateness of the strategies that is well contextualised to the quinoa market and addresses SR and LR considerations. 	8-10
L2	<ul style="list-style-type: none"> • Sufficient explanation of at least 2 relevant strategies but may not have addressed both producers and government • 2 sided argument regarding the appropriateness of strategies but may be underdeveloped. <p>OR</p> <ul style="list-style-type: none"> • 1 sided argument about the strategies but well developed • Contains gaps in analysis of policies or imprecise use of theoretical concepts/frameworks. 	5-7

L1	Descriptive analysis of strategies that may not be linked to revenue, cost or any theoretical framework.	1-4
E3	Clear stand that is based on explicit criteria Justification is based on economic analysis and shows an awareness of SR and LR considerations.	4-5
E2	Clear stand but criteria may be implicit Weak justification with insufficient substantiation through economic analysis	2-3
E1	Mere listing of statements with no clear stand	1

Essay Question 2

The successful exploitation of new ideas is crucial to a business being able to improve its processes, bring new and improved products and services to market, increase efficiency and, most importantly, improve its profitability.

(a) Explain how innovation may affect efficiency in a market.

[10]

(b) Discuss whether a firm's decision to innovate is dependent solely on the barriers to entry in the market.

[15]

Question Analysis

Command words:	Explain → To elaborate and give details...
Content:	Innovation: product and process Economic efficiency
Context:	Market structure: monopolies /oligopolies
Approach	Students must explain how innovation may affect: <ul style="list-style-type: none">• Consumer choices• Productive efficiency• Allocative efficiency Students must also try to give some real life examples.

Suggested Answer Scheme

<p>Innovation could be classified broadly as product and process innovation. The former focuses on the development of new products or improvement on existing products, while the latter focuses on developing more efficient production techniques over time, resulting in a fall in their average and marginal costs of production. Efficiency requires society to get the most from its scarce resources so as to avoid wastage. Efficiency is therefore concerned with how well resources are used to resolve three basic questions of what, how and for whom to produce</p>	<i>Definition of innovation and efficiency</i>
<p>Point: Innovation in the form of product and process innovation helps to increase consumer choices.</p> <p>Elaborate and example</p> <p>Dynamic efficiency is achieved when firms engage in R and D to improve the quality of goods and services or lower prices of goods and services to better meet the demand of consumers.</p> <p>Product innovation in the form of developing new products (e.g. Apple innovated iPad to be smaller thinner and faster or HuaWei in the form of 5G network).The development of such new products may influence consumers' tastes and preferences thus increasing product variety and consumer choices. For example Apple and Samsung have introduced new and innovative products to continue grabbing the attention of the customers. In addition, they have streamlined their manufacturing processes.</p> <p>Process innovation: Since R&D brings about cheaper methods of production, lower unit cost of production which may be passed on to consumers in the form of lower price resulting in higher consumer surplus and greater consumer welfare.</p> <p>Link</p>	<i>Explain how product innovation helps to increase in consumer choices (for whom to produce)</i>

<p>Innovation thus results in the achievement of dynamic efficiency.</p>	
<p>Point: Innovation can impact productive efficiency and thus resolve the question on how to produce.</p> <p>Elaborate and example Productive efficiency requires that whatever output is being produced, it is produced <u>at the lowest possible average cost.</u></p> <p>Through <u>process innovation</u> in the form of streamlining production lines, for example, a firm like Apple can reduce unit Costs of Production (CoP). This leads to Average Costs (AC) faced by the firm to fall, and correspondingly the Marginal Cost (MC) to fall.</p> <p>Monopolies and oligopolies have the ability to finance expensive research and development (R&D) programmes and develop new/better products and processes which are efficient and cost cutting.</p> <p>With innovation firms are technologically progressive resulting in the most efficient and lowest cost of production thereby achieving productive efficiency.</p> <p>Link: Thus with innovation , big firms like Hwa Wei are able to achieve productive efficiency through developing efficient methods of production to cut cost and thereby able to market their products at competitive prices.</p>	<p><i>Explain how innovation can impact productive efficiency. <u>How to produce</u></i></p>
<p>Point: Innovation can impact allocative efficiency and help firms to decide what to produce.</p> <p>Elaboration and Example</p> <p><u>Allocative efficiency</u> is achieved when resources are allocated in such a way to produce the combination of goods and services most wanted by the society. Allocative efficiency in any activity is achieved where <u>marginal benefit equals marginal cost.</u></p> <p><u>Product innovation</u> will result in a <u>fall in PED</u> in the sense that when new products are developed there will be few or no substitute in the short run. As a result of an increase in price, there will be a less than proportionate fall in quantity demanded and the gap between P and MC widens worsening allocative efficiency.</p> <p>Firms in an oligopoly and contestable monopoly tend to engage in high levels of innovation. In terms of ability, Oligopolists have the financial resources to engage in costly R&D and product innovation given that they enjoy supernormal profits in the long run. As such the gap between P and MC is increased, worsening allocative efficiency.</p> <p><u>Process innovation</u> results in lower costs and if lower costs are passed on to the consumers, the gap between P and MC will be reduced and this will improve allocative efficiency.</p> <p>Link Thus whether allocative efficiency can be achieved or not will depend on whether innovation can result in lower costs and whether the fall in cost can be passed to the consumers in the form of lower price.</p>	<p><i>Explain how innovation can impact allocative efficiency. <u>What to produce</u></i></p>

LORMs

Level	Knowledge, Application/Understanding, Analysis	Marks
L3	Well – developed explanation of 3 points on how innovation affects efficiency of a firm. Be able to link to product and process innovations.	8 – 10
L2	Underdeveloped explanation on how innovation affect's efficiency of a firm. Explanations with incomplete/inaccurate/inconsistent links towards innovation. Considers only 2 types of efficiency	5 – 7
L1	Response only addresses part of the question OR Whole response does not link to any economic concepts of efficiency. Pure listing/regurgitation of definitions.	1 – 4

(b) Discuss how a firm's decision to innovate is dependent on the barriers to entry in the market. [15]

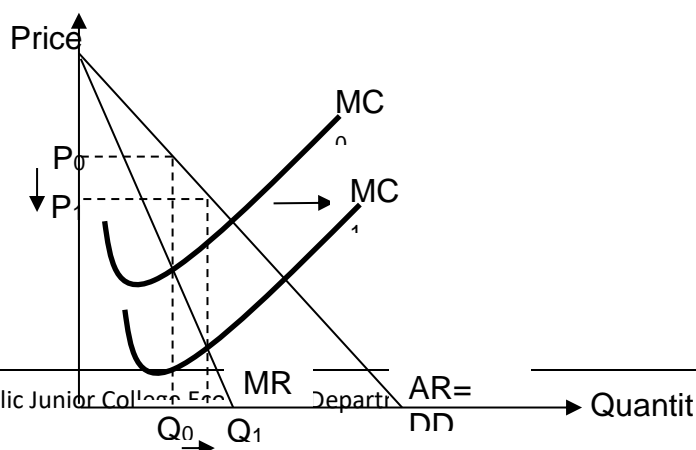
Question Analysis

Command:	Discuss... rational decision making by firms ... dependent ... barriers to entry
Content:	Decision making by firms to innovate. Barriers to entry Market structure
Context	Market: Market with low barriers to entry and Market with high barriers to entry
Approach	Students need to identify market with high barriers to entry for example oligopoly and market with low barriers to entry for example monopolistic competition. Students need to know that the ability to innovate depends on the profits they make and whether they can sustain their profits in the long run. Are there any threats of competition? Will firms need to innovate if barriers to entry is high? Other factors besides barriers to entry that may influence firms' decision to innovate.

Suggested Answer Scheme

<p>Barriers to entry are conditions that impede the entry of new firms into an industry. These barriers can limit the degree of competition faced by existing firms in the industry. To engage in innovation, firms must first have incentive and ability to engage in innovation. A firm's decision to innovate may be or may be not dependent on barriers to entry.</p> <p>This essay will compare markets with high BTE with those with low BTE to discuss how a firm's decision to innovate is dependent on the degree of barriers to entry.</p>	<p>Introduction</p> <p>Overview</p>
<p>Point: Firms with high barriers to entry have the ability to innovate and may decide to do so.</p> <p>Elaborate and example: LR supernormal profits earned by a monopoly due to the high barriers to entry may aid innovation. Monopolies have the ability to finance expensive research and development (R&D) programmes and develop new/better products and processes as a result of past accumulated long-run supernormal profits. Furthermore, it has the incentive to invest in R&D because it is protected from rivals through high barriers of entry and therefore can capture the full benefits from R&D. For example, antibiotic drugs were initially produced by monopolists and sold at high prices.</p> <p>Link Thus from this perspective a monopoly will decide to innovate as it has complete dominance of the market and it is not subjected to competition from rival firms.</p>	<p>Thesis 1. Monopolies with high barriers to entry with no threat of competition</p>
<p>Point: However, should the degree of barriers to entry of the monopoly be very high, the monopoly would probably have <u>little incentive</u> to innovate as it is the sole producer of the good.</p>	<p>Counter-argument</p>

<p><u>Elaborate/Example</u> Regardless of the costs of production or the quality of its product, demand for the good is likely to be price inelastic since there is no substitute available in the market, nor is there a threat of any substitutes that will potentially be developed. This is in spite of the monopoly having the <u>ability</u> to innovate, due to the high barriers to entry protecting any supernormal profit that it might have earned, into the long run.</p> <p><u>Link</u> Thus the monopoly firm may become complacent. Given its dominant position, the monopolist may not see the need to innovate and improve the quality of its products.</p>	
<p><u>Point:</u> Imperfect knowledge between firms constitute barriers to entry and may affect a firm's decision to innovate.</p> <p><u>Elaborate/Example</u> Consequently, it also depends on the level of knowledge available in the market which in turn dependent on the market structure that the firm operates in. For example, if the firm in question operates in a perfectly competitive market structure, such as onion farmers in Poland, then they probably would have no <u>incentive</u> to innovate. This is due to the perfect knowledge available, other firms can gain easy access to information about the innovations in production processes or innovative onions, allowing other firms to easily replicate them and thus compete away the potential profits gained by the initial firm who innovated.</p> <p><u>Link:</u> Thus firms with low barriers to entry and in which the level of shared knowledge is very high, firms may decide not to innovate. Low barriers to entry has influence the firm's innovation decision.</p>	<p><u>Thesis 2</u> Level of knowledge could be a factor affecting firm's decision to innovate</p> <p>[This can also be presented as a Thesis, i.e. imperfect knowledge between firms constitute a BTE or BTE determines the level of knowledge shared between firms]</p>
<p><u>Point:</u> A firm's decision to innovate may not be dependent on the level of barriers to entry but more on the <u>contestability</u> of the market.</p> <p><u>Elaborate/Example</u> Faced with the threat of competition, a monopolist in a contestable market may engage in process innovation such as streamlining their operations so as to reduce their unit cost of production. Such a reduction would diagrammatically lead to a fall in the MC curve from MC_0 to MC_1, as seen in the figure above, so that at the profit-maximising output, the price can be lower at P_0 and quantity can be higher at Q_1. The lower cost will make it more difficult for new entrants to match & therefore enter the industry.</p>	<p><u>Anti-Thesis 1</u> Explain the ability and incentive of a monopoly to innovate if it faces threat of competition (Contestability of market)</p>



<p>In addition, the firm may also engage in product innovation such as improving their product or service delivery, such that it would be less replicable by potential entrants. This would therefore help in the firm's decision to innovate.</p> <p>Link: Thus the firm's decision to innovate will also depend on the threat of competition and not just on barriers to entry.</p>	
<p>Point: A firm's decision to innovate <u>may not necessarily</u> be most <u>dependent on the high barriers to entry</u> of the market but on the potential profits it could make if innovation is carried out.</p> <p>Elaborate/Example Even without the market high barriers to entry, firms may still be incentivised to innovate as long as the potential profits reaped outweigh the cost of innovation. For example, if an oligopoly chooses to product innovate so as to make its product even more unique to reduce its PED value, it would then be able to increase prices even more in order to increase total revenue, and ceteris paribus, its profits. Thus its decision to innovate is based more on the potential profit it could reap rather than the degree of barriers to entry. E.g. Apple Corp raises the price of its phones with each new model introduced due to the new features introduced that would make demand for the i-phone more price inelastic.</p> <p>Link Thus potential profits may be a factor that influence a factor's decision to innovate and may not be barriers to entry.</p>	<p>Anti-thesis 2: <i>Potential profits is a factor affecting firm's decision to innovate and may not be barriers to entry</i></p>
<p>Point: Alternative objectives such as the goal of increasing market share may affect the firm's decision to innovate.</p> <p>Elaborate/Example Furthermore, firms' decisions to innovate may also be dependent on other factors <u>like alternative objectives</u> as well. This could be seen in oligopostic market structures, which may be incentivised to innovate so as to <u>increase market share</u>. This can be seen from firms like Mercedes Benz, which continually come up with new revisions of its cars by adding incremental features so as to reduce the substitutability of its cars, and in so doing hopefully increase the market share in the car industry market.</p> <p>Link: Thus firms with high barriers to entry may have other incentives to decide to innovate.</p>	<p>Anti-thesis 3: <i>Alternative objectives could be a factor affecting firm's decision to innovate</i></p>
<p>Point Firms may decide to innovate not due to influence of barriers to entry but due to the government's interventionist policy.</p> <p>Elaborate and Example According to Singapore Finance Minister, Mr Heng Swee Keat, supporting more firms in Singapore to innovate is a key thrust of the Singapore Budget 2018. Innovation is a top priority in Singapore. This include help for firms to innovate whether large or small. The government's Grant Schemes help firms to innovate. The government gives support for</p>	<p>Anti-thesis 4: <i>Government intervention</i></p>

businesses to build their own innovations and grants tax deductions of 250% for expenses incurred on R and D done in Singapore. Irrespective of whether firms are large or small or start ups, the government sees the need to innovate.	
<p>Link:</p> <p>Thus the decision by firms to innovate is not affected by barriers to entry but by government intervention. As our investments in research, innovation and enterprise will lay the foundation of our Future Economy.</p>	
<p>In conclusion, a firm's decision to innovate probably is definitely dependent on the degree of barriers to entry – as it affects the ability and incentive to innovate in the first place. This is because for firms which do not have the ability to innovate in the first place, innovation will not even be a potential decision to consider. While with no competition in the market, the ability will not translate to innovations due to the lack of incentive. Likewise, even if monopolies and oligopolies are faced with the threat of increased competition, they probably would still not innovate if they are making LR normal profits only.</p> <p>[S] Also, whether or not a firm engages in innovation, regardless of barriers to entry, may also depend on whether government provides sufficient subsidies/rebates to help firms innovate (to maybe develop potential new areas of comparative advantage). If government provides substantial incentives for firms, it is likely that firms even in the monopolistic competitive structure might be incentivised to innovate as long as the marginal benefit of innovation is more than or equals to the marginal cost of innovation.</p>	<i>Conclusion</i>

LORMs

Level	<i>Knowledge, Application/Understanding, Analysis</i>	Marks
L3	A <u>balanced and well-developed answer</u> on whether or not the firm's decision to innovate is dependent on barriers to entry, with consistent use of examples where appropriate.	8 – 10
L2	An <u>under-developed, balanced answer</u> on whether the firm's decision to innovate is dependent on barriers to entry, with inconsistent use of examples.	5 – 7
L1	A one-sided answer which merely <u>lists and describes</u> whether the firm's decision to innovate is dependent on barriers to entry Many/Serious conceptual errors; mainly irrelevant points that does not address the question requirement.	1 – 4
Evaluation		
E3	For an answer that arrives at an analytically well-reasoned judgement about whether a firm's decision to innovate is most dependent on the barriers to entry of the market. Might also question any unstated assumptions to arrive at this well-reasoned judgement.	4 – 5
E2	For an answer that makes some attempt at evaluation, but does not explain adequately their judgement or base it in analysis, about their judgement on whether a firm's decision to innovate is most dependent on barriers to entry of the market.	2 – 3

E1	For an answer that gives an <u>unexplained, unsupported</u> evaluative statement on whether a firm's decision to innovate is most dependent on barriers to entry of the market.	1
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Essay Question 3

The Singapore government strongly emphasises shared responsibility between the government and people in the healthcare market. Individuals use monies in their Medisave accounts, government subsidy, medical insurance like Medishield Life and cash to pay for treatments. In recent times, the affordability of healthcare services has come under spotlight.

In the light of the aging population in Singapore, assess the effectiveness of policies available to the government in addressing the different sources of market failure in the healthcare market in Singapore. [25]

Question Analysis

Command	Assess – Consider the working, benefits and limitations
Content:	<ul style="list-style-type: none">• Sources of market failure in the healthcare market• Policies available to address market failure in healthcare
Context:	Market : Healthcare Country: Singapore
Approach	<p><u>First Part of Essay</u> <u>Cause:</u> Sources of market failure</p> <ul style="list-style-type: none">• Positive externalities• Imperfect information• Inequity <p>Other acceptable sources – asymmetric information, market dominance)</p> <p><u>Second Part of Essay</u> <u>Effect:</u> Government implements policies to correct the market failure</p> <ul style="list-style-type: none">• Government subsidies + Pioneer generation & Merdeka generation packages for aging population + Medifund –to assist low income household• Medisave Co-payment scheme & Medishield insurance• Public education <p><u>Criteria:</u></p> <ul style="list-style-type: none">• Cost of implementation• Unintended consequences• Information available• Effectiveness in SR and LR

Suggested Answer Scheme

Intro	<p>Market failure occurs when the free market fails to bring about an efficient allocation of resources. It occurs where the marginal social benefit does not equal marginal social cost. It can also occur due to inequitable distribution of income. Hence both inequity and existence of positive externality may lead to an undesirable allocation of resources.</p> <p>In this essay, I will explain the various sources of market failure in the healthcare industry and evaluate the policies in place to address them in Singapore</p>	<p>Definition of market failure</p> <p>Contextualisation</p> <p>Overview for the first of the essay</p>
<u>Point 1</u>	<p>One source of market failure in the market for healthcare is the presence of positive externalities.</p> <p>Positive externalities are benefits borne by third parties who are neither the producer nor consumer of the good without payment. Positive externalities give rise to external costs that cause a divergence between MPB and MSB.</p>	<p>Point – Positive Externalities</p> <p>Explanation & Example</p>

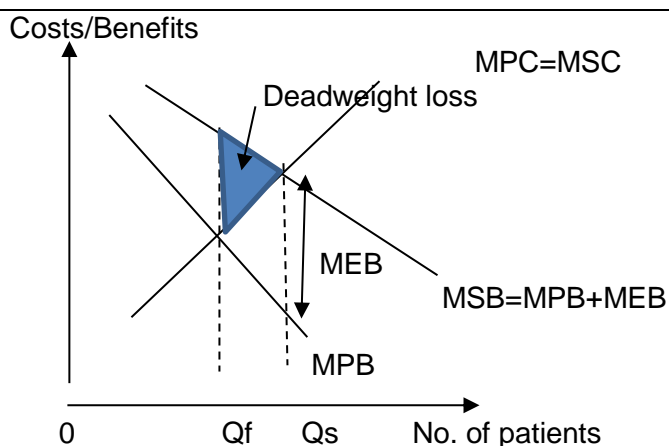


Fig 1: Market Failure in healthcare market due to Positive Externalities

Driven by self-interest, free market equilibrium is attained at $MPB = MPC$ at Q_f where net private benefits are maximised. MPB of taking a vaccination is the benefits that the person receives due to him/her being protected from the disease. while the MPC is the cost of the vaccination to the person. Assuming no negative externalities, $MPC = MSC$. Consumption of the vaccination generates **positive externalities** for employers and co-workers. The employers and other workers benefit as fellow workers are in better health and reduce chances of contracting the disease from the fellow workers. This is important to the economic growth of the country as productivity rises with better health of workers. This results in a divergence between MPB and MSB in the form of the MEB. Socially optimal output level is achieved at Q_s where $MSB = MSC$ where society's welfare is maximised. Thus, there is an under-consumption of $Q_f - Q_s$. This generates a deadweight loss of area (shaded), where $MSB > MSC$ over the $Q_f - Q_s$. This results in allocative inefficiency and therefore market failure.

The presence of positive externalities are thus a source of market failure in the healthcare market.

[Link to question](#)

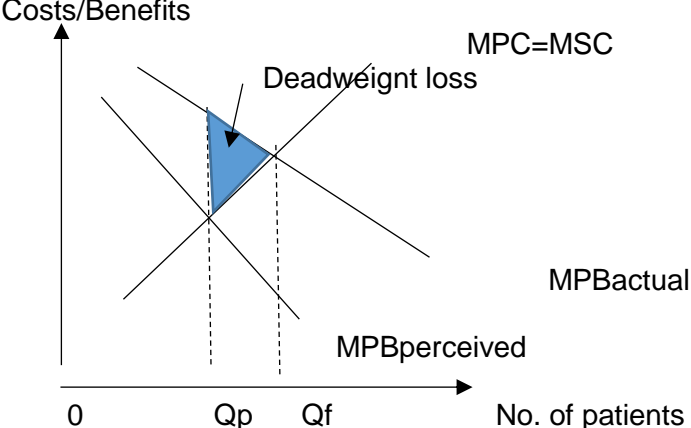
Point 2

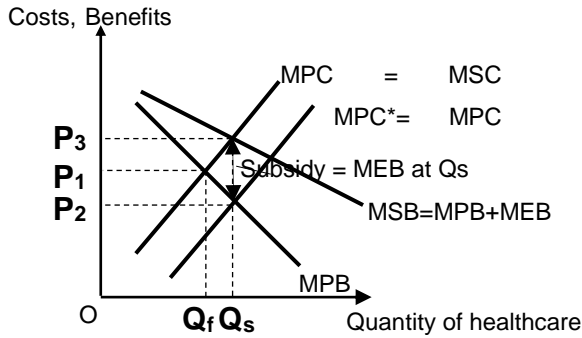
Another source of market failure in the market for healthcare is imperfect Information.

The market failure in the market for healthcare is worsened by the presence of imperfect information such that the output level in the free market may be even lower than Q_f in Fig 1. Imperfect information of consumers will cause a deviation between $MPB_{perceived}$ and MPB_{actual} , ($MPB_{perceived} < MPB_{actual}$) as shown in Fig 2. As consumers underestimate their private benefit, they will under-consume. Individuals generally underestimate the benefits of taking a vaccination or seeing a doctor when they are ill. They underestimate the benefits like better pay, better status, greater opportunities for growth, etc. that come with the higher productivity that comes with consuming healthcare and remaining healthy.

Point – Imperfect Info

Explanation & Example

	 <p>Fig 2: Market Failure due to Imperfect Information</p> <p>Hence they underestimate the private benefits that they are likely to enjoy as a result of consuming more healthcare. Without government intervention, the consumption of healthcare will be at Q_p which increases the level of under-consumption and therefore the deadweight loss in the market for healthcare. This results in further allocative inefficiency and market failure. Thus, imperfect information may be another source of market failure in Singapore.</p>	<p>Link back to question.</p>
<p><u>Point 3</u></p>	<p>A third source of market failure in the healthcare market may be inequity, especially with the aging population scenario in Singapore.</p> <p>In a free market, goods and services are allocated to consumers according to the consumer's ability and willingness to pay for them. Consumers signal their ability and willingness to pay using dollar votes. The higher the dollar vote, the more resources will be diverted to the provision of the good or service. The free market hence finds no incentive to cater to the needs of those who are not able to pay for the good even if they need them the most. In the healthcare market, consumers from the low income households or aged will have less dollar votes as compared to consumers from high income households.</p> <p>As a result, private producers will only provide healthcare services to the consumers from higher income households with higher dollar votes and not for consumers from the lower income households. This will result in resources to be diverted away from the low income households to the high income households in the healthcare market. Thus resulting in the healthcare needs of the low income households not to be met.</p> <p>Hence, the use of dollar votes in the free market, results in inequity which leads to market failure as the poor and the aged do not have access to the good which is a necessity.</p>	<p>Point - Inequity</p> <p>Explanation & Example</p> <p>Link to question</p>
	<p>Students may also explain the following:</p> <ol style="list-style-type: none"> 1. Asymmetric information where doctors know more than patients → over-prescription of medicines and tests (supply induced demand), especially when patient is covered by medical insurance → over-consumption of healthcare. 	

	2. High barriers to entry in healthcare industry due to high start up costs → few firms with significant market power in the industry → firms will cut quantity and increase price to maximize profits → $P > MC$, resulting in allocative inefficiency and therefore market failure.	
<u>Conclusion for first part of the essay</u>	As such, to alleviate inefficient allocation of resources and inequity, the government would need to intervene to correct the market failure.	Short summary for first part of the essay
<u>Second part of the essay Introduction</u>	The Singapore government uses a range of government policies to reduce the under-allocation of resources in the market for healthcare as well as to keep it affordable to all income groups. In this part, I will consider the effectiveness of a few of these policies in addressing the market failure in the healthcare market by considering the cost of implementation, the unintended consequences, the availability of relevant information, its ability to address the root cause of the market failure and its ineffectiveness in the short run.	
<u>Policy 1</u>	<p>Subsidies are used by the Singapore government to increase provision of healthcare services as well as to make it more accessible to the poor.</p> <p>Subsidies equal to the MEB at Q_s help to reduce the cost of provision to the firm from MPC to MPC*, reducing the prices of healthcare services from P_1 to P_2 as shown in Fig 3. This increases the quantity consumed to the socially optimal level at Q_s, eliminating the deadweight loss to society.</p>  <p>Figure 3: Effects of subsidy in healthcare</p> <p>The government also provides targeted subsidies for the poor like Medifund, which further reduces the out-of-pocket cash payment they incur, making healthcare services more affordable to them. The low income households may also include many elderly. In addition, pioneers and elders, holding Pioneer Generation card, Merdeka card and/or the Community Health Assist Scheme (CHAS) card can seek services at private clinics paying subsidised consultation fees. This helps to resolve the inequity in the market for healthcare, especially among the aged.</p>	<p>Point</p> <p>Explain</p> <p>Example</p> <p>Link back to question</p>

<p><u>Limitations of Policy 1</u></p>	<p>However, the use of subsidies to increase consumption and make healthcare more affordable may have some limitations.</p> <p>Firstly, the government may not have accurate information to give an accurate valuation of the external benefit. Thus, the government may not know the optimal amount of subsidy to give to attain the socially efficient output. Over or under-subsidising may result in continued inefficiency and welfare loss to society.</p> <p>In addition, due to the high government expenditure required, particularly given the aging population in Singapore, government may only be able to use subsidies as a short term measure as the opportunity cost of spending on subsidies may be very high especially given the slowing Singapore economy.</p> <p>In addition, due to imperfect information, some of the elderly may not know how and when to use the card(s) issued to them to enjoy subsidised healthcare.</p>	
<p><u>Policy 2</u></p>	<p>The government may also use legislation to correct under-consumption in the market for healthcare.</p> <p>The government has made it compulsory for all working adults to set aside 8-10.5% of their income in Medisave and to use part of this Medisave funds to purchase medical insurance in the form of Medishield Life for themselves and dependents to help defray the cost of healthcare. The use of Medisave funds and Medishield Life helps the individual to reduce the out-of-pocket cost of medical services, reducing the MPC to the patient and their family members, thus increasing consumption of healthcare services.</p> <p>This thus corrects the under-consumption of medical services in the healthcare market while keeping healthcare affordable.</p>	<p>Point</p> <p>Explanation with Examples</p> <p>Link back to question</p>
<p><u>Evaluation of Policy 2</u></p>	<p>However, the purchase of such insurance may result in unintended consequences in the form of moral hazard. Once insured, he insured may engage in risky activities that would result in them needing more medical treatment since they do not bear the full cost of their treatment.</p> <p>To prevent behavior, it is important to ensure that the insurance policy does not pay for 100% of the treatment with co-payment from individuals or family members involved.</p> <p>The issue of the elderly not knowing when they can use their Medisave and Medishield Plus is again a significant issue.</p> <p>Moreover, with aging population, higher healthcare costs and longer life expectancy, many elders, especially those with chronic health condition, may have used up their Medisave savings fully and may have to depend on their children to use their Medisave to help them cover their medical costs. In the longer run, this would mean that the children may have less in their Medisave accounts for their own twilight years and would have to depend on their children, resulting in a vicious cycle of individuals always depending on their children.</p>	
<p><u>Policy 3</u></p>	<p>The government may also use public education as a measure to correct the imperfect information as well as to get individuals to voluntarily internalise positive externalities in the market for healthcare services.</p>	<p>Point</p> <p>Explanation and example</p>

	<p>Since under-consumption in the healthcare market is also due to the presence of imperfect information, public education may be necessary to equip consumers with more information about the benefits of healthcare services including health screening. Public education is actively done by the Singapore government to promote healthy living. Posters and advertisements encouraging the public to pursue a healthier lifestyle through a healthy diet and exercise are prevalent. Such strategies are also used to encourage health screening like the publicity given to diabetes and breast cancer. For e.g. organisations like the Breast Cancer Foundation and National Cancer Centre provide awareness programmes like talks, roadshows about the importance of early detection of breast cancer during breast cancer awareness month in October to encourage more women, especially elderly women to do the mammogram. The government also requires all hospitals to provide information on the cost of common medical procedures on its website to allow consumers to make more informed choices. In addition, the government also holds road shows and advertisements to help the elderly know more about their Pioneer or Merdeka Generation cards.</p> <p>These public education efforts seek to improve the resource allocation of healthcare services in Singapore, through improving the level of information for the public.</p> <p>Such efforts would help consumers of healthcare voluntarily internalize the MEB from consumption of healthcare while closing the gap between perceived MPB and actual MPB addressing the root cause of positive externalities and imperfect information at the same time.</p>	
<u>Evaluation of Policy 3</u>	<p>Such type of public education efforts may be costly to implement with uncertain outcome as it takes time for mindsets to change. However, such efforts may be necessary to address the root cause of the market for healthcare.</p> <p>In addition, The government may also have to look at how to make such information more accessible to the elderly. These efforts may be less effective among elderly if they are not presented in a language or a platform that they are comfortable with.</p>	
<u>Evaluative conclusion</u>	<p>The Singapore government has a myriad of strategies in place to address market failure in the market for healthcare.</p> <p>These policies aim to address the problems of under-consumption through the provision of subsidies and legislation. In addition imperfect information is addressed through public education while inequity in the market through targeted subsidies like Medifund as well as medical subsidies to holders of the Pioneer Generation or Merdeka Generation Cards.</p> <p>In the light of ageing population, the equity issue is likely to worsen in the future which might severely increase the burden on the Singapore government. To address this issue, the Singapore government has moved towards more targeted subsidies through means-testing, where subsidies are given according to the household income instead of blanket subsidies for all. The government is also expanding hospitals and building more community hospitals to provide cheaper alternatives to the</p>	<p>Stand</p> <p>Substantiation</p> <p>Something Special in the context of Singapore.</p>

	people in an effort to ensure that there is sufficient healthcare facilities available to all at affordable prices. This also encourages greater competition in the healthcare market which would also improve the quality of healthcare provided. The government could also consider raising the proportion of CPF that goes into Medisave to reduce burden on children.	
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LORMs

	Knowledge, Application/Understanding, Analysis	
L3	<p>High L3 (18-20) Answer for the 1st part considers 3 sources of market failure and answers to second part is balanced and policies are specific to the Singapore context and explicitly linked to the sources of market failure.</p> <p>Low L3 (15-17) Answer for the 1st part considers 3 sources of market failure and answers to second part is balanced but policies may be generic and explicitly linked to the sources of market failure with good economic analysis. or policies are specific to Singapore with good economic analysis but not always explicitly linked to the source of market failure.</p>	15-20 (18)
L2	<p>High L2 (12-14) Answer for the 1st part considers at least 2 sources of market failure and answers to second part is balanced but policies may be generic and not be explicitly linked to the sources of market failure or aging population or policies are specific to the Singapore economy but economic analysis may be inconsistent.</p> <p>Low L2 (9-11) Answer is relevant considering at least 2 sources of market failure but discussion of generic policies may be one-sided or lacking explicit link to the source of market failure or aging population or policies are specific to the Singapore economy but lacking in economic analysis.</p>	9-14 (12)
L1	<p>Higher L1 (5-8) Answer is largely irrelevant with too much focus on the sources of market failure without any link to the policies or may consider the policies without linking to the sources of market failure.</p> <p>Lower L1 (1-4) Answer is largely irrelevant; answer may be focused on the sources of market failure or 1 policy with errors or lacking in economic analysis/diagram(s).</p>	1-8 (5)

E3	A justified stand with regards to myriad of policies to address the different sources of market failure and how these are evolving given the current context in Singapore, etc.	4-5
E2	A justified stand with regards to the policies used to address different sources of market failure	2-3
E1	An unjustified stand with regards to the use of policies to address various sources of market failure OR any evaluative comment within the answer.	1

Essay Question 4

A country's social expenditure is made up of cash handouts, rebates, subsidies and social welfare in areas such as home ownership, healthcare and education to improve the standard of living of its citizens

Source: *The Straits Times*, 30 April 2018

- (a) Explain the consequences of a government not achieving its Macroeconomic Aims. [10]
- (b) Assess whether a government injection on social spending is likely to have a [15] significant impact on the standard of living of its citizens.

Question Analysis

Command	'Explain' – students need to explain the effects on the economy when the government fails to achieve the macroeconomic aims related to unemployment, economic growth and balance of payments stated in the preamble.
Content	macroeconomic aims, macro issues
Context	Any (Give own examples)
Approach	Students need to explain the effects/consequences on the economy and the economic agents when the macroeconomic aims are not achieved.

Suggested Answer Scheme

Introduction

Most governments aim to achieve four macroeconomic aims: sustainable and inclusive economic growth, low unemployment rates, low inflation, and a healthy balance of payments position that is neither too far into the surplus nor deficit. This part of the essay discusses the consequences of not being to achieve sustained SG, low unemployment rate, and healthy balance of payments.

Failure to Achieve Sustained Economic Growth

- Economic growth is defined as an increase in the real output of an economy. It can be analysed in terms of actual growth and potential growth. The former refers to the increase in real output that has already been experienced by a country while the latter refers to the increase in an economy's productive capacity.
- Sustainable growth indicates a rate of growth that can be maintained without creating other significant economic problems (such as depleted resources and environmental problems), particularly for future generations. It implies a stable and positive growth rate over an extended period of time.
- Inclusive growth indicates a rate of growth that is sustained over a period of time, is broad based across economic sectors for the majority of the country's population.
- Undesirable rates of economic growth include low/negative economic growth, or economic growth rates that are either unsustainable or not inclusive.
- Not achieving actual economic growth or experiencing a negative economic growth could mean that the level of output in the economy is declining. Material living standards could decline because the quantity of goods and services for consumption is reduced.
- As fewer units of output is produced, demand for labour falls. This may be accompanied by falling income and rising unemployment rates. Lower or no income reduces individuals' abilities to consume goods and services, leading to lower material living standards.
- Individuals could reduce savings or draw on past savings during the period of lower income. Funds available for investment and capital accumulation could be reduced, restricting potential growth.
- The welfare of present and future generations is adversely impacted through environmental pollution and unpleasant living spaces such as congested transportation and air pollution. For example, power generating stations that burn fossil fuels emit carbon dioxide and other harmful gases affect residents who live nearby, leading to a deterioration of their non-material standard of living.

- Rapid economic growth may lead to rapid changes in the demand for different labour skill sets. While some people may gain from higher incomes and thus a higher standard of living, there are also others who may find that their skills are no longer relevant. and they may find themselves unemployed or forced to take low paid unskilled work. This may lead to inequitable distribution of income within a country.

Failure to Achieve Low Unemployment Rates

- Unemployment refers to the situation where people are unable to find work or unwilling to accept jobs that are currently available. The unemployed refers to people who are actively seeking employment (i.e. able and willing to work) but are currently without a job.
- The unemployed suffer from lower material living standards because of the lack of wage income. Social problems like crime and delinquency arise. Hence there are negative externalities associated with unemployment as third parties are affected by the higher crime, falling property values and a general degradation in the living environment. All these contribute a lowering of material and mental well-being.
- Unemployment of labour means that there is underutilization of resources. The economy is productively inefficient as it is producing below its full potential.
- Rising unemployment often also strains the fiscal budget. Rising unemployment means more public expenditure is required for unemployment benefits and tax revenue declines as personal income and consumption taxes fall. This causes government spending to be diverted from the provision of important social services like education, healthcare and transportation, which adversely affects the society both in the short and long term.

Failure to Achieve Low and Stable Inflation Rates

- Inflation refers to a sustained increase in the general price level of an economy, where general price level is the average price of goods and services in an entire economy.
- Inflation leads to a redistribution of income. Some people become better off at the expense of those who become worse off. With inflation, those who derive fixed income (e.g. from fixed pensions, interest securities and rents) will face a fall in real income. Workers whose percentage increase in nominal wage is less than the percentage increase in price level will also be worse off as real wage / income will fall.
- In an unanticipated inflation, debtors gain and creditors lose. The debtors gain because the real value of their debt is reduced by the price increase. They end up paying less than what they owe in terms of the real value of money as the money they borrowed earlier had greater purchasing power. Thus, wealth is redistributed from creditors to debtors.
- Unanticipated inflation or fluctuations in inflation rate results in uncertainty. When firms are uncertain about the future costs and prices of their products, and hence the rates of return on their investments, they will be less willing to take risks and invest, especially in long term projects.
- Firms and households may be pre-occupied with short-term, unproductive activities such as dabbling in properties and shares, which tend to yield attractive returns in an inflationary environment. Firms may divert investment funds out of productive investment into commodity hoarding and speculation. Such activities do not benefit the economy but only fuel an unsustainable rise in commodity and property prices.
- If a country has a relatively higher rate of inflation than its trading partners, then exports of that country would be relatively more expensive and imports into that country would be relatively cheaper. If the demand for the country's exports is price elastic, it would lead to a fall in export revenue, as the rise in (relative) price of exported goods leads to a more than proportionate fall in quantity demanded of exports. Meanwhile the country's demand for imports will increase as consumers switch to purchasing imports instead of buying locally produced goods, resulting in an increase in import expenditure. Hence it is likely that the country which has a relatively higher inflation rate will experience a worsening in its balance of trade, possibly even a deficit.
- A relatively higher inflation in the country will result in the demand for the country's currency in the foreign exchange market to fall as foreign countries will spend less on the country's

products (assuming demand for the country's export is price elastic). On the other hand, the demand for imports will increase, resulting in an increase in import expenditure. The country has to purchase more of the foreign currency by selling its own currency on the foreign exchange market. This will lead to an increase in the supply of the country's currency on the foreign exchange market. The fall in demand and increase in supply, the external value of the country's currency will fall. A persistent depreciation of the country's currency may result in loss of confidence in the country's economy among investors.

Failure to Achieve Healthy BoP Position

- The BOP is a statement of a country's international transactions over a period of time, usually a year. The BOP thus records the international inflows and outflows of a country's currency. A persistent BoP deficit means that the outflow of a country's currency is persistently more than its inflows.
- A depreciation of the currency could result. If the country is very reliant on imports, the currency depreciation could cause import prices to rise sharply, leading to cost-push inflation. This is detrimental to material well-being because the inflation reduces the purchasing power of individuals and households. It could also increase the price of exports and make them uncompetitive in global markets.
- In a fixed exchange rate regime, the central bank may sustain the external value of the currency by giving up its foreign currency reserves for domestic currency. Once the central bank runs out of reserves and loses the ability to support the currency, the resulting depreciation is likely to be sudden and severe, triggering imported inflation and soaring debt repayments.
- On the other hand, sustained BOP surplus exerts and appreciation pressure on the currency. This may hurt exports as they become less price-competitive in global markets, in turn adversely affecting the material well-being of entrepreneurs and workers in the related industries. Furthermore, the appreciation of home currency could lower import prices, allowing domestic consumers to substitute domestic goods and services to those produced overseas. However, currency appreciation could reduce imported inflation as prices of foreign goods and services are reduced.

Conclusion

As the issues of slow or negative economic growth, high unemployment rates and sustained BOP deficits have severe implications on the material well-being of residents, most governments set targets on these indicators and take active policy measures to ensure that they stay within the acceptable range.

LORMs

Level	Descriptor	Marks
L3	For answers that fully address the consequences of failure to achieve all four macroeconomic aims, explaining with sufficient and clear economic rigour.	8-10
L2	For answers that are descriptive in nature with insufficient economic rigour.	5-7
L1	For answers that do not answer the question or are descriptive in nature.	1-4

- (b) Assess whether a government injection on social spending is likely to have a [15] significant impact on the standard of living of its citizens

Question Analysis

Command	'Assess' – students are required to weigh the impact of government injection on SOL of its citizens
Content	Standard of Living
Context	Social spending on home ownership, healthcare and education
Approach	T: Government injection on Social spending will have significant impact on SOL (material and non-material)

	<p>AT: Limitations of government injection on Social spending will have on SOL (material and non-material)</p> <p>Synthesis:</p> <p>Other aspects of government policy can be more/equally as significant impact on SOL (material and non-material)</p> <ul style="list-style-type: none"> o Focusing on external sector (export sector) o Achieving sustainable growth [pollution]
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Suggested Answer Scheme

Introduction

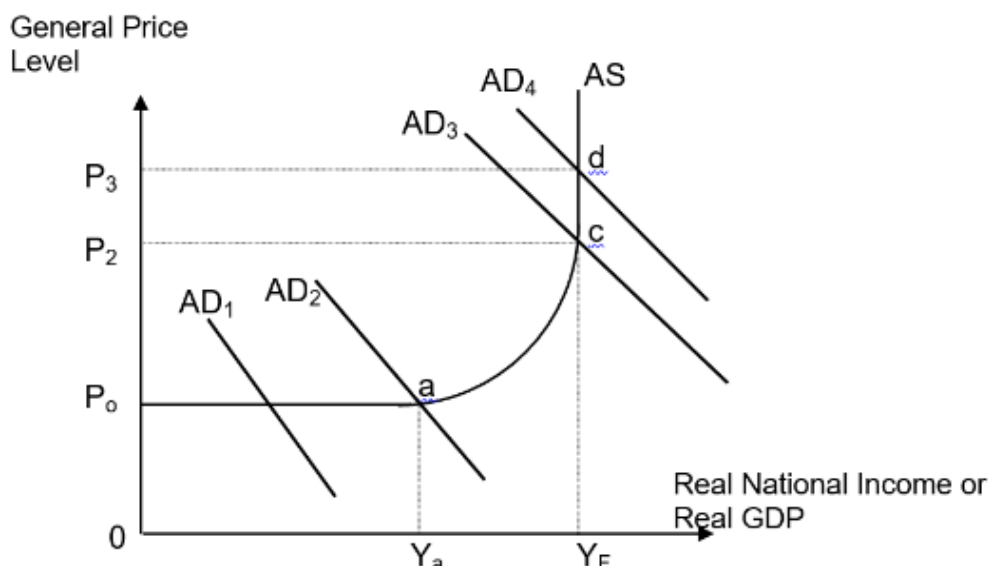
Standard of Living (SOL) reflects the well-being of an average person in a country. It includes the material and non-material aspects. The material well-being refers to the quantity of goods and services available to the average person in a country. The non-material well-being examines the quality of life of an average person in a country. This includes the number of working hours per period, leisure time, quality of physical environment, life expectancy...etc. As mentioned in the preamble, country's social spending is made up of cash handouts, rebates, subsidies and social welfare in areas such as home ownership, healthcare and education to improve the standard of living of its citizens

In this essay, we will look at how a government injection on social spending is likely to have a significant impact on the standard of living of its citizens and other policies that a government may need to undertake in order to improve the standard of living of its citizens.

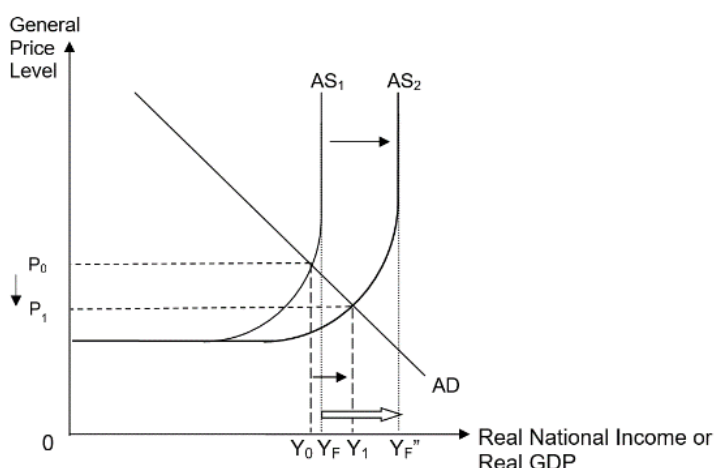
Body:

T: Government injection on Social spending will have significant impact on SOL (material and non-material)

Government injection on Social spending will have a significant impact on SOL as it can enhance actual and potential economic growth as well as improves equity. With an increase in the government expenditure (G) on housing and healthcare, it will have an impact on the Aggregate Demand. $\text{Aggregate Demand (AD)} = \text{Consumption (C)} + \text{Investment (I)} + \text{Government Expenditure (G)} + \text{Exports (X)} - \text{Imports (M)}$. With an increase in G it will lead to a rightward shift in the AD for example from AD1 to AD2, the unused resources can be put to use, with no upward pressure on prices. Thus, there will be a rise in output and employment while the general price level remains unchanged. With the increase in output and employment, workers will have a higher wage and thus increases the Material SOL of its citizens. With more citizens having found jobs and thus are less worried about basic necessities, the stress of looking for a job is reduced and thus improve the non-material SOL of citizens. However, those whom may have found jobs may now work in a stressful work environment thus leading to a fall in non-material SOL. The extent on the gain on non-material SOL remains to be seen.



A government spending on education will have the similar impact on AD in the short run. However, there is a long run aspect to the spending where when the citizens are educated, there would be an improvement in the quality of inputs (ie labour) and thus increasing the AS this will cause the AS to shift right (thus having potential economic growth)



The rightward shift of the AS curve will result in both Actual and Potential Economic Growth in the LR. The new national income level will increase from Y_0 to Y_1 thus improving the material SOL of citizens. The potential growth would indicate that there will be room for economy to grow in the future and thus further increasing the material SOL of the citizens, however this is dependent on the future increase of AD.

Government spending on housing together with subsidies for lower income on housing for example on 1-5 Room HDB flats, would improve equity within the population. This is so and the government redistributes tax from higher income earners and subsidise the housing of the lower income group. This will improve both material and non-material SOL of citizens as now everyone owns a house and has a roof over their head. Basic need of access to clean water and sanitation comes with the ownership of a flat.

AT: Limitations of government injection on Social spending will have on SOL (material and non-material)

Economic growth of the economy may not benefit the lower skilled workers as they may not reap the increased in income from growth and thus having a limited impact on their material SOL.

1 room flats are rental flats and occupants do not truly own the flats, thus will have limited impact on their material SOL. But the access to free flowing water and sanitation will indeed already increase their material SOL but not to the extent of owning a flat. 3-5 room flats are owned but occupants will have to undertake 20 – 30 years of housing loans. Ownership of the flats may increase their material SOL but would have an adverse impact on non-material SOL due to the stress of a long housing loan to pay.

Government spending on Education will only improve material SOL in the LR, when the students/learners acquire the skills and get hired for work. When they are undergoing training or education, there is no direct impact on their material SOL and may even have an adverse impact on non-material SOL given the stress in training.

Provision on Skills training may have limited impact on material SOL of low skilled and/or poor workers, as this group of workers will have to take time off from work to train but they need to work in order to put food on the table on a daily basis. Thus for them to get trained and increase the material in the LR, they have to forgo material SOL in the SR, thus not all workers would be willing to undertake the training.

Synthesis

As a government seeks to increase the standard of living of its citizens, many would turn to social spending to achieve this. These spending would in turn raise standards of both material and non-material well being to varying degrees. Dependent of the nature of country, there may be other aspects of government policy that can be more/equally as significant impact on SOL (material and non-material).

o Focusing on external sector (export sector)

Given Singapore's nature of a small and open economy, Singapore is also heavily dependent on the external sector, particularly trade to drive economic growth. As such, the Singapore government should perhaps focus improving the export sector instead to achieve a higher material standard of living. Due to Singapore's lack of natural resources, we are heavily reliant on imported inputs, and therefore highly susceptible to imported inflation thus ensuring flow of imports into our shores is of a greater significance to our material SOL. As our exports and imports accounts for >300% of our annual GDP, attention on the external sector will have a more significant impact on material SOL.

o Achieving sustainable growth [pollution]

Government will also need to spend on other priorities other than on Social spending to have a significant impact on SOL. Especially since the government should also need to ensure that sustainable growth is achieved, where other significant economic problems, such as depleted resources and environmental problems will not be created, particularly for future generations. The government can provide grants to firms to encourage more R&D on cleaner and green technology. Carbon taxes can also be implemented to reduce carbon emissions and lessen air pollution. All these will reduce the amount of environmental problems, thus leading to more sustainable economic growth in the long run.

LORMs

Level	Knowledge, Application/Understanding, Analysis	Marks
L3	<p>Answer also presents well balanced arguments on whether government injection on social spending is likely to have a significant impact on the standard of living of its citizens. These arguments are based on the various aims that the Singapore (or any other) government wants to achieve. Analysis is well-developed throughout and argument is coherent.</p> <p>Answer makes use of contextual knowledge to support the arguments. Good use of Singapore (or any other country) examples.</p>	8-10
L2	<p>Answer presents different arguments on whether a government injection on social spending is likely to have a significant impact on the standard of living of its citizens, although the analysis may not be fully developed.</p> <p>There are some weak attempts to use contextual knowledge to support the arguments. Examples not well used.</p>	5-7
L1	<p>Answer attempts to present some arguments on whether a government injection on social spending is likely to have a significant impact on the standard of living of its citizens but they are largely one sided. Analysis is largely undeveloped and contains inaccuracies in content.</p> <p>No contextual knowledge to support arguments. Answers are purely theoretical. Examples have not been used.</p>	1-4

E 3	A well justified stand that considers unstated assumptions and provides a new perspective (other focus that may have a more significant impact on SOL)	4-5
E 2	Answer makes a stand that attempts to use economic justification.	2-3
E 1	Answer makes an unjustified stand.	1

Essay Question 5

As much as one-third of the United States workforce could be out of a job by 2030 thanks to automation, according to new research from McKinsey. Meanwhile in Samoa, a small developing country, the tourism industry is badly hit with poor outlook globally.

Source: *CNBC*, 29 Nov 2017 & *Samoa Observer*, 26 May 2017

- a) Explain the various causes of unemployment across different countries. [10]
- b) Discuss the extent to which the nature of economy affects a government's choice of macroeconomic policies in addressing unemployment. [15]

Question Analysis

Command	"Explain": Describe in detail; give clear reasons using relevant economic facts
Content	Unemployment and its different types, factors that lead to rise in unemployment
Context	Students are expected to provide examples across different countries, preferably with reference made to those already provided in the preamble.
Approach	<p>Students are expected to first <i>define unemployment</i> and briefly <i>state the different types of unemployment</i>. Next, the <i>factors</i> leading to different types of unemployment <i>across different countries</i> will be examined.</p> <p>Students are expected to explain in detail <i>THREE</i> factors leading to unemployment across different countries. An analysis on different types of unemployment and their associated causes is preferred.</p> <p>For example – global recession (factor) that leads to fall in export revenue, and thus aggregate demand (link to concepts) for small and open economies (context) like Samoa, thus resulting in demand-deficient (cyclical) unemployment (type of unemployment).</p>

Suggested Answer Scheme

<u>Introduction:</u> Unemployment defined as the number of people who are capable of and willing to work but are unable to find suitable employment. It is usually measured by the unemployment rate = $(\text{Number of unemployed} / \text{Size of labour force}) \times 100\%$, where labour force is made up of the economically active (able & willing to work), both employed and unemployed. The 4 main types of unemployment are cyclical, structural, frictional and seasonal unemployment. In this essay, we will be exploring the factors that cause different types of unemployment across various countries.	Definition Understanding Overview
<u>Body: Paragraph 1 – Cyclical Unemployment</u> Cyclical unemployment increases during recessions (down swing of a business cycle) and decreases during expansions. As the economy moves into a recession, aggregate demand falls and is insufficient to purchase all of the full employment level of national output. Firms find that they are unable to sell their current level of output at the current general price level. Initially, firms may be willing to build up stocks of unsold goods, but with time, they will have to start to cut back on production, and the amount of labour they employ (since labour is a derived demand). This results in cyclical unemployment, also known as demand-deficient unemployment since it results from a falling/lack of aggregate demand.	Point Elaborate

For example, it was stated that Samoa's tourism industry was adversely affected from the negative global outlook. This could stem from recessions in major economies and eventually worsening to a worldwide contraction. As such, faced with falling incomes, consumers around the world will cut back on tourism expenditure. This resulted in a fall in exports in the form of tourism activities/services from Samoa, which resulted in a fall in its AD and hence national output, leading to a rise in cyclical unemployment.

Using the AD-AS diagram to illustrate cyclical unemployment in Figure 1, the full employment level of output is at Y_F . When hit with a fall in net exports, the economy is at the equilibrium level of output at Y_1 . Hence the output gap $Y_1 - Y_F$ results in cyclical / demand-deficient unemployment.

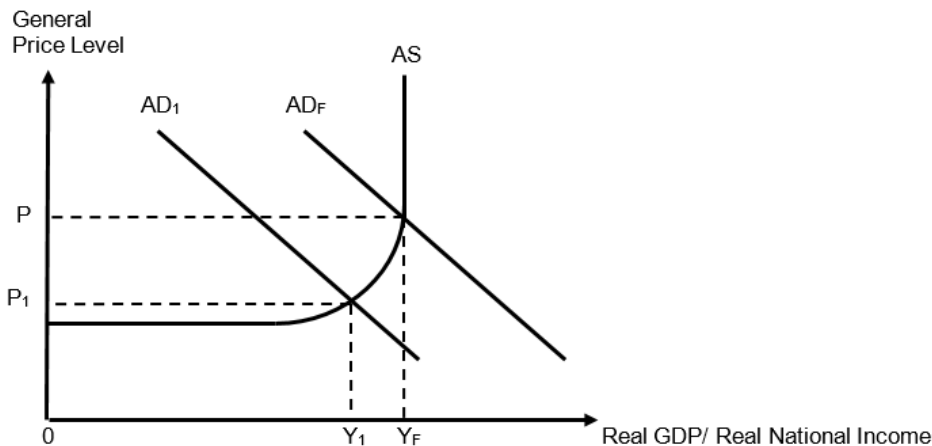


Figure: Cyclical Unemployment

Thus, any factors that contribute to falling AD will result in a rise in cyclical unemployment in demand-deficient conditions.

Example

Optional -
Elaborate (ADAS Diagram)

Link

Body: Paragraph 2 – Structural unemployment

Structural unemployment occurs when an economy undergoes structural transformations. It arises because of a mismatch of skills where the skill sets demanded by employers do not match those offered by the unemployed.

Structural unemployment can occur because of changes in pattern of demand and/or supply. At the demand side, changes in tastes, technology, taxes, or competition reduce the demand for certain skills and increase the demand for other skills. When there is a permanent fall in the demand for a firm or industry's goods and services, production will be cut back, leading to a decrease in the demand for labour. However, many displaced workers may not be easily and readily absorbed into other industries as they may not have the skills demanded by these industries (occupational immobility), leading to structural unemployment. For example, this can be observed in the closure of many photography studios in Singapore as there is a fall in demand of traditional photo printing using polaroid films. With the rise of digital printing that provides convenience and cost-effectiveness, workers that are equipped with the out-dated skills will be structurally unemployed if they do not upgrade themselves with the relevant know-how.

At the supply side, structural unemployment can result from the successful growth of new industries using labour-saving technology e.g. automation. This can be seen in the preamble where automation in United States leads to structural unemployment as workers are displaced by technology in the manufacturing industries. With the mismatch of skills, these retrenched workers will encounter difficulties in finding employment.

Point

Elaborate

Example

Elaborate
Example

<p>Therefore, the causes of structural unemployment can stem from changes in pattern of demand and/or supply where the existing skill sets are no longer preferred.</p> <p><i>*Note: Students are not required to cover both demand and supply side reasons for structural unemployment.</i></p>	Link
<p><u>Body: Paragraph 2 – Frictional unemployment</u></p> <p>Frictional unemployment occurs during the time required to match qualified job seekers with available openings. This typically can be attributed to the imperfect information present in the labour and job markets where potential matching of employers and employees can proved to be difficult.</p> <p>Job seekers need time to search for employment opportunities, and employers need time to find suitable employees. For example, in less developed countries such as Cambodia people who leave their jobs, either voluntarily or involuntarily (sacked or made redundant) and fresh graduates could be unemployed for a period of time while they are looking for a new job. This is due to imperfect information in the labour market. Employers are not fully informed about what labour is available; and job seekers are not fully informed about what types of jobs are available. Interestingly, frictional unemployment will rise during economic boom and vice versa as workers seek for greener pastures with opportunities abound during a bullish market.</p> <p>Thus, frictional unemployment can due to various factors such as the state of infrastructure to facilitate information sharing in the labour and job markets, as well as the prevailing economic conditions.</p>	<p>Point</p> <p>Elaborate Example</p> <p>Link</p>
<p><u>Body: Paragraph 4 – Seasonal unemployment</u></p> <p>Seasonal unemployment occurs when the demand for certain types of labour fluctuates with the seasons of the year.</p> <p>Taking the agricultural industry in rice-exporting countries (Thailand) as an example, workers are only employed during the harvest period, and are laid off the rest of the year in agriculture; and in tourism and construction, workers are only employed during certain periods, due to climatic conditions, and are laid off during winter. This could be due to festivals, annual weather cycles or major events scheduled in a country e.g. F1 in Singapore will lead to a rise in demand for workers during the season.</p> <p>Thus, seasonal unemployment affects mostly workers in specific industries with demand that coincides closely with seasonal changes.</p>	<p>Point</p> <p>Elaborate Example</p> <p>Link</p>
<p><u>Conclusion: Summary</u></p> <p>In conclusion, there are various factors that lead to unemployment and it is worthy to note the different types and their associated root causes. This will inform the government of the appropriate policies in addressing the problem of high unemployment in a country.</p>	

LORMs

Level	Knowledge, Application, Understanding and Analysis	Marks
L3	For an answer that shows a thorough & complete analysis of 3 different causes of unemployment in the different countries. Students are expected to explain in context of different types of unemployment, using appropriate countries as examples.	8-10

	<i>For L3 score, students are expected to make reference to the preamble and explain both structural and cyclical unemployment in the context of USA and Samoa.</i>	
L2	<i>For an answer that shows understanding of the at least two different causes of unemployment and attempt to address the question.</i>	5-7
L1	<i>For an answer that shows conceptual errors and mere listing of the causes of unemployment without any reference to the question.</i>	1-4

(b) Discuss the extent to which the nature of economy affects a government's choice of macroeconomic policies in addressing unemployment. [15]

Question Analysis

Command	"Discuss the extent" – to provide an alternative to the stated issue To place emphasis on more than just having a 2-sided discussion but also to show the limit to which an argument has validity & come to a reasoned conclusion
Content	Macroeconomic policies to resolve different types of unemployment, effectiveness of policies in context of different nature of economy (small and open vs large and less open), other criteria that affects effectiveness of policies
Context	No specific context; any context will do (preferably not hypothetical)
Approach	Students are expected to critically examine the extent nature of economy (small and open vs large and less open) will affect the effectiveness of macroeconomic policies. In particular, the use of demand-management policies to address cyclical unemployment will be significantly influenced by nature of economy via the size of multiplier and the choice of monetary policy tool (interest rate or exchange rate). They should then examine how nature of economy may not be as relevant in the use of supply-side policies to address structural unemployment / frictional unemployment. Lastly, an analysis on other criteria, such as root cause or fiscal health of government, should be carried out across different nature of economies to round up the discussion.

Suggested Answer Scheme

<u>Introduction:</u>	
To effectively address the different types of unemployment, a government has several macroeconomic policy tools such as interest rate, government spending, tax rates and exchange rates, and supply side interventions which it can make use of, to achieve the macro objective of low unemployment. To what extent the nature of the economy determines the government's choice of macro policy tools in addressing high unemployment depends on how the characteristics of each economy affects the effectiveness of these policies in achieving their intended aim of lowering unemployment.	Understanding
In this essay, we will be exploring how nature of economy and other criteria such as root cause and government priorities in face of conflicts, will affect the choice of macroeconomic policies across various countries.	Overview
<u>Thesis: Significance of nature of economy in addressing cyclical unemployment</u>	
The nature of economy significantly affects a government's choice of macroeconomic policies in addressing cyclical unemployment.	Point

<p>Large and less open economies such as China and United States of America (USA) tend to have a larger population size and hence, domestic markets, compared to smaller economies such as Singapore. The larger domestic market means that domestic consumption expenditure as a proportion of the country's overall Gross Domestic Product (GDP) is relatively higher than those of the small and open economies. Therefore, to counter demand-deficient unemployment, the governments of the large and less open economies tend to rely more on manipulating demand-management policy tools such as interest rates and tax rates to affect consumption spending.</p>	Elaborate
<p>For example, the central bank of USA (Federal Reserve) uses the interest rates as the monetary policy tool to counter falling aggregate demand in a recession. In times of slower / negative economic growth with rising cyclical unemployment, the Federal Reserve may reduce the interest rates so as to reduce the cost of borrowing, hence spurring domestic consumption. It may also reduce the personal income tax rates, to increase the disposable income and hence, increase domestic consumption. Since consumption takes up a large proportion of the USA's aggregate demand (AD) and leveraging on the large multiplier size, the lowering of interest rate (expansionary monetary policy) and lowering of tax rate (expansionary fiscal policy) are both effective in helping the USA government to resolve cyclical unemployment.</p>	Example
<p>These large and less open economies also are able to adopt protectionism tools to protect its domestic industries and local goods and services from foreign competitors when a fall in export demand resulted in rising cyclical unemployment. Examples of protectionism can be seen in the recent trade wars between USA and China, each imposing tariffs on imports from the other country. The use of the protectionism tools is intended to switch expenditure away from the consumption of imports towards the consumption of local goods and services. This will increase AD and increase real national output and reduce cyclical unemployment.</p>	Elaborate
<p>It is imperative to note that despite how the use of interest rate, tax rate and protectionism seem effective; there are various limitations in reality that will affect their effectiveness. Firstly, poor economic outlook in a bearish market will result in lower business and consumer confidence. This results in the insensitivity of consumption towards interest rates, and as such, AD will not increase significantly despite lowered interest and tax rates. Secondly, trade retaliation that will worsen long-term growth prospect as the 'beggar-thy-neighbour' effect escalates into a full blown worldwide recession, resulting in long term cyclical unemployment.</p>	Example
<p>On the contrary, the domestic consumption of the smaller economies tend to be a smaller proportion compared to other components such as net exports (X-M) and investment (I). For small and open economies like Singapore, since they do not have a sufficiently large domestic markets, these economies tend to be more open and reliant on trade and foreign investments. For Singapore, during times of recession with high cyclical unemployment, the Monetary Authority of Singapore will depreciate the exchange rate to enhance the price competitiveness of our exports. With a weaker Singapore dollar, the price of exports in foreign currencies will be cheaper and price of imports in local currency will be more expensive. Assuming the Marshall Lerner condition holds, there will be an improvement in net exports which increases AD, and thus reduces cyclical unemployment. During recession, the Singapore government also adopts an expansionary fiscal policy through increased government spending and lowering of direct taxes. These measures will seek to increase AD and result in higher real national output and subsequently, a fall in cyclical unemployment.</p>	Evaluation
	Elaborate
	Example
	Evaluation

<p>Additionally, in order to boost competitiveness of our exports, Singapore also encourages businesses to be innovative and to adopt more research and development (R&D) to increase the quality of our exports. At the same time, Singapore also signs Free Trade Agreements (FTAs) to encourage more access to larger overseas markets so as to increase our export revenue. All these measures will seek to reduce cyclical unemployment.</p> <p>Consequently, the depreciation of exchange rate will bring across the unintended outcome of imported cost-push inflation for small and open economies like Singapore, who is import dependent due to lack of natural endowment. Likewise, the use of supply side policy and signing of FTAs are both long-drawn processes, and thus might not be apt in the volatile global economic conditions – increase in AD during positive economic conditions will contribute to rising inflation and minimal gain in employment if the economy is nearing full employment level of output.</p> <p>Therefore, as discussed, the nature of economy does significantly influence the type of macroeconomic policies adopted by different governments. That being said, there are times where both types of economies use the same approach in tackling a similar foe.</p>	<p>Link</p>
<p><u>Anti-Thesis 1: Significance of root cause in addressing structural unemployment or frictional unemployment</u></p> <p>Regardless of nature of economy, both small and open and large and less open economy will adopt supply side policies to tackle structural and frictional unemployment.</p> <p>If the root cause of high unemployment rate stems from a mismatch of skills resulting in structural unemployment, then any government should aim to tackle the issue by adopting supply side policy. Supply-side policies to reduce structural unemployment are designed to make the supply of labour more adaptable and occupationally mobile to meet the changes in demand in the labour market and to make employers more willing to operate within existing market constraints.</p> <p>This can be done through the provision of government subsidies and grants for skills upgrading and retraining programs/schemes to ease transition from declining to growing industries. For example, in Singapore, Skills Development Fund (SDF) helps to subsidise the training costs of employees and the Skills Programme for Upgrading and Resilience (SPUR) provides retraining subsidies to help Professionals, Managers, Executives and Technicians (PMETs) to upgrade their skills; Workfare Training Support (WTS) scheme provides employer grants to encourage firms to send their older low-wage workers for skills training. Likewise in the USA, the government funds major programmes through the Department of Labour and Department of Education for the disadvantaged and displaced workers to provide them with reemployment services.</p> <p>Evidently, the use of protectionist measures by large and less open economies like the USA do allow the buying of time for supply side policies in reskilling displaced workers to be reemployed; but for small and open economies that are dependent on trade, like Singapore, we do not have the luxury of that option and thus, a need for diversification of sources of economic growth will be crucial for long term economic stability.</p> <p>On the other hand, the use of supply side policies in facilitating job search will reduce frictional unemployment in both types of economies. The government can provide better job information services and set up employment agencies which give out information about job vacancies. For example, in Singapore, Workforce Singapore (WSG) and Community Development Councils (CDC) establish labour exchanges, organize job fairs and career seminars and legislate against excessive job hopping. Schools can also provide career</p>	<p>Point</p> <p>Elaborate</p> <p>Example</p> <p>Evaluation</p> <p>Elaboration</p> <p>Example</p>

<p>guidance to give students a better understanding of the job requirements in the labour market.</p> <p>Therefore, the use of supply side policies is effective in both small and open as well as large and less open economies. This stems from the fact that the root cause of unemployment is common between the two.</p>	Link
<p><u>Anti-Thesis 2: Conflict of macroeconomic objectives affects the choice of macroeconomic policies</u></p> <p>Besides the nature of economy, the conflict of macroeconomic objectives will also affect government's policy choice across economies.</p> <p>In both small and open economies as well as large and less open, the use of demand management policies to reduce cyclical unemployment will eventually lead to rising demand-pull inflation as the economy approaches full employment level of output and beyond. Rising inflation will reduce export competitiveness as price of exports increase relative to those produced in other economies. This will worsen the current account and balance of payment. Therefore, to minimize the impact of such conflicts – the use of supply side policy to expand productive capacity in both types of economies will not only reduce the pressure on general price level; but also improve the non-price competitiveness of exports. This can be observed in the real world where countries like Singapore and China have invested heavily on productivity improvements in order to expand productive capacity.</p> <p>Additionally, supply side policy can be focused on the development of green technology to reduce carbon footprints or renewable energy sources to reduce depletion rate of non-renewable resources. At the same time, measures targeting skills upgrading / education of the lower-income group can be implemented to allow the disadvantaged groups to be socially mobile. The effect can be complemented with the appropriate tax policies to narrow the income gap. Strategically, the use of such policies will minimize the conflicts of economic growth with inclusivity and sustainability. For example, in the recent National Day Rally, Prime Minister of Singapore, Mr Lee Hsien Loong outlines the efforts to combat climate change as well as lowering of educational fees for students from low-income families, all in the aim of inclusive and sustainable growth</p> <p>Hence, besides the nature of economy, there are other considerations such as the conflicts of macroeconomic objectives that will influence governments' choice of policy tools.</p> <p><i>*Other possible arguments: Fiscal health of government (to determine the extent of use of Exp FP), Severity / Urgency of problem where time is a constraint, Root cause of problems</i></p>	<p>Point</p> <p>Elaborate</p> <p>Example</p> <p>Elaborate</p> <p>Example</p> <p>Link</p>
<p>Synthesis</p> <p>In my final analysis, the nature of economy affects the choice of macro policies in addressing unemployment to a certain extent as it determines the effectiveness of the macro policies. But this factor is only limited to cyclical unemployment.</p> <p>The clear-cut distinctiveness is in the use of exchange rate policy as their monetary policy approach for small and open economies, unlike the case in large and less open economies which tend to adopt interest rate intervention to increase AD. Both economies adopt fiscal policy but the intensity as a fiscal stimulus differs based on the size of multiplier.</p> <p>On the flipped side, both types of economies need to use supply-side policies more actively to deal with structural unemployment arising from automation or loss of international competitiveness. This proves that root cause of unemployment is a key consideration in decision making process by government.</p>	<p>Stand</p> <p>Substantiation</p> <p>Something Special</p>

In my personal opinion, the key to arrive at the optimal choice within inherent constraints involves the constant weighing of costs/benefits in using different policies and gathering information that are accurate (labour market participation rate / flexible working arrangements). This process of fine-tuning will be crucial as governments adjust and plan forward in this VUCA global environment.	
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LORMS

Level	Descriptors	Marks
L3	<p><i>For an answer which:</i></p> <ul style="list-style-type: none"> <i>Provides balanced and well-developed argument on the extent to which size of the economy influences the choice of macro policy tools.</i> <i>Explains other variables that will also influence the choice</i> <i>Good and accurate use of economic analysis.</i> <p><i>High L3 (9m and above)</i></p> <ul style="list-style-type: none"> <i>Has a breadth of macro-economic policy tools that include both demand-management and supply-side.</i> <i>Is sufficiently contextualised to how large vs small economies chooses the macroeconomic policy tools.</i> 	8 - 10
L2	<p><i>For an answer which:</i></p> <ul style="list-style-type: none"> <i>Is either one-sided or under-developed and contains some explanation and link to the “nature of the economy”.</i> <i>Able to give examples of large vs small economies but lacks the depth and precision in how they choose the macro policy tools depending on their nature of economy.</i> <i>Other variables are mentioned but not adequately explained.</i> <i>Use of economic analysis is sufficient and largely accurate.</i> 	5 - 7
L1	<p><i>For an answer which:</i></p> <ul style="list-style-type: none"> <i>Vaguely provides some understanding of the ‘nature of economy’.</i> <i>Some economic explanation on how some macroeconomic policy tool works.</i> <i>Some weak and incidental attempts at linking nature of economy to the choice of policy tools.</i> 	1 – 4

Level	Descriptor	Marks
E3	<p><i>Good attempt to provide well-reasoned evaluation/opinions, supported with clear explanation/evidence on the overall extent.</i></p> <p><i>E.g. The nature of the economy gives an indication to the government on the pillars of growth for their country, which will determine the main type of unemployment faced and its associated policies.</i></p>	4 – 5
E2	<p><i>Some attempt to provide synthesis/conclusion but lack clear substantiation/elaboration</i></p> <p><i>E.g. The size of the economy would determine the choice of macroeconomic policy tools but is not the only variable to be taken into consideration.</i></p>	2 – 3
E1	<i>Listing of opinion/conclusion, without any substantiation</i>	1

Essay Question 6

On 8 March 2018, Singapore and 10 other countries signed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), a free trade agreement. Minister for Trade and Industry Chan Chun Sing said, "The CPTPP will strengthen trade among countries in the Asia-Pacific, resulting in a more seamless flow of goods, services and investment."

Source: Ministry of Trade & Industry, accessed 17 July 2019

Discuss the impact of Singapore's policies to promote free trade on consumers and producers in Singapore. [25]

Question Analysis

Command	"Discuss the impact on..." – consider various perspectives (consumers and producers) and types of consequences (positive and negative) on these economic agents.
Content	<p>"Policies to promote free trade": Identify at least two types of policies, one being Free Trade Agreements (FTAs). Other policies that help facilitate greater trade include:</p> <ul style="list-style-type: none">• Supply-side policies (SSP)• Fiscal policy• Exchange rate policy <p>"Consumers, producers": Identify what these economic agents are interested in</p> <p>Consumers:</p> <ul style="list-style-type: none">• Micro impacts – maximize utility which may include consideration of price, variety, quality of goods (can also explain using impacts on allocative, productive, dynamic efficiency)• Macro impacts – standard of living through actual economic growth, employment (or unemployment), cost of living, and quality of life <p>Producers</p> <ul style="list-style-type: none">• Impacts on profit (costs and/or revenue)• Impacts on innovation (dynamic efficiency)• Impacts on investment decisions
Context	Singapore – macro policies by Singapore government; effects on consumers and producers in Singapore
Approach	<p>Introduction: Identify policies</p> <p>Body P1: Explain policy 1 (e.g. FTAs) and how it promotes free trade P2: Explain impact on consumers P3: Explain impact on producers</p> <p>Body P4: Explain policy 2 (e.g. SSP) and how it promotes free trade Body P5: Explain impact on consumers P6: Explain impact on producers</p> <p>Conclusion: Conclude on general impact on consumers/producers (positive or negative?)</p> <ul style="list-style-type: none">• What criteria can be used to evaluate the extent/nature of impact?• What assumptions can be questioned that would lead to a different impact? <p><i>Note: Other possible approaches are acceptable, provided economic analysis is valid and of sufficient depth. See the end of this suggested answer.</i></p>

Suggested Answer Scheme

<p><u>Introduction</u></p> <p>A free trade agreement (FTA) is a legally binding agreement between 2 or more nations to lift bilateral trade through measures such as lowering tariffs and other trade barriers to bring about closer economic integration. As a small and open economy, Singapore is heavily reliant on trade (X+M makes up over 300% of GDP). Hence, many of our policies directly or indirectly aim to promote free trade. In this essay, I will discuss the impact of two of such policies (FTAs and supply-side policies) on consumers and producers in Singapore.</p>	<p>Definition</p> <p>Set context</p> <p>Overview of essay</p>
<p><u>Body Point 1: One policy that Singapore uses to promote free trade is the signing of FTAs.</u></p> <p>FTAs aim to increase trade between signatory countries through the lowering/removal of trade barriers. This would increase trade flows and investment flows between these countries. In theory, according to the principle of comparative advantage, when countries specialise in the production of goods for which they incur a relatively lower opportunity cost and subsequently trade with each other, this benefits all countries involved by allowing them to consume beyond their Production Possibilities Curve (PPC). Furthermore, increased investment flows into the country due to lowering of trade restrictions can result in increases in LRAS.</p>	<p>Point</p> <p>Explain the policy (FTAs)</p> <p><i>Consider both trade flows and investment flows.</i></p>
<p><u>Point 2: Signing of FTAs can impact consumers in Singapore both positively and negatively.</u></p> <p>With the increase in free trade from FTAs, consumers may benefit by being able to consume a greater variety of goods and services as they now have access to goods from other countries. They may also be able to consume goods at lower prices and higher quality due to the increase in competition for domestic firms, which would incentivize firms to conduct both product and process innovation to lower prices and improve their products (i.e. dynamic efficiency). For example, the ASEAN Trade in Goods Agreement (ATIGA), which entered into force in 2010, allowed Singaporeans to access a wider variety of goods and services from our ASEAN neighbours at lower prices.</p> <p>However, consumers may also experience negative impacts. While FTAs are able to increase trade volume between signatory countries and generate economic growth, it also results in greater vulnerability to external shocks. For example, when Singapore's trading partners experience slow growth or recession, demand for Singapore's exports would fall, resulting in a fall in AD (ceteris paribus) and a rise in cyclical unemployment and a fall in income for workers. This results in reduced purchasing power and higher stress for consumers, lowering both material and non-material SOL. Furthermore, if FTAs lead to greater specialisation by Singaporean producers, there may be structural shifts in the economy leading to structural unemployment. For example, with greater free trade in the ASEAN bloc, Singapore's economy may shift away from low-skill manufacturing, resulting in such jobs being lost. The resulting structural unemployment may also reduce material and non-material SOL if not mitigated by government policies.</p>	<p>Point</p> <p>Explain how consumers benefit (price, quality, variety)</p> <p>Example</p> <p>Explain how consumers may not benefit – link to SOL</p> <p>Example</p>
<p><u>Point 3: Signing of FTAs can impact producers in Singapore both positively and negatively.</u></p> <p>Producers may benefit from lower costs as with lowered trade barriers, they are now able to buy imported factor inputs at lower prices. With lower COP, this would increase their profit, ceteris paribus. Producers can also benefit from higher revenue and lower costs due to access to larger markets. Domestic firms</p>	<p>Point</p> <p>Explain how producers benefit (link to</p>

<p>previously constrained by Singapore's small market can expand in other countries (through outward investment). This allows them to increase their scale of production and reap internal EOS, for example through financial economies of scale, leading to a fall in average cost. Demand may also rise due to the larger pool of potential consumers, leading to higher revenue and increase in profit, ceteris paribus. For example, the CPTPP would eliminate 94% of tariffs for goods traded within member countries, allowing domestic firms easier access to large markets such as Canada, Japan and Mexico.</p> <p>On the other hand, signing of FTAs may lead to negative impacts for domestic producers due to greater competition from foreign firms. If local consumers switch to imported substitutes, local producers would experience a fall in demand, and a fall in TR and profit, ceteris paribus. For example, Singapore signed the India-Singapore Comprehensive Economic Cooperation Agreement (CECA). With greater competition from Indian food producers, local firms may find that demand for their food products falls. Furthermore, a greater dependence on imported inputs would also make domestic producers more vulnerable to changes in import prices, which would then affect their profits.</p>	<p>profit through costs and revenue)</p> <p>Example</p> <p>Explain negative impact (link to cost/revenue, profit)</p> <p>Example</p>
<p><u>Point 4: Another policy that Singapore uses to promote free trade is supply-side policies.</u></p> <p>Singapore uses a variety of supply-side policies to increase long-run aggregate supply and promote potential economic growth. These include policies to increase quality of labour, such as SkillsFuture to promote skills training and lifelong learning. Other policies include efforts to increase the quality of infrastructure/level of technology, such as increasing connectivity through MRT lines and providing emerging industries with infrastructure, for example in the case of Jurong Island. Generally, supply-side policies promote free trade by</p> <ul style="list-style-type: none"> • Making SG an attractive destination for investment • Increasing export competitiveness (e.g. lowering unit costs through higher labour productivity) 	<p>Brief explanation</p> <p>Examples</p> <p>Link to question</p>
<p><u>Point 5: Supply-side policies can impact consumers in Singapore both positively and negatively</u></p> <p>Consumers may benefit from the potential economic growth that results from supply-side policies. In general, such policies shift LRAS outwards, allowing potential economic growth and a fall in GPL. This can help increase or maintain purchasing power for consumers.</p> <p><i>[Diagram] to show fall in GPL and increase in RNY. The increase in income also increases purchasing power to buy goods and services, improving material SOL.</i></p> <p>Furthermore, policies like SkillsFuture increase workers' skill level, addressing structural employment by reducing the skills mismatch and making it easier to find jobs. This results in a fall in structural unemployment and higher SOL, as earlier explained. For some supply-side policies such as infrastructure projects, consumers also benefit through increased convenience, e.g. being located closer to MRT lines, which may increase their quality of life and hence non-material SOL.</p> <p>However, the opportunity cost incurred from spending on supply-side policies means that consumers may not be able to benefit in other areas. For example, funds spent on SkillsFuture/infrastructure projects cannot be used for other policies that may help improve SOL, such as improving healthcare or increasing transfer payments to lower-income households. Furthermore, some supply-side policies, such as those that aim to reduce the power of trade unions, may reduce</p>	<p>Explain how consumers benefit</p> <p>Explain using diagram + Link to SOL</p> <p>Explain + Examples</p> <p>Explain possible negative impacts with link to SOL</p>

<p>workers' bargaining power and prevent wage rises that would increase purchasing power and material SOL. Lastly, skills training is often concentrated in certain knowledge-based industries; despite greater availability of training in these areas, those without prior knowledge or disposition to enter these industries may lose out, especially older workers. Hence, they would not experience an improvement in SOL.</p>	
<p><u>Point 6: Supply-side policies are likely to have mainly positive impacts on producers in Singapore</u></p> <p>In general, supply-side policies are likely to result in a fall in COP for producers, increasing their profit, ceteris paribus. For example, SkillsFuture aims to improve the quality of the labour force, increasing productivity and reducing firms' unit cost of production. With lower costs, producers' profits would rise, ceteris paribus. Furthermore, some firms may benefit from external EOS through government's provision of infrastructure to support a particular industry, such as in the case of the chemicals/energy industry located at Jurong Island. However, the extent of such benefits may depend on type of industry – sunset industries may get less support; strategic industries may benefit most</p>	<p>Point</p> <p>Explain benefits (link to costs + profit)</p> <p>Examples</p>
<p><u>Conclusion (Synthesis)</u></p> <p>In general, Singapore's policies to promote free trade are likely to have more positive than negative impacts on consumers and producers.</p> <p>Substantiation:</p> <ul style="list-style-type: none"> Based on <u>nature of economy</u>: Small & open → rely on trade and access to bigger markets; export-oriented industrialisation (EOI) has been cornerstone of economic growth leading to higher SOL and success for Singapore-based firms Based on <u>time period</u>: <ul style="list-style-type: none"> While FTAs may cause short-term problems (e.g. structural unemployment), these can be mitigated in the long run using SSPs to maintain or improve SOL for consumers Both FTAs and SSPs allow for potential growth, allowing for greater increases in RNY in the long run → higher mSOL for consumers and higher profit for producers (since COP falls) <p>Something Special:</p> <ul style="list-style-type: none"> Overall impact depends on <u>ability of government</u> to manage the negative impacts while maximizing positive impacts <ul style="list-style-type: none"> E.g. negotiating the best deal for Singapore in FTAs, while ensuring unemployment is effectively addressed by supporting sunset industries where appropriate; E.g. depending on state of economy, implementing fiscal policy where necessary to mitigate vulnerability to external shocks; E.g. if greater trade leads to growth that is unsustainable/not inclusive, being able to recognise this and implement mitigating policies such as carbon tax or readjusting income tax to be more progressive Impact on consumers may depend on income level/skill level of consumers/workers; extent of labour mobility Impact on producers may depend on size/market power of firm or the nature of the industry in which it operates 	<p>Stand</p> <p>Criterion 1</p> <p>Criterion 2 + Critical consideration of point made in body of essay</p> <p>Criterion 3 Show understanding of how these policies work; Address assumptions, e.g. state of economy, production methods</p> <p>Consider perspectives of diff groups of consumers producers</p>

Note: Students may also be credited for other possible policies/approaches to answer the question, including but not limited to the following:

Students who discuss the following policies can also be credited:

- Fiscal policy – tax incentives for foreign companies (e.g. tax holiday); low corporate taxes → encourage inward FDI to SG and allows for freer trade
- Exchange rate policy – gradual and modest appreciation (GRAMA) + stable exchange rate
 - Stability and predictability of returns makes Singapore an attractive investment destination
 - GRAMA may help reduce COP of exports, increases export competitiveness → sell more exports

Students who go into detail to consider the impacts on different types of consumers and producers can also be credited

- Producer impacts:
 - Students may consider the impact of greater competition from free trade on different market structures
 - Or impact on producers of different types of goods, e.g. luxury goods, necessities or inferior goods
 - Or impact on firms producing for export vs for domestic consumption
- Consumer impacts:
 - Students may consider different types of consumers (e.g. lower-income vs high-income, older vs younger)
 - Students may consider impacts on material vs non-material SOL

LORMs

L3	Well-developed argument with a balanced discussion of the positive and negative impacts of Singapore's policies to promote free trade on both consumers and producers. Answer considers more than one type of policy. Good economic analysis with reference to diagrams Good use of examples.	15-20
L2	Valid and coherent arguments of the impacts of Singapore's policies to promote free trade on consumers and producers; arguments may not be well-balanced. Economic analysis may not be so well-elaborated with some gaps. Some reference to diagrams. Some attempts to relate to context Capped at L2: For an answer which only considers ONE policy (though impacts may be well-explained). Low L2 (9-11): <ul style="list-style-type: none"> • For an answer which attempts to explain policies, but does not contextualise impacts to the relevant economic agents (consumers and producers). • For an answer that considers impacts on only consumers OR producers. 	9-14
L1	Lack of economic analysis and largely descriptive No use of examples; answer purely theoretical.	1-8

E3	Answer provides a well-justified stand that considers unstated assumptions and provides a new perspective.	4-5
E2	Answer makes a stand that attempts to use economic justification.	2-3
E1	Answer makes an unjustified stand.	1