CATHOLIC JUNIOR COLLEGE

JC2 Preliminary Examination

Higher 2

ECONOMICS   9570/02

Paper 2   **12 September 2023**

Additional Material: Answer Booklet   **2 hours 30 mins**

READ THESE INSTRUCTIONS FIRST

An answer booklet will be provided with this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

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.

Start a new question on a fresh page.

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

This document consists of **3** printed pages and **1** blank page.

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JC 2 PRELIMINARY EXAMINATION/2023

Answer **three** questions in total.

Section A

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

1. Since the pandemic hit, many gaming console companies were affected by supply chain disruptions and found themselves short on component parts. At the same time, consumer demand for gaming consoles also surged in 2021 when vaccines became available. These developments have resulted in a shortage of computer chips used in gaming consoles and car production.

    Source: Various

    (a) Explain why there is a shortage in computer chips, and how it affects the market for gaming consoles. [10]

    (b) Discuss the impact the supply chain disruptions are likely to have on consumers of gaming consoles and its related products. [15]

2. Information failures exist in the healthcare and insurance markets. In the management of this issue, Singapore introduced co-payment in its health insurance system to encourage everyone to exercise responsibility and make prudent decisions. Effort has also been made to encourage early diagnosis of diseases to improve long-term health.

    Source: The Straits Times 2021

    (a) Explain how the presence of **two** types of information failures can prevent an efficient allocation of resources. [10]

    (b) Assess whether government intervention will be effective in dealing with information failure in Singapore's healthcare and health insurance markets. [15]

3. Governments must continue to play their roles as robust enforcers of competition and consumer protection to keep cost of living low and to protect consumers' rights.

    Source: The Guardian 2021

    (a) Explain how rational producers make their production decisions and why prices are often higher in less competitive markets. [10]

    (b) Discuss whether government intervention to increase competitiveness in the market will necessarily improve market outcomes for consumers and the society at large. [15]

Section B

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

4. In October 2022, MAS tightened its monetary policy for the fifth consecutive time within 12 months. Although Singapore's GDP growth was expected to slow, MAS had assessed that a further tightening of monetary policy was needed to help dampen still-elevated inflation and ensure medium-term price stability.

Source: mas.gov.sg/news/monetary-policy-statements/
2023/mas-monetary-policy-statement-14apr23

    (a) Explain how inflation could occur during periods of high economic growth as well as during a recession. [10]

    (b) Discuss the effectiveness of demand-side and supply-side policies in reducing the rate of inflation in all economies. [15]

5. Japan's trade deficit roughly quadrupled to a record $160 billion USD in fiscal year 2022, imports jumped 32.2% from a year earlier, while exports increased 15.5%. Japan had a trade surplus with the United States but a much higher deficit with China.

Source: asia.nikkei.com/Economy/
Japan-posts-record-160bn-trade-deficit-for-fiscal-2022

    (a) Explain the factors that contribute to an increasing balance of trade deficit. [10]

    (b) Discuss whether governments should prioritize addressing a balance of trade deficit or a budget deficit. [15]

6. While Singapore continues to sign more Free Trade-Agreements, most recently with the Pacific Alliance, a Latin American bloc of countries, others have retreated to protectionism to boost their economic resilience and self-sufficiency amidst global economic turbulence.

Source: Various

    (a) Explain how the FTA between Singapore and the Pacific Alliance will benefit its domestic firms and macroeconomy. [10]

    (b) Discuss the view that small and open economies like Singapore should retreat to protectionism amidst this period of economic turbulence. [15]

END OF PAPER

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1. Since the pandemic hit, many gaming console companies were affected by supply chain disruptions and found themselves short on component parts. At the same time, consumer demand for gaming consoles also surged in 2021 when vaccines became available. These developments have resulted in a shortage of computer chips used in gaming consoles and car production.

Source: Various

(a) Explain why there is a shortage in computer chips, and how it affects the market for gaming consoles. [10]

(b) Discuss the impact the supply chain disruptions are likely to have on consumers of gaming consoles and its related products. [15]

Part 1(a) Explain why there is a shortage in computer chips, and how it affects the market for gaming consoles. [10]

Command	Explain why – to give detailed reasons
Content	• Shortage = Qd > Qs • Impact on market: Equilibrium P and Q
Context	Context as mentioned in the pre-amble & question
Approach	R1: Shortage in computer chips R2: Effect on market for gaming consoles (Equilibrium P and Q) R3: Extent of P and Q changes using elasticity concepts

Suggested Answer

Part	Description	Remarks
Introduction	A shortage occurs when the quantity demanded is greater than the quantity supplied at the market equilibrium price.	Define
	In this essay, I will look at the reason why there is a shortage in computer chips, establish the relationship between computer chips and gaming consoles, and explain the impacts on the market for gaming consoles.	Overview
Body- R1	**R1: Shortage in computer chips** When the COVID-19 pandemic hit, productions came to a standstill as people were ordered to stay home to prevent the spread of the disease. This resulted in factories shutting down. Due to expectations of future prospects, producers, including that of computer chips, decided to decrease their production to avoid being stuck with unsold goods. As such, supply decreases, shifting	

leftwards from S0 to S1. (can also explain that SS remains stagnant)

In the following year when vaccines became readily available, consumers were expecting pre-covid resumption of activities, hence the taste and preferences of products, including that of gaming consoles and cars, increased. This led to a rise in demand for gaming consoles and cars, thereby increasing the derived demand for computer chips, which is a key factor input in the production of gaming consoles. Demand for computer chips increases, shifting rightwards from D0 to D1.
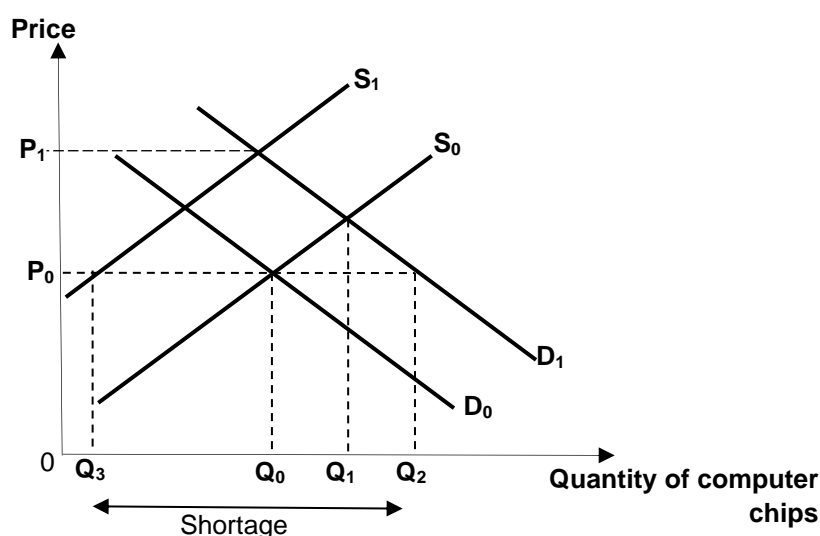
Figure 1: Shortage of computer chips

At the original equilibrium price P0, quantity demanded increases from Q0 to Q2, but quantity supplied falls from Q0 to Q3. Since Qs < Qd, this results in a shortage of Q3Q2.

Body- R2 | **R2: Effect on market for gaming consoles**

Computer chips is an essential factor input in the production of gaming consoles. Given the aforementioned situation with the shortage of computer chips, where Qd (Q2) > Qs (Q3) at the original equilibrium price P0 in figure 1, this has led to an upward pressure on price. In response to the rise in price, producers will increase their quantity supplied and consumers will reduce their quantity demanded according to the law of supply and demand respectively. The price adjustment process continues until the new market equilibrium is reached, where equilibrium price rises from P0 to P1.

With reference to figure 2, given the rise in price of computer chips, this would increase the cost of production of gaming consoles. Hence, supply decreases, shifting leftwards from S0 to S1, ceteris paribus.
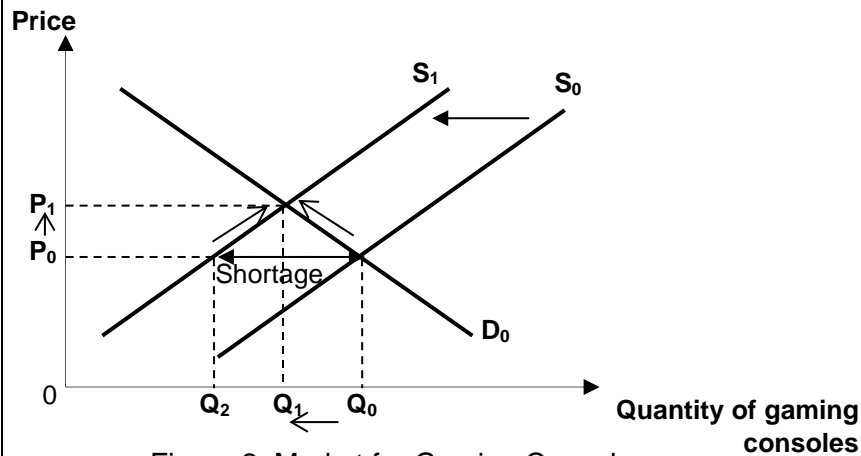
	Price Figure 2: Market for Gaming Consoles At the original equilibrium price P0, the quantity demanded is at Q0 and the quantity supplied is now at Q2. This creates a shortage at Q0Q2. The shortage would exert upward pressure on price In response to the rise in price, producers will increase their quantity supplied and consumers will reduce their quantity demanded according to the law of supply and demand respectively. The adjustment process continues until the new equilibrium price P1 and Q1 is reached, where Qd = Qs. Therefore, a fall in the supply, ceteris paribus, would cause a rise in equilibrium price from P0 to P1, and a fall in equilibrium quantity from Q0 to Q1.	
Body- R3 (Knowledge)	- Can use elasticity concepts to talk about the extent of price or quantity changes.	
Conclusion	To conclude, a shortage in the market for computer chips occurred because quantity demanded exceeded quantity supplied at the market equilibrium price. As a result, this led to a rise in equilibrium price and a fall in equilibrium quantity in the market for gaming consoles.	

Figure 2: Market for Gaming Consoles

Mark Scheme

Knowledge, Understanding, Interpretation, Application and Analysis			
Level	Analysis Level	Descriptors	Marks
L3	A+A A+C+K A+C	Response addresses the question fully and contains excellent analytical explanations of the shortage of computer chips and effects on the market for gaming consoles using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Response also contains appropriate examples to show application to current situations.	8-10
L2	A+K C+C+K C+C A+0 C+K+K	Response may contain cursory explanations of shortage of computer chips and effects on the market for gaming consoles with ability to identify facts, some ability at diagrams but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Part 1(b) Discuss the impact the supply chain disruptions are likely to have on consumers of gaming consoles and its related products. [15]

Command	Discuss – multiple perspectives
Content	TE of gaming consoles and its related products (XED)
Context	Supply chain disruptions; Gaming consoles and its related markets
Approach	R1: TE in the market of gaming consoles EV1: Significance of PED affecting TE R2: TE in a related market EV2: Depends on magnitude of XED R3: TE in another related market

Suggested Answer

| Part	Description	Remarks
Introduction	This essay will explore how the supply chain disruptions will affect the consumers of gaming consoles, and its related products.	
Body- R1	**R1**: **Impact the supply chain disruptions have on consumers of gaming consoles** As explained in part (a), the supply chain disruptions led to a rise in price of computer chips. Since computer chips are an essential factor input in the production of gaming consoles, cost of production would rise, causing supply of gaming consoles to decrease. Avid gamers would deem having gaming consoles as a necessity due to their addiction of having to play games every day. Thus, the demand for gaming consoles could be price inelastic. Given the rise in price of gaming consoles as explained above, this would lead to a less than proportionate fall in quantity demanded. Given that TE = P x Q, this would lead to a rise in TE for consumers of gaming consoles.	
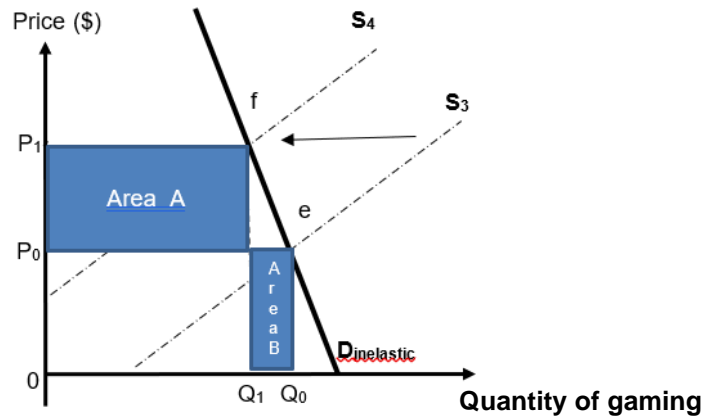
Figure 3: Market for Gaming Consoles (TE rises)

As illustrated in Figure 3 above, supply decreases, shifting leftwards from S3 to S4. Equilibrium price rises from P0 to P1, and given that demand is price inelastic, it led to a less than proportionate fall in Qd from Q0 to Q1. Since area A (rise in TE due to rise in price from P0 to P1) is greater than area B (loss in TE due to fall in Qs from Q0 to Q1), it can be concluded that TE for consumers of gaming consoles would rise.

Body-Eval1	**EV1**: **PED of gaming consoles could be elastic instead.**

On the other hand, the PED for gaming consoles could be elastic, as there are many substitutes for gaming e.g. computer devices, iPad, smartphones…etc. Hence, when prices rise due to a fall in supply, it will lead to a more than proportionate fall in quantity demanded, hence TE will fall instead.
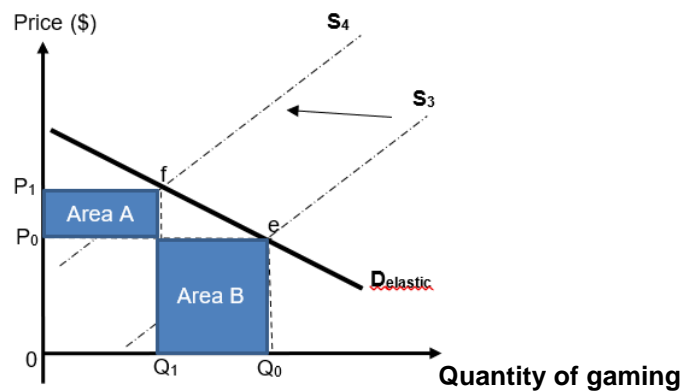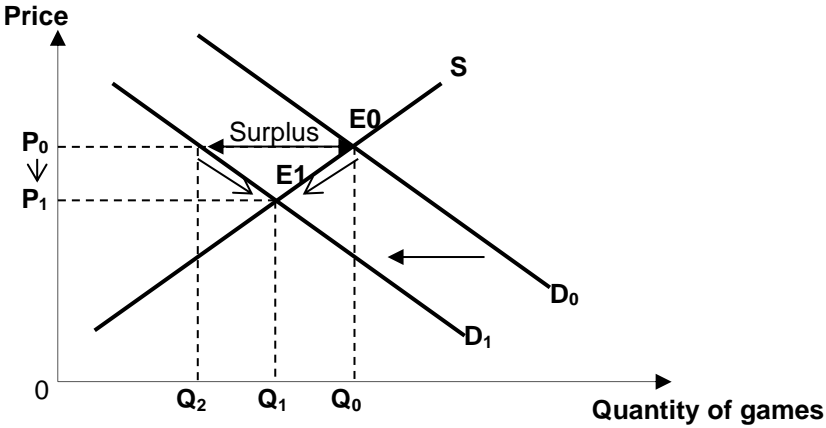

Figure 4: Market for Gaming Consoles (TE falls)

This can be seen in figure 4, where area B (fall in TE due to fall in Qd from Q0 to Q1) is greater than area A (rise in TE due to rise in price from P0 to P1).

Other accepted EV: Significance of PED affecting TE; inaccuracy of PED values

Body- R2	**R2: Impact the supply chain disruptions have on consumers of related markets (complements)** In order for the gaming consoles to work, one has to buy accompanying games that support the systems of the gaming consoles as well. As such, gaming consoles and games are complements, where XED <0. The rise in the price of gaming consoles, would cause quantity demanded of gaming consoles to fall. This will then reduce the demand for games as well, where demand for games shifts leftwards from D0 to D1. At the original price P0, quantity demanded Q2 is less than quantity supplied Q0. This creates a surplus of Q2Q0. The surplus would exert downward pressure on price. In response to the fall in price, consumers will increase their quantity demanded and producers will reduce the quantity supplied accordingly to the Laws of Demand and Supply respectively. The adjustment process continues until the new equilibrium E1 is reached, where Qd equals Qs at point E1. Therefore, a fall in demand for games, ceteris paribus, will cause a fall in both equilibrium price and equilibrium quantity from P0 to P1 and Q0 to Q1 respectively, resulting in a fall in TE from 0P0E0Q0 to 0P1E1Q1. **Price** Figure 5: Market for Games	
Body- Eval2	**EV2: Dependent on magnitude of XED – close or weak substitutes** However, the extent of decrease in the demand for games ultimately depends on the closeness of the complement relationship between gaming consoles and games e.g. Xbox / Nintendo Switch / PS4. If one does not purchase the related games, then having the gaming console would be useless. Hence, there is a very strong relationship between gaming consoles and its games, where $|XED| > 1$, where they are strong complements. Thus, the rise in price of gaming consoles would lead to a more than proportionate fall in the demand for games, thereby causing TE to fall to a greater extent.	

Body- R3 (Knowledge)	**R3: Impact the supply chain disruptions have on consumers of related markets (competitive supply)** Gaming consoles are not the only product that uses computer chips as one of its key factor inputs. As stated in the pre-amble, computer chips are also used in car production. Hence gaming consoles and cars could be related in terms of competitive supply. Given the more lucrative and high value product of cars, as compared to gaming consoles, with the onset of the supply chain disruptions, the computer chip producers would rather prioritize the sale of computer chips to car production, instead of gaming consoles. As such, this would lead to a further fall in supply of computer chips meant for gaming consoles, where price rises sharply (also because PES is inelastic), hence cost of production of gaming consoles would rise sharply, causing a greater decrease in the supply of gaming consoles. Assuming PED of gaming consoles is inelastic as explained above, TE would rise to a greater extent. Answer can also talk about the impact on related markets (substitutes e.g. computers, gaming laptops, iPads, smartphones…etc.) - Rise in price of gaming consoles >> rise in demand for substitutes (XED > 0) >> rise in TE	
Conclusion	**Stand** The supply chain disruptions would cause TE of gaming consoles and its substitutes to rise, whereas TE of complements would fall. **Substantiation** The extent of the impact on consumers of gaming consoles and its related products would depend on the elasticity values. While the extent of impact on consumers of gaming consoles depend on PED, the extent of the impact on consumers of gaming consoles' related products depend on XED, where the closeness of the relationship would affect the magnitude of XED and therefore the extent of shift in demand for the related products. **Something Special** At the end of the day, one must be mindful when using elasticity concepts to estimate the impact on consumers of gaming consoles and its related products. We assume everything else remains constant in the market other than the variables we are considering i.e. the ceteris paribus assumption. However in reality, there can be many factors affect demand, quantity demanded, supply and quantity supplied simultaneously. These will therefore affect the accuracy of the elasticity values calculated. Moreover, many of the elasticity values obtained are historical estimates of consumer behaviour and a lot may have changed over the years, or where it may only be applicable to a certain group of consumers. Therefore, it is wrong to assume that the data provided is always accurate. That is, the PED/XED values may be outdated, for another place/country or for a different group of consumers.	

Mark Scheme

	Knowledge, Understanding, Interpretation, Application and Analysis		
Level	Analysis Level	Descriptors	Marks
L3	A+A A+C+K A+C	Response addresses the question fully and contains excellent analytical explanations of impact on consumers of gaming consoles and its related products using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Response also contains appropriate examples to show application to current situations.	8-10
L2	A+K C+C+K C+C A+0 C+K+K	Response may contain cursory explanations of impact on consumers of gaming consoles and its related products with ability to identify facts, some ability at diagrams but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Evaluation

Level	Descriptors	Marks
E3	Response contains well-explained evaluative judgments for **two** requirements and a well-justified summative conclusion	5
E2	Response contains a well-explained evaluative judgment for at least 1 requirement, the other requirement may not be well evaluated. Response may not have a summative conclusion.	3-4
E1	Response contains evaluative judgments that is unexplained or not supported by the arguments presented in the answer. Judgment may not be linked to the context of the question. OR A well-explained evaluative judgment linked to one requirement.	1-2

2.   Information failures exist in the healthcare and insurance markets. In the management of this issue, Singapore introduced co-payment in its health insurance system to encourage everyone to exercise responsibility and make prudent decisions. Effort has also been made to encourage early diagnosis of diseases to improve long-term health.
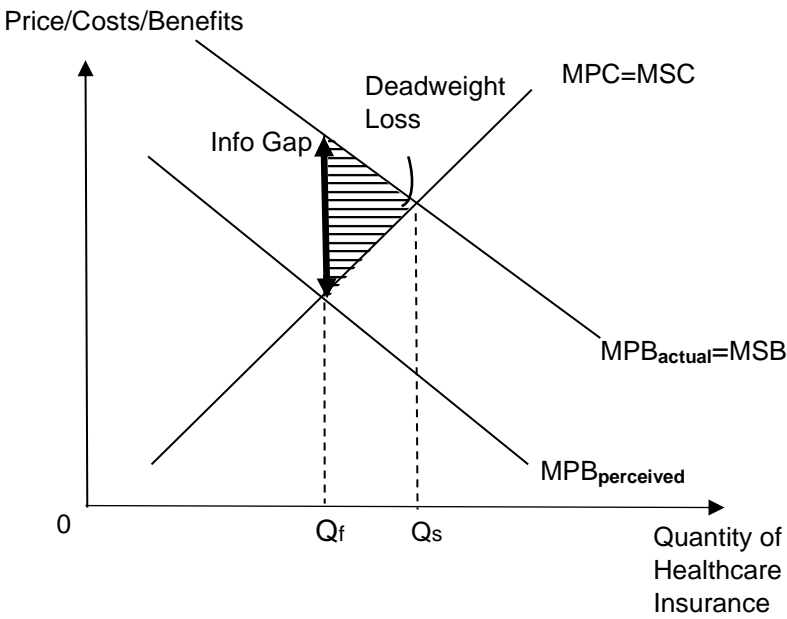
Source: The Straits Times 2021

(a)   Explain how the presence of **two** types of information failures can prevent an efficient allocation of resources.   [10]

(b)   Assess whether government intervention will be effective in dealing with information failure in Singapore's healthcare and health insurance markets.   [15]

Part 2(a) Explain how the presence of two types of information failures can prevent an efficient allocation of resources. [10]

Command	Explain how- make clear a process
Content	Information failures prevent efficient allocation of resources. - Asymmetric information→ MF - Imperfect information → MF
Context	No context word in question stem, thus can give any relevant examples
Approach	R1: How imperfect information prevents an efficient allocation of resources. R2: How asymmetric information prevents an efficient allocation of resources. R3: An alternative case of either asymmetric or imperfect information and how it prevents an efficient allocation of resources.

Suggested Answer

Part	Description	Remarks
Introduction	Efficiency in resource allocation is achieved when the resources are allocated to produce the combination of goods and services most wanted by society, where Marginal Social Benefit (MSB) = Marginal Social Cost (MSC). Market failure occurs when the free market fails to bring about an efficient allocation of resources. It occurs where the MSB does not equal MSC. When consumers or producers lack information, they would more likely make a poorer decision than if they had better information. In this essay, I will be explaining two types of information failure preventing allocative efficiency.	Define Overview
Body- R1	If left wholly to the free market, goods may be under-consumed because individuals under-estimate their actual private benefits	

from consuming healthcare insurance due to imperfect information and ignorance of consumers about the actual benefits of healthcare insurance.

Left to the free market, the free market equilibrium is at Qf, where perceived MPB = MPC. Let's assume that there is no externalities in this case, where MPC = MSC, and actual MPB = MSB.

A young healthy man may underestimate the probability of him falling seriously ill, and so fails to consider healthcare insurance, in consideration that as he ages, the chances of him becoming ill increases significantly. Since medical insurance premiums incur additional private cost currently but pay benefits only in the event of any future illness, this young healthy man, being myopic, will be less likely to buy any medical insurance currently as he thinks that he is still young and healthy. People will therefore under-consume health insurance, where perceived MPB is lower than actual MPB. The socially efficient equilibrium where society's welfare is maximised is at Qs where MSC = MSB = actual MPB. Since Qf is less than Qs, there is an underconsumption of healthcare insurance of QfQs. Over this QfQs output level, MSB > MSC, resulting in a deadweight loss as indicated by the shaded area. Thus, market failure exists, causing an inefficient allocation of resources.

Body- R2

Asymmetric information is a subset of imperfect information. It results in a distortion of incentive, where the party with more information may exploit the information gap, resulting in an inefficient allocation of resources.

Asymmetric information exists in the healthcare market. Patients, as non-medical experts, often know much less about their medical conditions, ailments and the treatments that are available, as compared to professionally trained doctors. Hence, due to this asymmetric information gap, doctors may overprescribe

	unnecessary tests or recommend more expensive treatments (which may be unnecessary), thereby resulting in overconsumption of healthcare services / higher healthcare expenditure. This leads to a wastage of resource, resulting in allocative inefficiency. [**Adverse Selection** due to asymmetric information between buyer and seller before the transaction has been completed.] Self-interested utility maximising buyers of insurance have more information about their health condition than the sellers. They thus have the incentive to conceal information about their pre-existing health conditions. The sellers have no way to check their information, and if they charge a lower premium, they will incur loses. Thus, they are unwilling to charge a lower premium in order to reduce risk. As such, this will always result in higher costs for the healthcare insurance firms. Therefore, to cover this, the insurance company raises the average price of premiums for all insurance policies, out-pricing the low-risk consumers out of the market. This can result in the healthcare insurance market for low-risk individuals collapsing because of adverse selection, thereby resulting in an underconsumption of insurance, deadweight loss and thus an inefficient allocation of resources.	
Body- R3 (Knowledge)	[**Moral Hazard** due to asymmetric information between buyer and seller after the transaction has been completed.] Moral Hazard in the insurance market occurs because insurance encourages risky behaviour – especially so when the actions of the insured party cannot be accurately monitored or controlled by the insurer. For example, whenever one buys any Apple products, AppleCare is offered – which is an insurance regarding damage or lost of Apple products. Hence, students/people who bought AppleCare were less careful/more careless about their Apple products, perhaps throwing the devices around and not taking good care of the Apple products, because they know that any repairs or resultant costs would not be borne by them. Due to moral hazard, with increased risk-taking behaviour, more claims might have been made due to insurance coverage from AppleCare, where the insured consumers have more information than Apple about their own actions after the transaction. If there is no way for the insurance company to monitor the buyer's behaviour after the AppleCare is purchased, there will be overclaims due to riskier behaviour and exploitation of the insurance market. Thus, this will increase social cost and result in an overconsumption of scarce resources (for claims), thus, leading to deadweight loss and market failure.	
Conclusion	In conclusion, asymmetric information resulting in adverse selection, and imperfect information are two types of information	

| | | failures that would lead to market failure where there is an inefficient allocation of resources. | |

Mark Scheme

	Knowledge, Understanding, Interpretation, Application and Analysis		
Level	**Analysis Level**	**Descriptors**	**Marks**
L3	A+A A+C+K A+C	Response addresses the question fully and contains excellent analytical explanations of two types of information failure preventing an efficient allocation of resources using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Response also contains appropriate examples to show application to current situations.	8-10
L2	A+K C+C+K C+C A+0 C+K+K	Response may contain cursory explanations of two types of information failure preventing an efficient allocation of resources with ability to identify facts, some ability at diagrams but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Part 2(b) Assess whether government intervention will be effective in dealing with information failure in Singapore's healthcare and health insurance markets. [15]

Question Interpretation

Command	Assess whether- 2 sided arguments required

Content	Government Intervention…information failures
	    - Policies to deal with imperfect information.
	    - Policies to deal with asymmetric information.

Context	Singapore healthcare and health insurance market
Approach	R1: Government intervention will be effective with dealing with imperfect information in the healthcare market. E1: Government intervention will NOT be effective with dealing with imperfect information in the healthcare market. R2: Government intervention will be effective with dealing with asymmetric information in the health insurance market. E2: Government intervention will NOT be effective with dealing with asymmetric information in the health insurance market.

Suggested Essay Outline

Part	Description	Remarks
Intro	The government can use public education to deal with imperfect information in the healthcare market and co-payment schemes to deal with moral hazard in the health insurance market.	Context
	The effectiveness of these policy options will depend on whether the policies can change consumer behaviour such that consumption reaches the socially optimal level of consumption.	Criteria
	This essay aims to discuss if the government measures can effectively deal with the information failures in both markets.	Overview
Body	**R1: Government intervention will be effective with dealing with imperfect information in the healthcare market.**	
		P
	The government can use public education to such as the encouragement of early diagnosis of diseases to improve long-term health to deal with information failure in the healthcare market. Public education involves the use of advertisements and campaigns by the government to educate the public and influence consumers' perceived MPB. Some examples of such agencies in Singapore include the Health Promotion Board, which helps consumers see that regular diagnostics does not merely allow for early	E & E

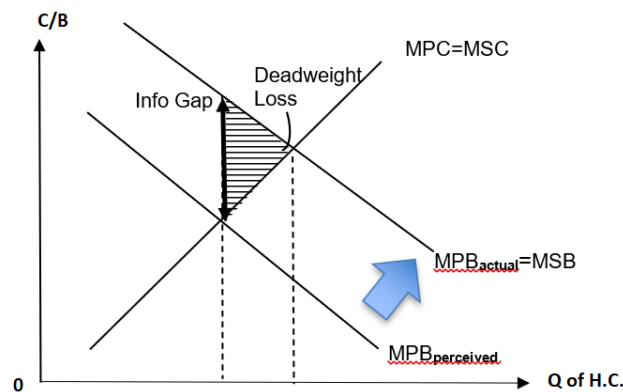|		
	interventions for serious illnesses but may also detect other health challenges, which allows for corrective action which will improve one's quality of life. With reference to Figure 3, public education campaigns can educate consumers of the actual MPB to increase $MPB_{perceived}$ and bridge the information gap between $MPB_{perceived}$ and MPB_{actual}. As such, $MPB_{perceived}$ will shift to MPB_{actual}. Consumers of healthcare will then consume where MPBactual = MPC at Qs. There will thus no longer be underconsumption, the deadweight loss will be eliminated and market failure will be resolved. Figure 3: Public Education Effect Also, due to the salience bias, the prominence of media messages regarding the positive impacts of vaccination and the early diagnostics will also increase the consumption of healthcare services as the benefits of healthcare are now more salient to the consumers. This will help to reduce the underconsumption and deadweight loss as well.	Integration of cognitive biases Link
	E1: Government intervention will NOT be effective with dealing with imperfect information in the healthcare market. However, public education may not be effective in dealing with the market failure due to information failure. Habits and mindsets are hard to change, and even if individuals have the information, they may not want to change their habits and thus, the quantity consumed will not reach the social optimal output. They may also avoid screening due to fear of uncovering a certain disease. Furthermore, there may be a long time lag when it comes to allowing people to react to the information. Thus, this policy's effectiveness is uncertain or limited, at best.	FEAST-Effectiveness
	R2: Government intervention will be effective with dealing with asymmetric information in the health insurance market.	
		P

	In the case of market failure involving moral hazard, it is sometimes possible to reduce the risk-taking behaviours by the insured party through the use of co-payments. In such cases the insured person co-pays part of the actual cost.	
	For instance, patients in Singapore are expected to co-pay part of their medical expenses and to pay more when they demand for a higher level of service. This is to ensure individual responsibility and to prevent people from seeking medical services that may not be necessary. From an economic analysis perspective, co-payment introduces a cost-sharing mechanism that aligns policyholders' incentives with those of insurers. When individuals face a co-payment requirement, they have a direct financial stake in their decisions regarding the utilization of insurance benefits. This financial stake creates an economic incentive to consider the costs and benefits of seeking healthcare services or making insurance claims.	E & E
	By implementing co-payment, the price sensitivity of individuals increases. They become more mindful of the expenses associated with their insured events and tend to make more careful choices, thereby reducing unnecessary or excessive utilization of insurance benefits. This reduces moral hazard by discouraging individuals from engaging in behaviours that increase the likelihood of making claims, thereby mitigating the adverse impact on insurance costs.	Integration of cognitive biases
	This will deter consumers from taking unnecessary risks due to consumers' loss aversion. To avoid such losses, consumers will try to avoid risk taking behaviours. As such, insurers face lesser risks in insurance provision. There will be lesser claims, mitigating the overconsumption of scarce resources and thus, reduces deadweight loss, leading to a more efficient allocation of resources in the health insurance market.	L
	E2: Government intervention will NOT be effective with dealing with asymmetric information in the health insurance market.	
	Currently, co-payment amounts only forms a very low percentage of the overall medical cost. Furthermore, consumers can buy riders to reduce their co-payment amounts. Previously in Singapore, purchasing a high-end rider plan could cover the co-payment amounts and consumers do not bear any cost in an event of a medical mishap. Thus, they will not have incentive to watch their risk-taking behaviour and the moral hazard issue may not be mitigated.	FEAST-Effectiveness
	R3: Government intervention will be effective with dealing with asymmetric information in the health insurance market/health care market	
	Candidates can raise points such as:	

	- Public education to deal with persuasive advertising for certain healthcare products - Signalling to deal with moral hazard of doctors Any sensible brief explanations of a policy to deal with information failure in either market can be credited as R3.	
Conclusion	**Stand** Public education may achieve limited effectiveness in addressing the information failure in the healthcare market. Co-payment however is likely to be effective. **Substantiation- SITUATION of STRAWS** Although the provision of information can incentivize better use of healthcare, in reality, people may not react to the information provided because of fear and complacency. Also, the high healthcare costs may also act as a deterrence of people seeking healthcare treatment. Although riders can reduce the effectiveness of co-payments, Singapore has recently legislated a compulsory co-payment of 5%, which will still be significant in deterring risk-taking behaviour. Thus, it is unlikely that its effects are negligible to the consumers. **Something Special- RECOMMENDATION of STRAWS** There is a need to complement current policies with other policies and periodic reviews in place to enhance its effectiveness. To improve resource allocation in the healthcare market, the government may have to provide subsidies alongside public education in order to mitigate cost considerations. For moral hazard, it may have to review the amount from time to time and if risk-taking behaviours do increase, co-payment amounts should also increase accordingly to mitigate the moral hazard issue.	

Mark Scheme

	Knowledge, Understanding, Interpretation, Application and Analysis		
Level	Analysis Level	Descriptors	Marks
L3	A+A A+C+K A+C	Response addresses the question fully and contains excellent analytical explanations of how government intervention to increase competition will improve consumers' and societal outcomes using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Response also contains appropriate examples to show application to current situations.	8-10
L2	A+K C+C+K C+C A+0 C+K+K	Response may contain cursory explanations of how government intervention to increase competition will improve consumers' and societal outcomes with ability to identify facts, some ability at diagrams but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Evaluation

Level	Descriptors	Marks
E3	Response contains well-explained evaluative judgments for **two** requirements and a well-justified summative conclusion	5
E2	Response contains a well-explained evaluative judgment for at least 1 requirement, the other requirement may not be well evaluated. Response may not have a summative conclusion.	3-4
E1	Response contains evaluative judgments that is unexplained or not supported by the arguments presented in the answer. Judgment may not be linked to the context of the question. OR A well-explained evaluative judgment linked to one requirement.	1-2

3.   Governments must continue to play their roles as robust enforcers of competition and consumer protection to keep cost of living low and to protect consumers' rights.

Source: The Guardian 2021

(a)   Explain how rational producers make their production decisions and why prices are often higher in less competitive markets.   [10]

(b)   Discuss whether government intervention to increase competitiveness in the market will necessarily improve market outcomes for consumers and the society at large.   [15]
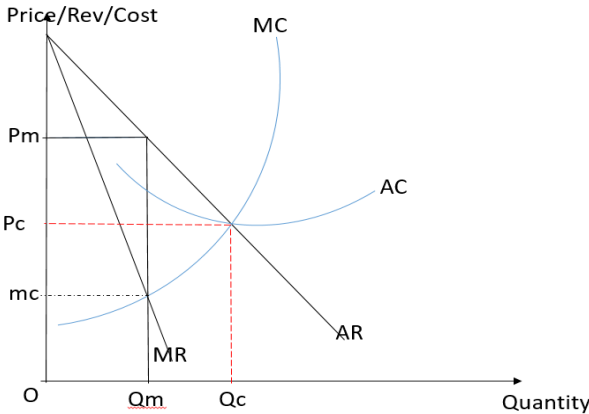
Part 3(a) Explain how rational producers make their production decisions and why prices are often higher in less competitive markets. [10]
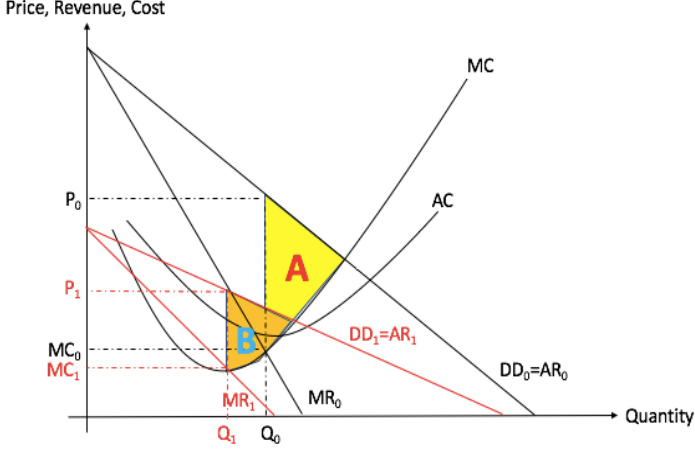
Question Interpretation

Command	Explain how- make clear a process
Content	How rational producers make production decisions- Marginalist Principle Why Prices are higher in less competitive market? - Different market share (AR level) and PED levels of the market
Context	No context word in question stem, thus can give any relevant examples
Approach	R1: How rational producers make production decisions R2: Why Prices are higher in less competitive market R3: Another reason why prices may be higher?

Suggested Essay Outline

Part	Description	Remarks
Intro	Rational producers make production decisions to maximize profits. They do so by applying the marginalist principle. Rational decision making by firms in different market structures will result in different price and output decisions, and thus result in varying degrees of prices.	Setting the context
	This essay aims to explain how rational production decisions are made and account for the fact that prices may be higher in less competitive markets.	Overview of the essay
Body- R1	**R1: How rational producers make production decisions?** Rational producers would want to maximize their profit and would hence want to produce where MR=MC, and MC cuts MR from below.	P
	MR is downward sloping because of the negative relationship between price and quantity demanded. An example of marginal revenue is the price of the good a producer gets, which reflects the additional income he receives from selling one more unit of good. The marginal cost curve is generally	E & E

upward-sloping, because of the diminishing marginal returns implies that additional units are more costly to produce. An example of marginal cost is the additional labour, raw material and electrical costs for producing an additional unit of the good.

At an output level where MR > MC, the addition to total revenue is higher than addition to total cost from producing an extra unit of the output, thus resulting in increasing profit. Thus, they will continue producing. The opposite happens when MR <MC. As such, the petrol retail firms will produce an output shown by Qm in Figure 1.

The demand curve is downward sloping signifying price setting ability of the firms and is shown by the AR curve on the diagram.
For the output Qm, the firm will follow its AR curve and set a price equal to the reservation price, Pm for their products.

Figure 1: P and Q determination

L

Thus, rational producers apply the marginalist principle to determine their price and output decisions.

Body- R2	**R2: Why prices are higher in less competitive markets?**	
	Prices are normally higher in less competitive markets because of the higher market share of firms, which result in them having a higher market power.	P
	Due to the smaller number of firms in less competitive market like monopolies and oligopolies, the firms' market share is often larger than in more competitive markets. Thus, the AR of firms in less competitive market will be higher than those in more competitive markets. Due to less substitutes available, the PED of goods produced by less competitive firms is also < 1. For example, there will be limited number of telcos as opposed to hawker stalls or hair salons, thus the former presents less options for consumers to choose as opposed to the latter.	E & E

	As seen in Figure 2, when AR facing the firm is higher and less elastic, MR will also be higher and steeper. The rational firm in the less competitive market will produce at Q0 where MC=MR and sell the good at a price P0. This is much higher than a more competitive firm with a lower and more price elastic AR, which produces at Q1 and charges price P1.	
	Figure 2: Less VS More competitive firms' P and Q determination	L
	Thus, prices are higher in less competitive markets.	
Body- R3 (Optional)	Prices are often higher in less competitive markets like monopoly as the firm will not have incentive to engage in price competition. Being the only firm in the market, it has very high market power and has no threat of competition, thus, it is unlikely to reduce prices. In more competitive markets, firms have to engage in price competition in order to stay competitive, thus, they will engage in discount pricing and thus, result in a lower price.	A short explanation of the point.
Conclusion	Thus, rational production decisions are made via the marginalist principle and prices are much higher in less competitive markets due to firms having higher market share and a less price elastic demand.	Summary of points

26

Mark Scheme

Knowledge, Understanding, Interpretation, Application and Analysis			
Level	Analysis Level	Descriptors	Marks
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L2	A+K C+C+K C+C A+0 C+K+K	Response may contain cursory explanations of how rational firms make their production decisions and why prices may be higher in less competitive markets with ability to identify facts, some ability at diagrams but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Part 3(b) Discuss whether government intervention to increase competitiveness in the market will necessarily improve market outcomes for consumers and the society at large. [15]

Question Interpretation

Command	Discuss whether- 2 sided arguments required
Content	Government intervention to increase competitiveness. - Effect on DWL (on society at large) - Effect on Prices, CS, Quality of goods, Choice, Equity (consumers' outcomes)
Context	No context word in question stem, thus can give any relevant examples
Approach	R1: Government intervention to increase competitiveness will be effective in improving consumers' outcomes. E1: Government intervention to increase competitiveness will NOT be effective in improving consumers' outcomes. R2: Government intervention to increase competitiveness will be effective in improving society's outcomes. E2: Government intervention to increase competitiveness will NOT be effective in improving society's outcomes.

Suggested Essay Outline

| Part	Description	Remarks
Intro	Competition is believed to enhance consumers' and societal welfare as it provides incentive to be cost efficient, innovative, and less complacent. However, market dominance can also be beneficial to the society.	Context
	This essay aims to discuss if government intervention to increase competitiveness indeed improves consumers' and societal outcomes.	Overview
Body	**R1: Government intervention to increase competitiveness will be effective in improving consumers' outcomes.** One way the government can increase competition in the market is via antitrust policies. Antitrust laws are regulations that encourage competition by limiting the market power of any firm. In Singapore, the body that enforces such regulations is the Competition and Consumer Commission of Singapore. With more competition, there will be entry of new firms, which will increase competition in the industry. Firms may become **more productive efficient** as they are more concerned with being more cost efficient when more firms enter the market. When firms review the optimal combination of labour and capital to produce the goods, cost can be reduced. With the reduction of costs, firms are now able to produce on their LRAC.	P E & E
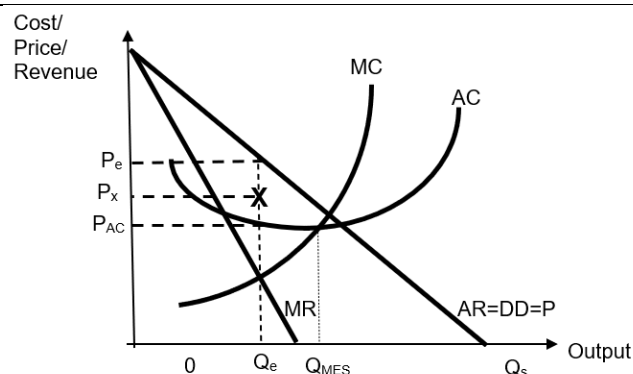
Figure 1: Productive Efficiency

With reference to Figure 1, the incumbent firm could be producing at a productive inefficient level, with the cost at Px. With increased competition, it may innovate and become more cost efficient and produce at Pac, which allows it to be productive efficient from the firms' point of view. This may translate into lower prices for the consumer and increase their level of consumer surplus.

L

E1: Government intervention to increase competitiveness will NOT be effective in improving consumers' outcomes

The incumbent dominant firms could have enjoyed commercial economies of scale via bulk discounts because of their extensive purchases of factors of production. For example, SP Group could have enjoyed bulk discounts for their purchase of coal and oil, which are necessary raw materials for electricity generation. As such, their average cost used to be lower. However, with a decreased market share and hence, a fall in output, firms no longer enjoy discounts and this increases their average cost, as they no longer enjoy commercial economies of scale.
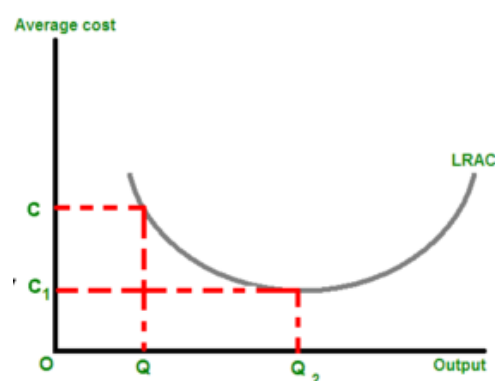
With reference to Figure 2,

Figure 2: LRAC curve

When output decreases from Q2 to Q, average cost increases from C1 to C. This may translate into higher prices for consumers and reduce consumer surplus.

(Especially: In case of **natural monopoly**, which is a type of monopoly that exists due to high fixed or start-up costs such as Public Rail Transport and Energy Providers. With natural monopolies, economies of scale are very significant so that minimum efficient scale is not reached until the firm has become very large in relation to the total size of the market.)

R2: Government intervention to increase competitiveness will be effective in improving society's outcomes

P

E & E

With more competition, deadweight loss will be smaller. Existing firms faces a fall in AR due to falling market share and its demand become more price elastic due to the availability of substitutes. For example, with the liberalization of the energy market in Singapore, each firm now has a smaller market share and consumers have more choices to choose from.

Figure 3: Fall in AR and PED>1

As seen from Figure 1, AR shifts left from AR_1 to AR_2. Firms now produce where MC cuts MR1, and produces are Q1, price is set at P1. Price and Quantity of firm falls from P_0 to P_1 and Q_0 to Q_1. Firms' mark-up between price and MC reduces (P_0 MC0 to P_1 MC1). The firms are now more allocative efficiency, as can be seen from the smaller deadweight loss (Area A to Area B). This hence increases societal welfare. Thus, government intervention to increase competitiveness will be effective in improving society's outcomes.

L

E2: Government intervention to increase competitiveness will NOT be effective in improving society's outcomes

	However, the above assumes if we are starting from a market with high degrees of market dominance. If market has been highly contestable, for example the F&B industry, Singapore's Telco and Energy Markets, the firms' behaviour are already in check. There is already a healthy level of competition that provides incentives for firms to be productive and dynamic efficient. Entrance of more firms could erode profits and cause them to close down. That results in a loss or disruption of the good or service which creates a larger deadweight loss for society.	

	R3: Government intervention to increase competitiveness will be effective in improving society's/consumers' outcomes
	
	Candidates can speak about how competition can:
	   - Improve equity
	   - Improve dynamic efficiency and creates more choice/better quality/ cost reducing strategies etc.	

Conclusion	**Stand** Whether increased competition is beneficial for consumers' and society's outcomes depends on the competition at hand. **Substantiation- SITUATION of STRAWS** Although competition has its benefits, too much competition can also result in cost increases or erosion of firms' profits, which may lead to them ceasing operations and result in larger deadweight loss. If the industry already has a healthy level of competition, further intensifying competition may also be undesirable, and may not result in many improvements, since firms are already competitive in the first place. **Something Special- RECOMMENDATION OF STRAWS** Thus, the government may like to calibrate carefully before any intervention or only increase competition for certain industries with more dominant firms to reap optimal benefit.	

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L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Evaluation

Level	Descriptors	Marks
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4. In October 2022, MAS tightened its monetary policy for the fifth consecutive time within 12 months. Although Singapore's GDP growth was expected to slow, MAS had assessed that a further tightening of monetary policy was needed to help dampen still-elevated inflation and ensure medium-term price stability.

Source: mas.gov.sg/news/monetary-policy-statements/
2023/mas-monetary-policy-statement-14apr23

(a) Explain how inflation could occur during periods of high economic growth as well as during a recession. [10]

(b) Discuss the effectiveness of demand-side and supply-side policies in reducing the rate of inflation in all economies. [15]

Part 4(a) Explain how inflation could occur during periods of high economic growth as well as during a recession. [10]

Command	Explain how
Content	Causes of inflation
Context	Period of recession with rising unemployment rate
	Period of rising economic growth with falling unemployment rate
	No specific country, but preferably Singapore
Approach	Introduction
	Requirement 1: Inflation could occur during periods of high economic growth
	Requirement 2: Inflation could occur during recession
	Conclusion

Introduction
Inflation is the persistent increase in general price level. Demand-pull inflation is caused by increasing AD when the economy is almost or at full capacity, where AS is vertical straight line. Cost-push inflation, on the other hand, is due to rising costs in the economy. Inflation rates typically rise as AD and economic growth increase, but can also can also occur during recession.

Requirement 1: inflation can occur during periods of high economic growth.
Rising economic growth is fuelled by rising components of AD such as C and I. For example, rising economic growth exudes positive economic outlook and increase further business expectations, leading to increase in AD. Rising global economic growth will increase the country's export, leading to increase in AD. Government's expansionary policies to stimulate economic growth such as increasing government will further fuel AD.
Likewise,
Such increase in autonomous AD will create shortages of goods and services at the initial GPL level (P1) causing an upward pressure on price. As firms increase production to meet the rising AD, demand for factors of production increases. As the economy moves closer to full employment, the increased production results in competition for scarce resources → increases factor prices → Each unit of output becomes costlier to produce, causing an upward pressure on GPL. GPL continues to increase until the economy re-equilibrates at the higher GPL P3, causing demand-pull inflation
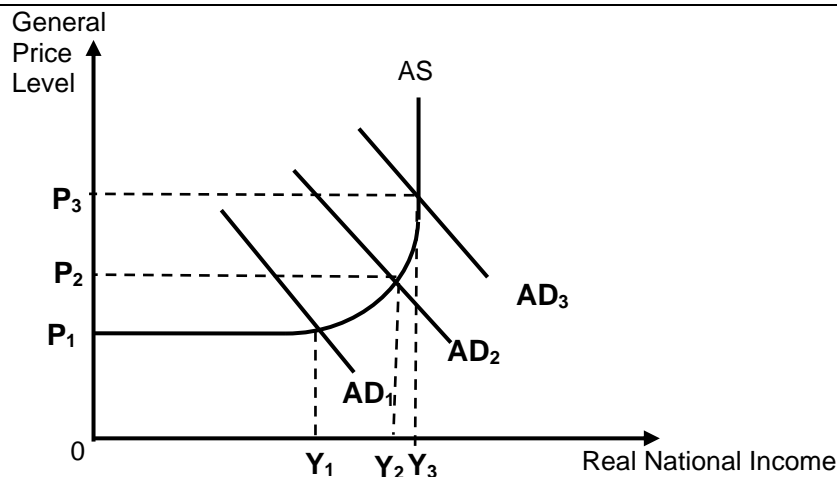
Requirement 2: Inflation could occur during recession.

Recession is a period of falling real national income or negative economic growth for at least two quarters. It is typically caused by falling AD due to poor economic outlook. The low AD will, through the multiplier process, leads to fall in production and employment, leading to falling real national income and hence fall in economic growth.

However, when the falling RNY is accompanied by rising costs of resources such as rising oil prices, there will be rising cost-push inflation accompanying the recession.

The Russia-Ukraine war has led to disruptions in the global supply of resources, especially oil and grains, causing large increases in fuel and food prices → increasing production costs.

This is worsened by the rising interest rates as central banks attempt to tame rising inflation caused by pent-up demand after the pandemic. The increase in interest rate increases production costs. To maintain profit, firms cut down production. This causes the country's AS to fall, as seen in the leftward shift of the AS curve from AS1 to AS2, leading to shortages of goods and services in the economy at the prevailing GPL P1, causing upward pressure on GPL hence rising inflation despite the economic recession.
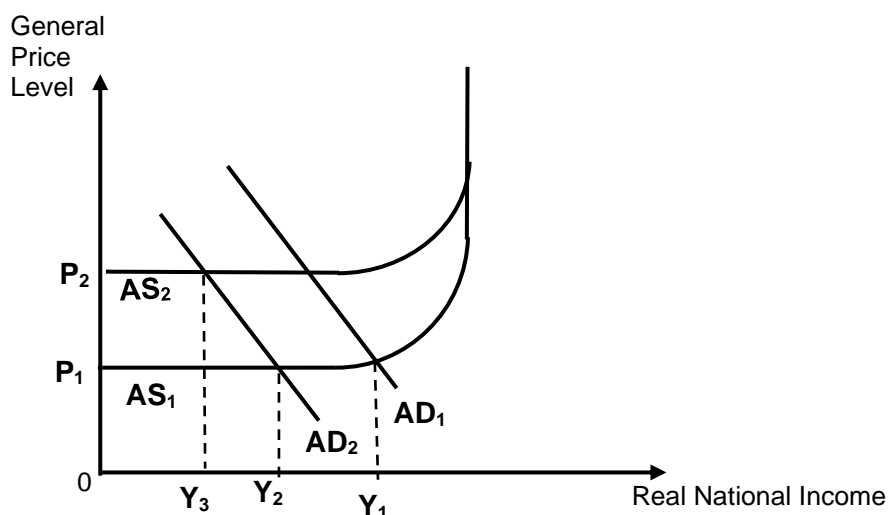
High inflation rate is self-sustaining and can lead to falling economic growth and recession.

Rising inflation rate leads to rising cost of resources and rising labour costs as workers demand higher wages to compensate for their falling real income. This will lead to cost-push inflation, which is pushed onto the consumers, who will again demand for higher wages, further increasing inflation.

Large increases in GPL that surpasses rate of EG leads to falling RNY, lowering households' purchasing power, causing a fall in households' consumption. This will further lower AD and worsens the recession. The price instability caused by such high inflation will further worsens the already poor business outlook, causing further fall in I and C.

The overall fall in AD caused by the high inflation will lead to fall in production and RNY, causing further recession.

Conclusion:

Inflation can occur both in periods of high economic growth and recession. Demand-pull inflation typically comes with rising AD during period of high economic growth when the economy is at or almost at full employment. However, inflation that occurs during recession is mainly cost-push and can be cause for the recession.

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L2	A+K C+C+K C+C A+0 C+K+K	Response may contain cursory explanations of how inflation could occur during periods of high economic growth as well as during a recession with ability to identify facts, some ability at diagrams but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Part 4(b) Discuss the effectiveness of demand-side and supply-side policies in reducing the rate of inflation in all economies. [15]

Command	Discuss
Content	Demand-policies Supply-side policies
Context	No specific context. But students are expected to bring in possible contexts to compare for illustration: e.g. large countries vs small and open economy
Approach	Introduction Requirement 1: demand-side policies to reduce the rate of inflation Evaluation 1: Effectiveness of demand-management policies in large countries such as US and China vs small and open economies like Singapore Requirement 2: supply-side policies to reduce the rate of inflation. Evaluation 2: Effectiveness of supply-side policies in countries with different state of economy. Overall Evaluation

Introduction

Typically, governments tend to use demand-management policies to address demand-pull inflation and supply-side policies to address cost- push inflation. However, the degree of effectiveness of these policies differ between countries, depending on the nature and state of the country's economy, among other factors.

Requirement 1: demand-side policies can be used to lower a country's high inflation rate.

The use of demand-management policies are policies that target at reducing AD to slow down the increase in GPL during period of high inflation.

Contractionary fiscal policy is a demand-side policy that seeks to reduce G through reducing government spending and lower C and I by raising income and corporate tax respectively. Increasing income taxes will lower households' income and hence their purchasing power, thereby reduces C. Increasing corporate taxes, on the other hand, reduces firms' after-tax profit. This provides less funds for the firms to invest, reducing I → reduces overall AD.

On the other hand, contractionary interest rate centred monetary policy will decrease C and I by increasing interest rate to increase the cost of borrowing. This will reduce consumers' consumption of big-ticket items on credit. At the same time, the increase in interest rates will reduce MEI as expected returns from investments falls , causing fall in I.

General Price Level (vertical axis), Real National Income (horizontal axis). AS, AD₁, AD₂, P₁, P₂, Y₂, Y₁
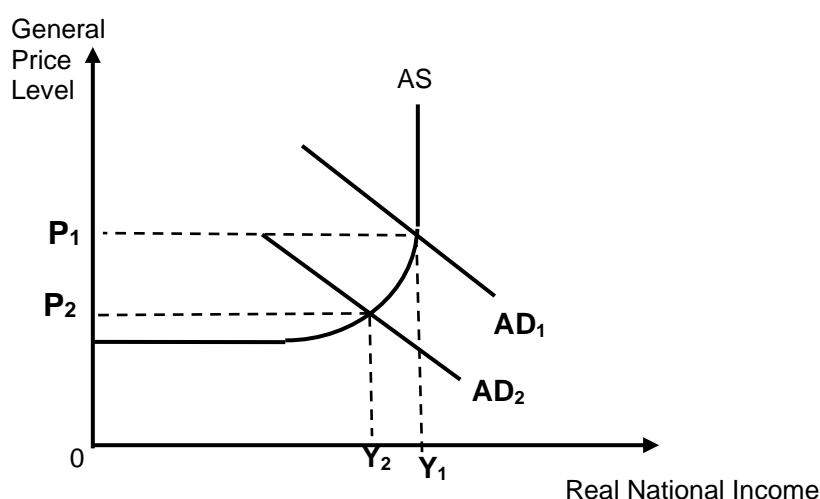
The fall in C, I and G will increase AD, ceteris paribus. Assuming the economy is operating at full employment, the fall in AD creates surplus of goods and services at the initial GPL level (P1), causing downward pressure on GPL as inventories increase due to falling demand for goods and services, causing the firms to reduce their production. As the economy moves away from full employment, factors of production are no longer scares hence reduces competition for factors of production → decreases factor prices. The downward pressure on GPL continues until the economy re-equilibrates at lower GPL P2, reducing the demand-pull inflation

Evaluation 1:

Effectiveness of demand management policies in addressing inflation depends on the root cause of the inflation.

- Demand-management policies can be effective for countries with large domestic demand and less open to the global market, like Indonesia. Government policies to lower C and I will lead to large fall in overall AD thereby reducing the high inflation. However, for open economies with very large external demand like Singapore where demand-pull inflation are often caused by rising external demand, the fall in AD caused by demand-management policies may not be sufficient to bring down the country's inflation rate to a healthier level.

- Likewise, countries whose investments are mainly FDIs like Ireland and China in the early 2000s, the effectiveness of contractionary interest rate policy is limited in reducing I to reduce inflation. The country's increase in interest rate would have impact only on the domestic firms which takes up a small proportion of the country's overall investment.

- Demand-management policies is effective for countries facing demand-pull inflation where the high inflation is caused by rising AD. However, for countries that are faced with cost-push inflation, demand-management policies will worsen the inflation. Raising interest rate will increase cost of borrowing, hence further increase cost of production cost which will be passed on to the consumers, thereby increasing inflation rate further. Likewise, raising corporate rate will mean additional cost of production for firms.

Effectiveness of demand-management policies will also be limited if the inflation is stoked by both rising AD and rising labour cost causing spiral inflation.

Requirement 2: Supply-side policies can be used to lower a country's high inflation rate.

Government supply-side policies to help firms reduce their production costs would help address cost-push inflation. Government subsidies such as rental subsidies and government financial aid to firms to cover their labour costs and costs of other essential resources such as fuel, will help them cover their costs of production hence continue to increase production at lower average costs. This will increase SRAS, shifting SRAC curve down to SRAS2. This creates a surplus at the prevailing GPL, resulting in an downward pressure on GPL until the surplus is eliminated at a lower equilibrium GPL, P2, hence reducing inflation rate.
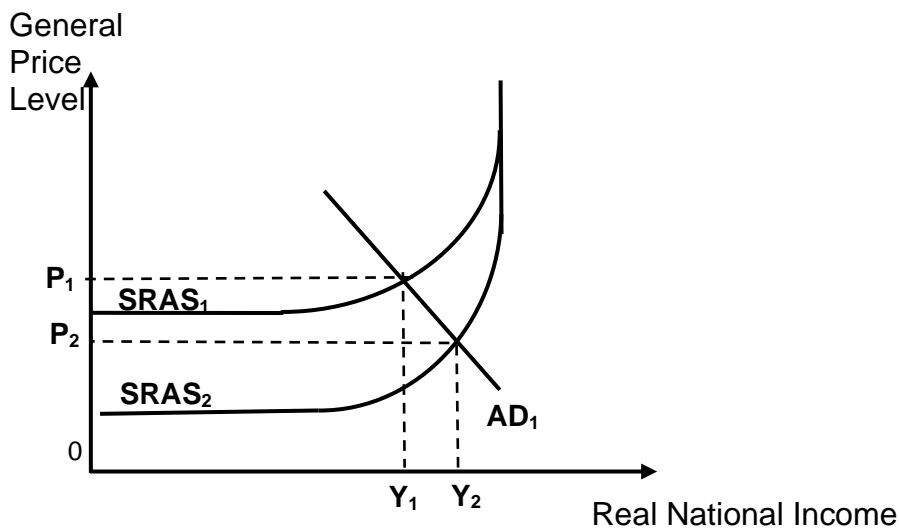
Supply side policies often involve improving the quality, quantity of factors of production and the adoption of new technology. This may take the form of grants for the adoption of new technology and training grants to increase the productivity of labour in tendon with the new technology. An example would be where workers are encouraged and given financial support to undergo training to upgrade their skills. Firms may also be given financial supports to adopt new technology to make their production process more efficient and productive. This will increase productivity, thereby increasing productive capacity and hence increase LRAS.
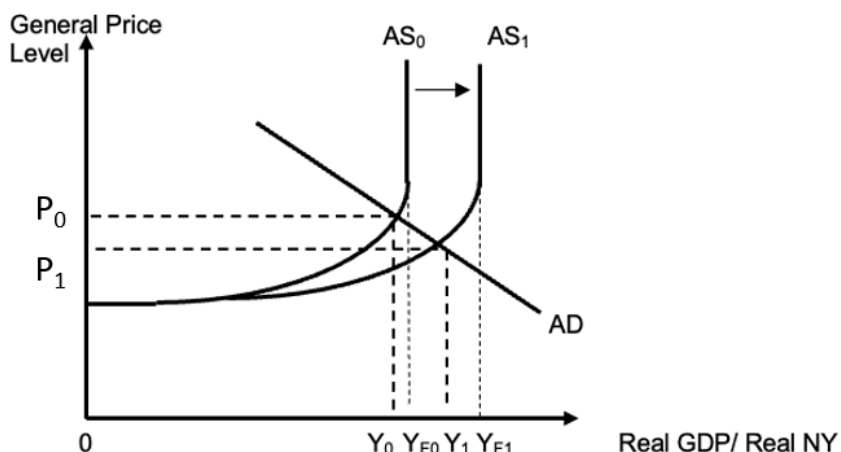
As seen in the figure above, the use of LR supply side policies increases productive capacity. This results in an increase in LRAS, shifting AS curve to the right from AS0 to AS1. This creates a surplus at prevailing GPL levels, resulting in an downward pressure on GPL until the surplus is eliminated at a lower equilibrium GPL, P1, hence reducing inflation rate.

Evaluation 2:

- The time lag in the impact of long-run supply side policies is quite long, hence is not suitable for governments seeking for quick-fix to reduce their country's very high inflation rate, like Turkey and Venezuela. Government's policies to increase technology and infrastructure to attract investments involve large government spending and investments into the country. This will increase AD, leading to further strain the country's limited resources. This will further increase the country's inflation rate.
  Hence for such countries, a more targeted supply-side policies such as subsidies to help reduce the firms' production costs would be more effective at reducing the high inflation rate.

- Supply side policies are costly because significant investments is required that have a high opportunity cost. Hence countries that are heavily in debt, e.g. Malaysia with its govt debt more than 80% of its GDP, imposing ss-policy may be a long-term financial commitment it may be able to make. Such SS-side policies may increase its govt debt even higher.

Overall Evaluation/Conclusion

Stand:
Both demand-management policies and supply-side policies are effective in address inflation, depending on the root of the problem. However, the degree of effectiveness may differ between countries due to the state and nature of the economy.

Substantiation
Demand-management policies is more effective for countries with relatively larger size of domestic demand and larger size of multiplier than the small and open countries with large external demand and dependent on imports. On the other hand, for these small and open economy, perhaps quick fixes such as short-term supply-side policies to help firms reduce their production costs would be more effective in reducing inflation rate. However, this does not address the root of the problem if the inflation is cost-push. Furthermore, financial

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5.		Japan's trade deficit roughly quadrupled to a record $160 billion USD in fiscal year 2022, imports jumped 32.2% from a year earlier, while exports increased 15.5%. Japan had a trade surplus with the United States but a much higher deficit with China. *Source: asia.nikkei.com/Economy/* *Japan-posts-record-160bn-trade-deficit-for-fiscal-2022*	
	(a)	Explain the factors that contribute to an increasing balance of trade deficit.	[10]
	(b)	Discuss whether governments should prioritize addressing a balance of trade deficit or a budget deficit.	[15]

Part 5(a) Explain the factors that contribute to a balance of trade deficit. [10]

Command	Explain – to give detailed reasons
Content	Balance of trade Balance of trade deficit, export revenue < import expenditure
Context	Any context but should use context mentioned in the pre-amble.
Approach	Requirement 1: Price Factor Requirement 2: Non price factor Requirement 3: Price or non-price factor

Suggested Answer

> **Introduction**
> - Balance of trade (BOT) records the international transactions in terms of export revenue and import expenditure of a country. (Lecture notes page 17)
>   - BOT is the difference between the value of a country's exports and the value of a country's imports for a given period.
> - Balance of trade is the main component of a country's current account and balance of payments (BOP).
> - Balance of trade (BOT) deficit occurs when export revenue is less than import expenditure.
> - Balance of trade (BOT) deficit could be caused by price and non-price factors.
>
> **One factor that contribute to a balance of trade deficit is price factors.**

One factor that contribute to a balance of trade deficit is increase in general price level relative to other countries.

Should the prices of domestic goods and services be relatively more expensive due to a higher rate of inflation in the domestic country as compared to the rest of the world, this will make exports relatively more expensive. The outcome on export revenue and thus, trade balance will depend on the PED of exports.

Assuming that demand for the country's exports is price elastic, a higher price of exports will result in a more than proportionate fall in quantity demanded for exports and thus a fall in export revenue (X).

As demand for domestic goods is positively cross elastic (substitutes) with respect to imports, the higher price of domestic goods will cause people to switch from consuming domestically produced goods to the consumption of imports. This will cause an increase in total import expenditure (M) in the domestic country.

Therefore, the fall in export revenue and rise in import expenditure will cause a deterioration in the trade balance, and possibly increase an existing trade deficit.

One factor that contribute to a balance of trade deficit is appreciation of the country's currency.

If SGD appreciates against the USD, this means it takes less SGD to purchase US$1, and more USD to purchase SG$1. With a stronger currency the price of exports in foreign currency will be higher and this leads to a fall in quantity demanded for exports (note that Px in local currency terms remains the same). At the same time, the appreciation or strengthening of the SGD would lead to the price of imports to fall in local or domestic currency terms leading to an increase in quantity demanded for imports. Assuming the Marshall-Lerner condition holds (PEDx +PEDm >1), an appreciation of the SGD against the USD will lead to a fall in net exports (X-M).

A fall in the net export revenue could in fact worsen an existing trade deficit and bring about a deterioration to the BOT.

One factor that contribute to a balance of trade deficit is changes in domestic supply conditions.
When supply of a country's exports fall, its export prices rise. This could increase a trade deficit and worsen the trade balance assuming PEDx>1 (export revenue falls as quantity demanded for exports fall more than proportionately to the rise in export prices).

The fall in supply of a country's exports could be due to:
- **Loss in comparative advantage**
  A loss in comparative advantage due to higher costs may reduce supply of exports. This may be due to rising input prices like wage increases, which increases the cost of production in the country.
  Note: Changes in comparative advantage due to higher domestic cost would be a price factor. However, if loss of comparative advantage due to other countries gaining comparative advantage due to use of better technology, it may be a non-price factor.

- **Relative rise in cost of production**
  During an oil crisis, energy prices would have soared and lead to an increase in cost of production. This will reduce the supply of exports.

...

Increase in wages in Singapore due to government policy to reduce inflow of low-cost foreign labour, and levies imposed on the employment of low-cost foreign labour.

- **Falling domestic productivity**
  Falling health conditions have caused a fall in productivity of workers in many African countries. As a result, the supply for many of these countries' export falls.

One factor that contribute to a balance of trade deficit is non-price factor.

- **Changes in Interest Rates**
  As part of expansionary monetary policy, the Central Bank increases money supply and reduces interest rates. The falling interest rate is likely to increase investment and consumption, causing national income in the economy to increase via the multiplier effect, GPL may also rise as a result, this can mean an increase in the prices of exports from the country. Assuming demand for exports is price elastic, there will be a fall in export revenue. Furthermore, as income increase, it may lead to an increase in demand for imported goods and services. A rise in import expenditure and a fall in export revenue could increase a trade deficit and worsen the trade balance.

- **Changes in the Global Demand Conditions:**
  - **Tastes and preferences**
    This can be due to changes in tastes and preferences of foreign consumers for a country's exports because they are of better quality. This may cause the demand for its exports to decrease, causing trade balance to worsen. Hence, the BOP deteriorates.
    For example, as China progressed in her economic growth, GDP per capita rose with an expanding middle class. This fostered a culture of consumption and popular amusement as the taste and preferences of her people changed in favour of imported luxury goods that are of better quality. This will worsen the trade balance of countries that export inferior goods; while improve the trade balance of countries that export luxury goods.

  - **Relative income**
    Changes in the relative income and will also affect demand for exports and imports. The demand for exports depends on the national income of an economy's trading partners. If the income of the trading partners falls (e.g. During the 2007-2009 Global Financial Crisis, most of Singapore's major trading partners, e.g. US, European countries, and Japan, recorded negative economic growth rates, whereas Singapore's growth rate in 2009 was 0.1%.) relative to domestic income, demand for the country's exports fall (assuming YEDx >0), then export revenue of the domestic economy will decrease, ceteris paribus. There will be a decrease in the net export revenue of the country leading to a worsening of the trade balance. Ceteris paribus, this may cause a deterioration of the country's BOP position.

- **Establishing Institutional Changes**
  The establishment of new institutions may change the economic, social and political framework of a country. An example is the formation of the European Union (EU). Members of the EU will benefit but non-member face trade barriers. This may result in disequilibrium on their BOPs.
  Therefore, exports of non-members countries could be reduced and this may result in an increase in their trade deficit and worsening of their current account. Similarly if a member of the EU, such as the UK decides to leave the institution, then it would lose its benefits as a member. It could face tariffs on its exports to EU-member countries and hence experience a fall in export revenue that could adversely affect the trade balance.

•	**Imbalances in a country's capital and financial account**
	Trade imbalances could also be caused by imbalances in a country's capital and financial account. If a country has insufficient savings and government revenue to finance its domestic investments and government expenditure, it will need to borrow from abroad or sell its assets to foreigners to finance such spending. This will inflate the demand and value of the country's currency, leading to the country's exchange rate being overvalued which will in turn reduce its trade competitiveness.

Conclusion

In conclusion, the above factors might lead to a balance of trade deficit. It could also be due to exports revenue decrease and assume import expenditure remaining constant, or imports expenditure increase and assume exports revenue remaining constant. A worsening BOT could also be from a surplus to a smaller surplus and need not always be in deficit.

Mark Scheme

Knowledge, Understanding, Interpretation, Application and Analysis			
Level	**Analysis Level**	**Descriptors**	**Marks**
L3	A+A A+C+K A+C	Response addresses the question fully and contains excellent analytical explanations of the balance of trade. Explanations includes both export revenue and import expenditure, using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Response also contains appropriate examples to show application to current situations.	8-10
L2	A+K C+C+K C+C A+0 C+K+K	Analytical explanations which include either export revenue or import expenditure, using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Cursory explanation which includes both export revenue and import expenditure, using relevant economic concepts, but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Part 5(b) Discuss whether governments should prioritize addressing a balance of trade deficit or a budget deficit. [15]

Command	Discuss whether – thesis and anti-thesis perspectives
Content	Balance of trade deficit and budget deficit
Context	Any context but should use context mentioned in the pre-amble.
Approach	**Introduction** **Requirement 1:** Governments should prioritize addressing a balance of trade deficit due to its negative consequences. **Evaluation 1:** A balance of trade deficit might be desirable. **Requirement 2:** Governments should prioritize addressing a budget deficit due to its negative consequences. **Evaluation 2:** A budget deficit might be desirable. **Requirement 3:** [Optional] **Summative Evaluation 3**

Suggested Answer

Introduction:
- A balance of trade deficit occurs when a country's import expenditure is more than its export revenue.
- A budget deficit occurs when government spends more than its tax revenue collected.
- Both balance of trade deficit and budget deficit will have negative impact on the economy and the various stakeholders.

Requirement 1: Governments should prioritize addressing a balance of trade deficit due to its negative consequences.

1) Consumers

To correct the persistent BOT deficit, the government might implement protectionist policies such as tariffs on imported goods. This would raise the prices of imported good, reducing consumer ability to purchase them. This may adversely affect their material standard of living.

For a developing country, a current account deficit in the initial years of development may be more due to its purchases of imported capital goods rather than consumption goods. The higher capital accumulation should enable its productive capacity to increase faster and this should allow the country to export more in the future (which will then correct the initial current account deficit). The wealth created will increase the material standard of living of the people.

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2) Producers

For such developing countries, the demand for imported capital should fall overtime as the country becomes less capital scarce and also because producers will become increasing able to produce its own capital goods. Thus the country's current account should improve overtime. This also applies for countries with a planned balance of payments deficit for infrastructural developments.

If the deficit is due to long-term capital outflow which will yield returns or profits in the future: this will then benefit the country's current account when investment income is sent back in the future, yielding higher future income of consumers and producers in the longer run.

BOP deficit may arise due to a deficit in either the current, capital and financial accounts or all of them. A long-term, large adverse balance of payments deficits that is unplanned, is a serious problem since it is caused by a country living beyond its means.

3) Government

BOT deficits will have to be corrected because there is a limit on the ability of the government to sustain such chronic deficits. Its finite official reserves will run out as a deficit must be accommodated by a reduction in gold and foreign reserves or by borrowing in the official reserves account of the BOP.

Having to persistently lose gold or foreign reserves or to borrow short term show that the country is unable to finance desired imported goods and services with exports or long term capital flows. It may need to incur large external debt (borrow from abroad) to cover its deficits. Borrowing from abroad is constrained by foreign perceptions of its credit-worthiness, which will lower a country's competitiveness in attracting FDI, thus affecting its long term growth prospect. Besides, if it borrows too much, it will find that agencies which lend it money such as IMF will impose conditions for future borrowing. This means that the government loses its ability to run its economy in the way it sees fit.

Furthermore, a persistent trade deficit reflects poor economic management, which results in a loss of confidence in the economy. A capital flight may ensue, which will worsen the country's balance of payments and may lead to a deterioration in the exchange rate.

In addition, a persistent trade deficit could be an indication to the government that the country's exports are too low; suggesting that the economy is not competitive in terms of:

•   Export price competitiveness; and/ or
•   Export non-price competitiveness (quality).

This can create some structural issues that leads to dependence on imports, which cannot be substituted through domestic production. This will then have implications on the government as to how they should intervene to correct the BOT deficit.

Evaluation 1: A balance of trade deficit might be desirable.

A balance of trade deficit indicates that a country is importing more goods and services than it is exporting. This implies that domestic households and firms have access to a wider variety of goods and resources at competitive prices, increasing households' standard of living.

A balance of trade deficit can be an indication of strong domestic demand and economic growth. When a country's economy is growing, households and firms tend to demand more goods and services including both domestic produced and foreign goods, leading to an increase in imports. An increase imports can be a sign of a healthy growing economy.

With positive sentiments from economic growth and improved in SOL, it can promote investment. Foreign investors may be attracted to a country with a trade deficit, as it implies that the domestic market has the potential for strong demand and profitability. This inflow of foreign investment can further stimulate economic growth and job creation.

Requirement 2: Governments should prioritize addressing a budget deficit due to its negative consequences.

Long-term deficits create an unsustainable growth, as governments may deplete reserves and resort to borrowing to cover the budget deficit. This accumulation of debt, with the burden of future interest payments, poses a significant financial strain. Consequently, governments may be forced to implement contractionary fiscal policies in the future in order to repay the debt, leading to decreased aggregate demand in the future, adversely impacting the standard of living and economic outlook for future generations.

Also, budget deficits arising from expansionary fiscal policies could lead to demand-pull inflation now. Moreover, as the government borrows to finance the deficit, it competes with private borrowers, leading to higher interest rates and reduced investment, negatively affecting economic growth.

Furthermore, actual economic growth due to expansionary fiscal policies might lead to environmental degradation and resource depletion, leaving a burden on future generations.

Evaluation 2: A budget deficit might be desirable.

A budget deficit might be caused by implementation of expansionary fiscal policy which will increase AD.
- Households' SOL will increase
- Firms' profits will increase
- Demand deficit Unemployment will decrease
- Might potentially lead to potential growth if EFP promotes increase in QQT.

Requirement 3: [Optional] Any of the above points

Conclusion and Evaluation (EV3)

The prioritization between a Balance of Trade (BOT) deficit and a budget deficit hinges on several key factors. First and foremost, the severity of each deficit, in terms of its magnitude and duration, plays a crucial role. A temporary deficit may require short-term measures, while a prolonged deficit demands more sustained strategies.

Additionally, the planned or unplanned nature of the deficit is vital, as intentional deficits for specific economic goals may require different approaches compared to unforeseen deficits.

Policymakers must carefully assess these factors to determine the appropriate course of action and address the root causes of each deficit effectively, ensuring long-term economic stability and prosperity.

Mark Scheme

Knowledge, Understanding, Interpretation, Application and Analysis			
Level	**Analysis Level**	**Descriptors**	**Marks**
L3	A+A A+C+K A+C	Response addresses the question fully and contains excellent analytical explanations of impact of BOT deficit and budget deficit using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Response also contains appropriate examples to show application to current situations.	8-10
L2	A+K C+C+K C+C A+0 C+K+K	Response may contain cursory explanations of impact of BOT deficit and budget deficit with ability to identify facts, some ability at diagrams but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Evaluation

Level	**Descriptors**	**Marks**
E3	Response contains well-explained evaluative judgments for <u>two</u> requirements and a well-justified summative conclusion	5
E2	Response contains a well-explained evaluative judgment for at least 1 requirement, the other requirement may not be well evaluated. Response may not have a summative conclusion.	3-4
E1	Response contains evaluative judgments that is unexplained or not supported by the arguments presented in the answer. Judgment may not be linked to the context of the question. OR A well-explained evaluative judgment linked to one requirement.	1-2

6. While Singapore continues to sign more Free Trade-Agreements, most recently with the Pacific Alliance, a Latin American bloc of countries, others have retreated to protectionism to boost their economic resilience and self-sufficiency amidst global economic turbulence.

   Source: Various

   (a) Explain how the FTA between Singapore and the Pacific Alliance will benefit its domestic firms and macroeconomy. [10]

   (b) Discuss the view that small and open economies like Singapore should retreat to protectionism amidst this period of economic turbulence. [15]

Part 6(a) Explain how the FTA between Singapore and the Pacific Alliance will benefit its domestic firms and macroeconomy. [10]

Command	Explain how – to give detailed reasons
Content	Free trade agreement, higher profits, economic growth, low unemployment, price stability and favourable BOP.
Context	Singapore and the Pacific Alliance, domestic firms and macroeconomy.
Approach	Requirement 1: FTA between Singapore and the Pacific Alliance will benefit its domestic firms. Requirement 2: FTA between Singapore and the Pacific Alliance will benefit its macroeconomy. Requirement 3: FTA between Singapore and the Pacific Alliance will benefit its domestic firms or macroeconomy.

Suggested Answer

> **Introduction:**
> Free trade agreement is a treaty or pact signed between two or more economies to reduce or eliminate trade barriers and promote imports and exports among them.
> Firms aim to maximise profits and governments aim to achieve economic growth, low unemployment, price stability and favourable BOP.

> **Requirement 1: FTA between Singapore and the Pacific Alliance will benefit its domestic firms.**
>
> 1) **Increased profits**
> By gaining access to foreign markets, firms' demand increases as they expand their market size into these foreign market and hence enjoy additional source of revenue through exports on top of the sale of goods and services within the domestic economy.
>
> Trade also enables firms to lower their average cost of production. When firms expand their scale of production, they can reap greater internal economies of scale, thus reducing average cost of production, enabling them to compete better in the export market. Through international trade, firms have access to cheaper sources of resources from various countries, hence able to lower their cost of production.
>
> Hence, firms can enjoy higher demand and fall in unit cost at the same time. This can result in higher level of profit, the primary objective of producers.

2) Increase efficiency and innovation in production due to competition from imports
Free trade increases competition for domestic firms. The entrance of imported goods and services reduces domestic firms' market share the country motivate them to streamline their production towards more efficient production methods. May even embark into new technology and innovations to lower average cost to maintain their market share in the economy.

Requirement 2: FTA between Singapore and the Pacific Alliance will benefit its macroeconomy.

1) Growth and Development of Economies

Free trade provides access to markets around the world for domestic producers. This will spur an increase in demand for the country's exports. This will lead to increase in net export, thereby increases AD and hence increases real national income, causing increase in actual economic growth. Therefore, the government's macroeconomic aim of positive economic growth can be achieved through free trade.

Trade also can lead to full utilisation of otherwise underemployed or unemployed resources. The increase in AD due to increase in net export will lead to the creation of more jobs as more workers are required to increase production of output to meet the increase in AD, reduced the country's unemployment level.

Using PPC diagram, such production of output to meet AS is reflected in the movement from a point within the PPC outwards to a point on the PPC. The government's aim to achieve low unemployment is therefore achieved.

2) Price Stability
With a greater access to global markets, firms are able to expand their scale of production, reaping economies of scale. This reduces the unit cost of production leading to cheaper goods and services which will be beneficial for the consumers.
Through trade, countries can import resources and raw materials from cheaper sources around thus allowing for increase in production at lower cost. This increases the country's SRAS, leading to fall in general price level. This helps the government achieve its macroeconomic aim of price stability.

3) Faster Rate of Technological Advancement and Diffusion and Potential Economic Growth
In order to maintain their competitiveness with their foreign counterparts, firms may look to enhance their products e.g. through Research & Development (R&D). Experimentation with new processes and products provide workers with a learning-by-doing environment, which contributes to rapid economic development.

Countries exposed to international trade can gain access to modern technology. International trade also allows for the transmission of ideas, technical expertise and managerial skill etc. that are essential for the economy to develop. This can lead to higher productivity and increase the country's productive capacity, hence increase the country's LRAS.

Hence national income increases, thereby leading to economic growth in the long run, achieving the government's aim of potential economic growth.

Mark Scheme

	Knowledge, Understanding, Interpretation, Application and Analysis		
Level	**Analysis Level**	**Descriptors**	**Marks**
L3	A+A A+C+K A+C	Response addresses the question fully and contains excellent analytical explanations of the positive impact on both firms and macroeconomy using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Response also contains appropriate examples to show application to current situations.	8-10
L2	A+K C+C+K C+C A+0 C+K+K	Response addresses the question fully and contains excellent analytical explanations of the positive impact on **either firms or macroeconomy** using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Response may contain cursory explanations of the positive impact on both firms and macroeconomy with ability to identify facts, some ability at diagrams but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
L1	C+0 K+K	Response shows some knowledge but does not indicate that the meaning of the question has been properly grasped, thus, answer may be mostly irrelevant. There may be some basic errors in theory and may contain a few valid points made incidentally.	1-4

Part 6(b) Discuss the view that small and open economies like Singapore should retreat to protectionism amidst this period of economic turbulence. [15]

Command	Discuss
Content	Protectionism, tariff, macroeconomic policies
Context	Period of economic turbulence – recession + high unemployment OR recession + inflation; small and open economy like Singapore
Approach	Introduction: Set context: period of economic turbulence and small and open economy like Singapore Example of tools of protectionism Requirement 1: Reason 1 why small and open economy like Singapore should retreat to protectionism. Evaluation 1: Requirement 2: Reason 2 why small and open economy like Singapore should retreat to protectionism. Evaluation 2: Requirement 3 (optional): Reason 3 why small and open economy like Singapore should retreat to protectionism. Conclusion and Evaluation (EV3):

Introduction

Set context
Period of economic turbulence – weak global economic outlook has caused many countries to face with economic slowdown, even recession in some countries, and high unemployment. This is made worse by the Ukraine war further disrupting supply chains and increasing prices of resources such as fuel and grains.
For most countries, protecting the domestic economy seems to be the natural measures in addressing the impact of such economic turbulence on their economic growth and unemployment.

Impact on small and open economy
Small and open economy like Singapore naturally have small domestic demand hence their economic growth tend to be export-led. They are also import-dependent due to their limited or, as in Singapore, lack of resources.

Requirement 1: Protect Vulnerability to External Shock brought about by the global economic turbulence affecting economic growth, unemployment & Price Stability

One reason for small and open economies like Singapore to embark in protectionist policies is to protect the country against falling external demand and increasing costs due to rising import prices.
During period of global economic turbulence, due to poor economic outlook and falling global economic growth, small and open economies like Singapore will face falling export. This will

cause large fall in AD, causing fall in RNY through the multiplier process, hence leading to economic slowdown and possibly recession.

Hence protectionist policies such as import tariffs and quotas would help to dampen the effect of falling export of AD on the economy.

Figure 2: Analysis of Import Tariff
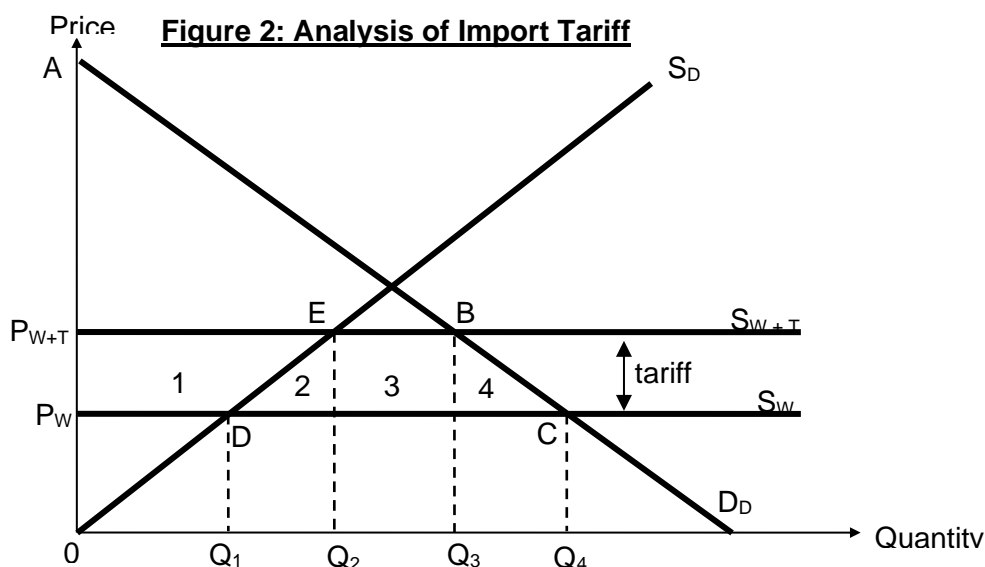
From the above diagram, import tariffs would shift the world supply curve up from S_W to S_{W+T} raising the price of imports by the amount of the tariff i.e. P_W to P_{W+T}. At P_{W+T}, assuming both imports and domestically produced goods are each other's good substitutes, qty of imports is reduced from Q1Q4 to Q3Q4 as domestic consumers switch to domestically produced goods in the domestic market, enabling the domestic firms to raise their price to also at price Pw+T. Hence with import tariffs, domestic firms can increase production from Q1 to Q2, allowing their workers retain their jobs → slows down the rise in unemployment cause by the economic turbulence. The increase in domestic demand for domestically produced goods → increases the country's national output produced despite the fall in export.

Evaluation 1:

Protection measures such as import tariffs to counter the impact of global economic turbulence may backfire and cause further economic problems for a small and open economy like Singapore. Since Singapore imports most of its resources and goods, import tariff will increase price of many imported intermediate goods that are required in production of goods and services. This will worsen the country's export competitiveness, further reduces the country's export. Rising costs of imported resources will also further increase in cost-push inflation.

Foreign countries may retaliate by imposing restrictions on the home country's exports. Hence, effort to protect domestic industries may 'backfire', not only reduces the domestic exporting industries' demand, but also lowers the country's export and hence economic growth.

Requirement 2: Protectionism to protect domestic firms against strong competition in the economic turbulence.

▪ Protection would allow the government to protect industries that are facing strong competition due to declining CA. For example, Singapore's food manufacturing industries facing strong competition from foreign imports from countries that can produce the goods at lower costs, causing domestically produced food to be more expensive that imported ones. Protectionist policies during this economic turbulent period will not just slow down the decline of this industry, but also give time for firms to restructure their business and move their resources to other industries. It will also reduce the structural unemployment, allowing the workers time to be retrained to acquire the skills required in other industries.

- Protectionist policies will also protect domestic firms in industries that are in the infancy stage (thus operating at a smaller scale and higher unit cost) e.g. The digital software and product design industries. Firms in these industries may not be able to compete with the foreign firms or products in this economic turbulent period of falling economic growth and rising costs. Protecting the firms in these industries will allow them to grow and reap the EOS that can help to lower their production cost and develop the comparative advantage needed to compete when the global economic conditions improve.

Evaluation 2:
- Protecting the industry from competition may reduce the pressure and incentive for the firms in the industries to reduce their average costs, causing the firms to be complacent and remain inefficient over the long run and become too dependent on protection.
- Furthermore, it may be difficult to determine which new industries have the potential to become internationally competitive. If industries with no potential comparative advantage are protected, it can lead to a misallocation of resources.
- Once protection is in place, it will be politically difficult to remove once the economic turbulence period is over as firms and employees within the industry will resist the change.

R3: To protect domestic firms against unfair competition by foreign firms engaging in dumping.

- There is tendency for some countries to subsidise their domestic forms to cover their costs during this period of economic recession, with excuse of providing help to domestic firms to survive and retain their workers. However, some of the firms that receives the subsidies firms that produce goods for exports. Large government subsidies allow these firms to be able to sell their goods in foreign markets at below costs. Such predatory price where prices are charged below average cost of production is by foreign firms in the small countries provide unfair competition to domestic firms that are already faced with small domestic demand. this may drive the domestic firms out of the industry resulting in the foreign company gaining control of the market and subsequently charging higher prices. Thus, government impose trade restrictions on imports so that locally produced goods will be competitive.

Evaluation
- It is difficult to prove that the foreign goods are being subsidised so it will be difficult to know when to impose trade barriers. The differences in price could be due to lower production costs (i.e., comparative advantage) rather than subsidies.
- Restricting cheap imports will prevent consumers from enjoying higher consumer welfare as they cannot enjoy lower prices and higher consumer surplus,

Overall evaluation
Stand: In considering protectionism, small and open economies like Singapore should consider the negative impacts on its economic in this period of economic turbulence

Stand:
- Given the nature of the small and open economies which are typically import-dependence, protectionism measures to address the impacts of global economic turbulence is not a good idea.
  Given the country's dependence on imports, import tariffs will increase the prices of imports, including imported factor inputs, and can worsen the country's inflation, unemployment and falling economic growth during the period of economic turbulence.

- If protectionist policies were o be implemented, it should be adopted only as a short-term measure to be implemented during the economic slowdown when economic activities are low in the economic turbulence. Protectionism would reduce the stresses of competition, hence allow the firms in the protected industries to restructure themselves to be more efficient so that they can compete better when economic condition improves. On the other hand, protectionist policies should not be a long-term policy.

Something special/Recommendation
Supply-side policies such as measure to improve the quality and quantity of the country's factors of production would be a better measure to adopt in the amidst this period of economic turbulence.
Subsidies, grants and other financial support to firms for the adoption of new technology, including importing this new technology. The government may also subsidies and grants on training to increase the productivity of labour in tendon with the new technology. This would make the firms' production process more efficient and productive → increases productivity → makes the country's export more competitive in the global market, even during economic turbulence. Also makes the economy more resilient in the face of economic turbulence.

Mark Scheme

Knowledge, Understanding, Interpretation, Application and Analysis

Level	Analysis Level	Descriptors	Marks
L3	A+A A+C+K A+C	Response addresses the question fully and contains excellent analytical explanations of the view that small and open economies like Singapore should retreat to protectionism amidst the period of economic turbulence using relevant economic concepts, theories and principles in a precise, logical and reasoned manner. Response also contains appropriate examples to show application to current situations.	8-10
L2	A+K C+C+K C+C A+0 C+K+K	Response may contain cursory explanations of the view that small and open economies like Singapore should retreat to protectionism amidst the period of economic turbulence t with ability to identify facts, some ability at diagrams but theory may be incompletely explained. Response may not fully address question requirements. Examples used may be inappropriate or there may be no examples used.	5-7
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Evaluation

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