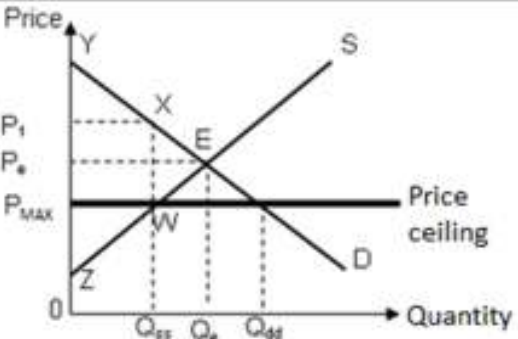
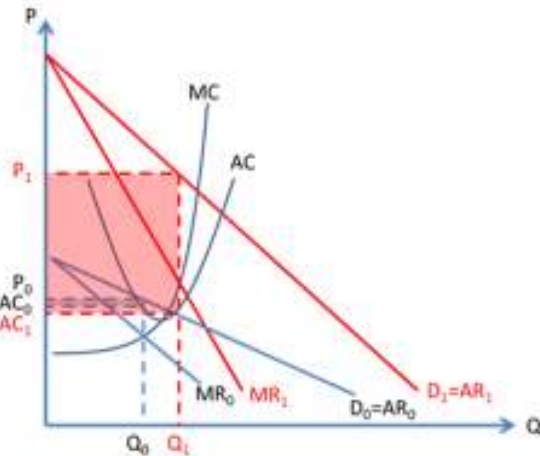


Suggested Answers – CSQ1

(a)	(i)	Using Figure 1, compare the trend in the prices of medical care and all goods and services between 2000 and 2023.	[2]
		<p>The prices of medical care and all goods and services have increased between 2000 and 2023.</p> <p>The prices of medical care increased at a faster rate as compared to the prices of all goods and services.</p> <p><i>General trend – 1 m</i> <i>Refinement – 1 m</i></p>	
		<p>Markers' Comments</p> <p>The question is generally well-attempted. Students are reminded not to compare period by period.</p>	
	(ii)	How will the rise in price of prescription drugs affect consumer's expenditure on healthcare?	[2]
		<p>The demand for prescription drugs is price inelastic as they are necessities to treat illnesses. [1]</p> <p>The rise in price will lead to a less than proportionately fall in quantity demanded. Hence, consumer expenditure will rise. [1]</p>	
		<p>Markers' Comments</p> <p>Students who understood the requirement of question brought in the relevant elasticity concept and link to expenditure. Those who did not, simply said expenditure had increased as consumers are buying more drugs. Students must read the question carefully. The cause is stated in the question → rise in price.</p>	
(b)		With reference to Extract 2, explain how price controls can make prescription drugs more affordable and how it will impact consumer surplus.	[4]
		<p>The government can impose price ceiling on prescription drugs to make it more affordable. It is set by below the market equilibrium price which is deemed too high. With price ceiling, the price will drop from P_e to P_{max}. The consumer surplus has increased from P_eY_e to $P_{max}Y_{XW}$.</p>	

	 <p>Explanation of measure [1] Impact on the price [1] Impact on consumer surplus [1] Diagram [1]</p>	
	<p>Markers' Comments</p> <p>Common mistakes made by students</p> <ul style="list-style-type: none"> - Diagrams are not labelled properly - Consumer surplus after the imposition is identified incorrectly 	
(c)	With reference to Extract 3, explain two types of barriers to entry that pharmaceutical firms possess.	[4]
	<p>The first will be legal restrictions due to the law. Patents are exclusive rights given to production for drugs for a number of years. With patents, other firms are not allowed to produce the drugs or they can be subject to court action. [2]</p> <p>The second type of barrier to entry will be high set up costs such as the costs involved in research and development of new drugs and the manufacturing facility (\$1.2 billion). [2] Hence, these two BTEs will prevent new firms from entering the market.</p>	
	<p>Markers' Comments</p> <p>Most students did well for this question. Those who did not, only brought in one BTE or did not bring in evidence from the extracts. Students are reminded to complete the analysis to explain how the BTEs will prevent new firms from entering the market.</p>	
(d)	Discuss whether product innovation is the most effective strategy for enhancing the profits of a pharmaceutical company.	[8]
	<p>From extract 3, the innovation gap, also called the innovation deficit, is happening as companies watch some of their bestselling products of the last decade approach the end of patent protection, revenues are bound to erode. This will affect the profits (Total revenue – total costs) of firms.</p> <p>Product innovation is an effective strategy to enhance profits of a pharmaceutical company. Production innovation is needed to come up with better/new drugs. With successful innovation, the demand for the new drugs will rise and make it more price inelastic from D0 to D1.</p>	

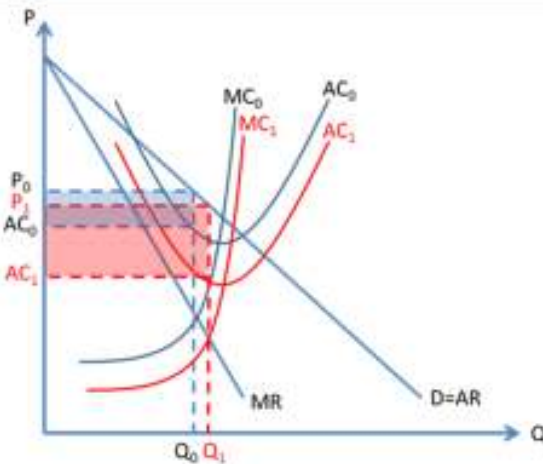


With reference to Figure above, at the original demand D_0 , the profit maximisation price and output where $MC = MR_0$ were P_0 and Q_0 respectively. At P_0 and Q_0 , the supernormal profit was the small shaded area $((P_0 - AC_0) \times Q_0)$. With discovery of new drugs due to innovation, there will be an increase in demand and reducing the PED, the demand curve shifts right and becomes more inelastic from D_0 to D_1 . The profit maximisation price and output where $MC = MR_1$ then becomes P_1 and Q_1 respectively. At P_1 and Q_1 , the supernormal profit is now the larger shaded area $((P_1 - AC_1) \times Q_1)$. This increase in profit is mainly due to an increase in TR (from $P_0 \times Q_0$ to $P_1 \times Q_1$). Product innovation has caused an increase in price, output, and hence the TR and profit.

Evaluate product innovation.

Increase in profit does not take into account the cost of product innovation. R&D cost the firm money. If the increase in cost of production is more than the increase in revenue from the higher and more price inelastic demand, the firm's profit would fall instead. Additionally, R&D takes a long time and may not always be successful.

Other than product innovation, the pharmaceutical firm can also look into process innovation (e.g. more efficient method of production of drugs) to rise profits. This would reduce both the average cost of production and the marginal cost of production.



With reference to fig above, with the original MC_0 and AC_0 , the profit maximisation price and output where $MC_0 = MR$ were P_0 and Q_0 respectively. At P_0 and Q_0 , the supernormal profit was the small shaded area $((P_0 - AC_0) \times Q_0)$. With process innovation, the MC and AC decrease from MC_0 and AC_0 to MC_1 and AC_1 . The profit maximisation price and output where $MC_1 = MR$ then becomes P_1 and Q_1 respectively. At P_1 and Q_1 , the supernormal profit is now the larger shaded area $((P_1 - AC_1) \times Q_1)$. This increase in profit is mainly due to a fall in TC (from $AC_0 \times Q_0$ to $AC_1 \times Q_1$). We see that process innovation has caused a decrease in price, an increase in output, and an increase in profit.

Evaluate process innovation.

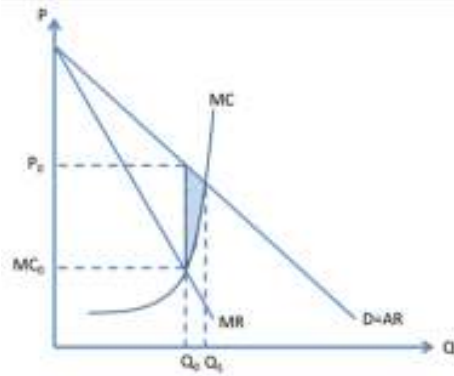
There is cost involved in process innovation and this might eat into the profits of the firms.

Evaluative conclusion

From extract 3, patent expirations are expected to put \$226 billion in global prescription sales at risk through 2026. Hence, product innovation is very significant in affecting the profits of the firms. Once new drugs have been discovered, firms will then need to work on process innovation to improve the efficiency of the production process to further increase profits. Hence, both product and process innovation are important in increasing firm's profits.

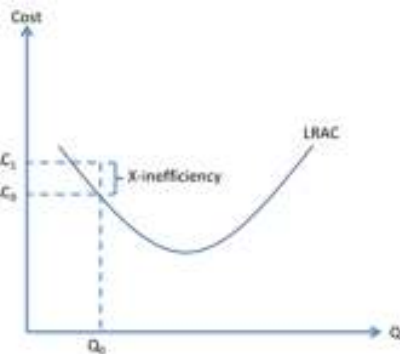
	Knowledge, Application, Understanding and Analysis	Mark
L2	For a well-developed and balanced answer on whether innovation is the best strategy to increase profits. Consider both product and process innovation and the limitations. Clear and coherent analysis, grounded by economic concepts, frameworks and principles and with application to the pharmaceutical company. Max 4 – Product and process innovations are well-explained but no limitation.	4-6
L1	Answer lacks balance or scope or reference to case material or details.	1-3
E	Makes a substantiated judgement that answers the question.	1-2

		<p>Markers' Comments</p> <p>Many students explained how product innovation work to increase profits but some saw it as process innovation. Stronger students structured their answers in terms of strategies that led to revenue maximization (product innovation) and cost minimization (process innovation) thereby explaining profit maximising explicitly.</p> <p>However, quality of answers were uneven because of the quality of explanation and economic analysis given. Stronger students were clear in the diagrams and analysis but weaker ones cannot even get the diagram drawn correctly. Main mistakes include using collusion as a strategy when the question is about competition via product innovation.</p>	
(e)		Discuss whether government intervention is necessary in cases where a pharmaceutical company holds a dominant position in the market.	[10]
		<p>Whether a government intervention is necessary where a pharmaceutical company holds a dominant position in the market will depend on how these are affected: allocative efficiency, production efficiency, dynamic efficiency, equity and variety. Whether market dominance is a concern in the pharmaceutical industry depends on whether the possible benefits from greater market dominance would be able to outweigh the inefficient behavior from dominant firms.</p> <p><u>Requirement 1: Government intervention is necessary.</u></p> <p>Dominant firms may be a concern for governments as they may be allocative inefficient.</p> <p>As a firm becomes increasingly dominant within an industry, they have greater market share and thus greater price-setting power due to lack of available substitutes. If the market were to be completely dominated by one firm, the firm would become a monopoly. As a price-setter, the monopolist faces a downward sloping average revenue (AR) curve and downward sloping MR curve. The monopolist would choose to profit-maximise by producing at an output, seen on the figure 1 as output Q, where marginal revenue (MR) is equal to marginal cost (MC). The firm would charge the highest price that consumers would be willing to pay for this level of output, seen on the diagram as price P0, based on the AR curve. $P=MC$ is the condition for allocative efficiency, at Qs.</p> <p>In a monopoly, there is allocative inefficiency because at the profit-maximising long run equilibrium (P0 and Q0 below), price exceeds marginal cost ($P0 > MC0$). Since consumers value the last unit of the good (measured by price) more than it costs to produce (measured by marginal cost), increasing the output can increase the welfare of the consumers. QS is the socially optimal output and the underproduction of the good leads to deadweight loss of the shaded area.</p> <p>Therefore, the government should be concerned if a firm becomes dominant within the pharmaceutical industry as it would result in consumer welfare not being maximised as the firm would restrict production of pharmaceutical products in order to charge exorbitant prices and earn high profits.</p>	



Dominant firms may be a concern for governments as they may be productively inefficient.

Monopolies tend to be productively inefficient due to the lack of competitive pressure on profit margins. Since the monopolist faces no threat of competition due to high barriers to entry such as patents in the pharmaceutical industry, the firm may then indulge in practice such as over-staffing and prestige projects that would increase the average cost of the firm. Thus, they do not produce on the LRAC. We also say that they suffer from x-inefficiency. This is illustrated below.



With reference to Figure 13, the monopolist is producing Q_0 units of output. The lowest average cost of producing this output is AC_0 . However, due to the lax cost controls, the monopolist actually incurs an average cost of AC_1 . The excess cost ($AC_1 - AC_0$) reflects x-inefficiency. Thus, dominance in the pharmaceutical industry may lead to wastage of resources, as the dominant firm would be productively inefficient and not produce pharmaceutical products at the lowest average cost.

R2: Government intervention is not necessary.

Dominant firms can bring benefits to society by producing goods at a lower cost and lower price (IEOS).

Dominance in the pharmaceutical market would lead to high prices compared to that of a more competitive market due to higher market power. However, greater dominance also means greater market share and thus dominant firms are able to operate on a larger scale as compared to firms in a monopolistically competitive market. Hence, these dominant firms may be able to produce at a lower average cost compared to smaller firms through

exploiting economies of scale. One of the large costs to producing pharmaceutical products is the high initial cost involved in the research and development of new drugs and manufacturing facilities. As this is a fixed cost that does not increase with output, by operating on a larger scale, this cost is spread out over a larger output and thus will reduce average cost. That is, able to exploit research and development economies of scale. This fall in average cost can be passed on to consumers in the form of lower prices. Consumers will not need to stop treatment due to the high prices.

Dominant firms can bring benefits through engaging in research and development

Another important difference between dominant firms and firms in more competitive market structures is that dominant firms are able to earn supernormal profits in the long-run while firms in markets with low barriers to entry would be earning only normal profits in the long-run. This ability to earn supernormal profits in the long-run is beneficial to society as investment into research and development is often very costly (extracts 1 and 3) and is thus the supernormal profits give the firm sufficient financial ability to invest in research and development. Research and development plays a big role with regards to consumer welfare especially in the pharmaceutical industry (ext 3). Through spending on research and development, consumers would be able to enjoy improvements in the quality of the drugs as well as invention of new drugs to treat different diseases. Thus, dominance in the market results in higher consumer welfare in the form of better quality of goods and greater variety.

Evaluative Conclusion

Government involvement in the pharmaceutical industry might not be encouraged when we think about how making new and better medicines is crucial for people's health. In addition, making medicine is specialized and big companies can do it more efficiently. This will make medicine cheaper and more affordable to the lower income group earners.

However, big companies might not always make medicine as cheap as they could or work on new medicines. They might not even pass on the savings to consumers. To handle this, the government should still make sure there's still competition among the few dominant firms. They can do this by changing some rules, like making patents expire sooner, so more companies can compete in making medicines. This will make the industry more contestable.

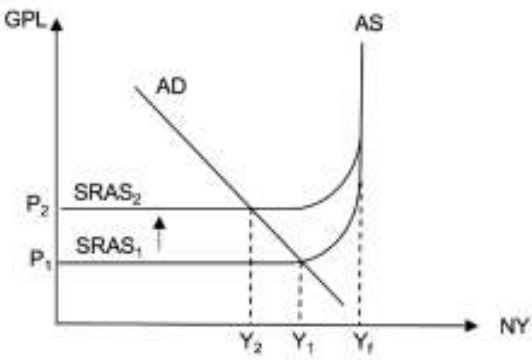
Knowledge, Understanding, Application and Analysis		
L2	Sound analysis of the extent to which the pharmaceutical industry in any country needs to be intervened by the government Use of relevant case information to support analysis	5-7
L1	Answer that attempts to consider the extent to which the pharmaceutical industry needs to be intervened by the government. Contains major conceptual errors.	1-4
Evaluation		

		E2	Evaluative judgment that reaches a conclusion based on the analysis offered	2-3	
		E1	Evaluative judgment without explanation or elaboration or superficial evaluation	1	
					[Total: 30]
		<u>Marker's Comments</u> <ul style="list-style-type: none">Many students were able to explain the benefits and costs on the society linking to efficiencies / equity / choices.The depth of analysis differs. Students who drew diagrams to explain the reason for government intervention due to allocative efficiency did better than those who did not. In addition, there were some misconceptions. Several students linked the fall in gap between MC and P to fall in profits. For profits, students will need to look at the gap between P and AC.Students only explain one benefit and cost, lacking scope in their answer. There is also no reference to the pharmaceutical firms.			

Suggested Answers – CSQ2

(a)	(i)	Describe the trend of US trade balance with China.	[2]
		Deficit (1) Worsening / Increasing (1)	
		<p>Markers' Comments</p> <ul style="list-style-type: none"> Students are reminded to use the correct terminology. Students are also reminded not to be too descriptive. 	
	(ii)	Using a diagram, explain the likely implication of your answer in (ai) on the external value of the USD against the Chinese Yuan.	[4]
		<p>The worsening of the US trade deficit was a result of a greater amount of imports from China (1), than export to China. This led to an overall increase in supply of USD (1) in the forex market in order to purchase Yuan.</p> <p>There was also an increase in demand for USD (as the Chinese have also increased in demand for US exports), but this was to a lesser extent than the increase in supply.</p> <p>This led to a depreciation of the USD (1) against the Chinese Yuan.</p>	

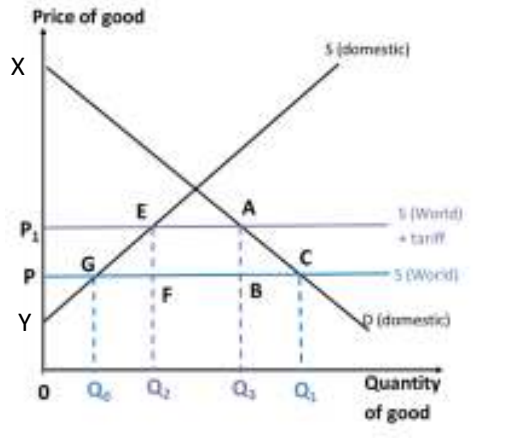
		<p>Diagram (1)</p>	
		<p>Markers' Comments</p> <ul style="list-style-type: none"> Students are reminded to use the correct terminology i.e. depreciated. The question is about 'External value of USD' so we should be analyzing the question from USA's perspective i.e. SS of USD and DD of USD. Some student's analysed the question from China's perspective. Some students were confused and <u>thought it was asking what led to the worsening trade deficit</u>. However, the question is asking <u>what the result of the trade deficit is</u>. 	
(b)		<p>"Even if governments, firms and consumers wanted to separate, the economics make it difficult to deliver products in a decoupled world at a price that firms and consumers are willing to pay." (Extract 6)</p> <p>Explain how the theory of comparative advantage is reflected in the above statement.</p>	[2]
		<p>The theory of comparative advantage states that trade can benefit all countries if they specialize in the good in which they have a comparative advantage. A country has a comparative advantage over another in the production of a good if it can produce it at a lower opportunity cost, i.e. if it has to forgo less of other goods in order to produce it. (Definition of Opportunity Cost -1m)</p> <p>If countries 'decouple' i.e. no longer trade according to CA, firms would incur a higher cost and thus consumers would need to pay a higher price.(Linkage to lower price -1m)</p>	
		<p>Markers' Comments</p> <ul style="list-style-type: none"> Most students recognized that this question was about CA, but many clearly did not memorize the definition. ☹ 	

(c)	<p>“With that come the attendant risks of stagflation - a potent combination of high unemployment and high inflation.”</p> <p>Using a diagram and with reference to Extract 7, explain how stagflation might result.</p>	[4]
	<p>“Russia's invasion of Ukraine has escalated matters, wreaking further havoc on global supply chains and food and energy security. Trade sanctions on Russia have further disrupted recovering supply chains, spiking prices of oil, gas, energy, industrial metals, fertilisers and food.”</p> <p>Russia's invasion and Trade Sanctions have caused an increase in cost of production. (1)</p> <p>Thus, firms need to charge to higher price for every quantity to take into account this rising costs (cost-push inflation). This causes SRAS to fall and shift upwards.</p> <p>The fall in output also means less factor inputs such as labour are required, causing a rise in unemployment. (1)</p>  <p>Diagram (1)</p>	
	<p>Markers' Comments</p> <ul style="list-style-type: none"> • Stagflation is predominantly caused by fall in SRAS. So while many students talked about fall in AD, that was unfortunately not required in this question. • An increase in AD is definitely wrong. • Students should also attempt to <u>explain why</u> prices rise and why unemployment rises. They should not simply state it, just because it is seen in the diagram. 	
(d)	<p>With reference to Extract 7, discuss the costs and benefits that a small open economy should consider when deciding on the 'optimal point of openness.'</p>	[8]
	<ul style="list-style-type: none"> • Define Globalisation • Explain any 2 relevant benefits of globalisation that can be linked to case evidence. 	

		<ul style="list-style-type: none"> • Explain any 2 relevant costs of globalisation that can be linked to case evidence. • (Costs and Benefits should be spread across trade, investment, and labour flows) • Overall Evaluation <p><u>Benefits of Globalization</u></p> <p><i>"In contrast to global city competitors like Hong Kong, Tokyo or London, Singapore is not part of a larger nation and thus lacks its own hinterland. It cannot sustain itself by its small domestic market alone."</i></p> <p><i>"For a global city, the world is its hinterland," said Mr Rajaratnam in 1972, going on to describe Singapore's access and links to other global cities via sea, air, electronic communications and the international financial network."</i></p> <p><i>"Being open and welcoming of talent"</i></p> <p>Trade- As a small open economy specialises in the production of a particular good and produces for the large world market, the increase in the scale of production enables the firms in the country to exploit internal EOS and reduce its average cost of production. This allows it to produce its good at a lower price. Ceteris paribus, as its export revenue increases, this allows to attain economic growth and employment.</p> <p>Trade- Trade is particularly important to a small, open economy as they can rely on their own domestic markets which are too small to drive growth. Hence, trade provides a strong channel to increase their AD and hence achieve growth through increasing (X-M). This benefits consumers as growth generates higher incomes and improved standard of living. Firms benefit from earning more profits.</p> <p>Trade- International trade provides greater choice for consumers especially for small open economies, as they are able to purchase goods and services, which their own countries do not produce. This enhances consumer welfare. E.g., Singapore can enjoy French wine and apples from China and Australia.</p> <p>FDI- Inward FDIs increases AD as it contributes to the (I) component of AD, leading to higher economic growth and lower unemployment level. It also contributes to capital accumulation and increases LRAS as it increases the stock of capital in the economy. Additionally, FDI inflows allow knowledge and technological transfer to take place, increasing productivity and further increasing the LRAS. These increases in AS generate potential growth and dampen possible inflationary pressures.</p> <p>FDI - In terms of the effects on BOP, FDI may result in higher exports as the goods produced by such factories are exported (e.g., FDI from US to Singapore in the form of US firms setting up factories in Singapore would lead to higher exports from Singapore to the rest of the world when the goods produced by these factories were exported). The increase in X would lead to an improvement in the BOT of Singapore.</p>	
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	<p>Labour- The inflow of labour is particularly important for a small open economy with a limited labour force. Labour flows help increase the size of the labour force and hence shifts the AS rightwards, achieving potential growth. Additionally, the inflow of labour increases the supply and drives down wages in the recipient country. This benefits firms in the recipient country as their costs of production decrease. The reduction in the costs of production also shifts the AS downwards, achieving actual growth and a reduction in the general price level.</p> <p>Labour- If the inflow were of skilled labour, the recipient country's productivity would increase, as they would bring in skills and experience, which benefits the economy. The increase in productivity further increases the AS. It may also have an indirect effect on AD as the presence of skilled labour can attract FDI and allow the country to develop a comparative advantage in higher value-added goods and services.</p> <p><u>Costs of Globalisation</u></p> <p><i>"Grave political and economic dangers implicit" in being an open, connected global city."</i></p> <p><i>"Singapore - by all accounts now the paragon of a global city - confronts, along with the rest of the world, a trifecta of disease, war and economic crisis."</i></p> <p><i>"Russia's invasion of Ukraine has escalated matters, wreaking further havoc on global supply chains and food and energy security. Trade sanctions on Russia have further disrupted recovering supply chains, spiking prices of oil, gas, energy, industrial metals, fertilisers and food."</i></p> <p><i>"massive inflow of foreign entrants or external capital that there are adverse impacts on citizens' livelihoods, asset prices"</i></p> <p>Trade - Due to the higher volume of trade, there is now <i>greater interdependence</i> among countries. Changes in aggregate demand in one country can send ripples throughout the global economy. For example, the fall in aggregate demand in the US due to the financial crisis led to a fall in US's national income. US residents hence reduced their purchase of domestically produced goods as well as imports. Since US's imports are the exports of other countries, these other countries e.g. Singapore suffered a fall in exports. Consequently, the AD of these countries also decreased and reduced their national income. This process where a change in national income of one country reduces the national income of other countries is known as the international trade multiplier. The more a country trades, the more vulnerable it will be to changes other countries' national income. For example, Singapore, which is heavily dependent on trade, often goes into a recession when the US goes into a recession.</p> <p>Trade- Small open economies also experience increased threats to external shocks such as imported inflation - increase in global prices of imported raw materials, intermediate factor inputs and final goods and services.</p>	
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	<p>FDI- In the long run, small open economies that attract FDI may expect an outflow of remittances from profit repatriation (i.e. sending back of profits to home country). As such, the country may end up suffering from a balance of payment deficit via the current account.</p> <p>FDI- FDI inflows can also cause structural unemployment. This is because foreign firms may bring in new machines and methods that make old skills obsolete. Since economies would have to stay competitive through the use of technological advanced production methods, there is a need for workers to be equipped with the relevant skills and in a timely manner is essential to remain employable. Thus, the inability to match up with the current skills required in a timely manner would result in structural unemployment.</p> <p>Labour- For small open economies, inflow of labour could lead to worsening income inequality. The inflow of unskilled labour increases the supply of unskilled labour in the economy and depresses the wages of unskilled labour. While the inflow of skilled labour has a similar effect, the effect is alleviated by the fact that with the establishment of MNCs, the demand for skilled labour has also increased such that wages for skilled labour has generally increased overall. In Singapore, for example, globalisation has widened income inequality as real wages for skilled labour has risen while that of unskilled labour has fallen.</p> <p>Overall Evaluation Small open economies such as Singapore (being import reliant and export dependent) have much to gain from globalisation. Hence, even though there are many costs to globalisation, protectionism is not a choice for such economies as they <i>"must be prepared to undertake these risks simply because the alternative... is, for a small Singapore, certain death."</i></p> <p><i>Instead, they should mitigate these costs by ensuring they have strong economic fundamentals. This can be done by:</i></p> <ul style="list-style-type: none"> <i>Equipping Singaporeans with strong education, retraining and skills. This will ensure they will always possess the skills required in the global market place.</i> <i>Ensuring new areas of comparative advantage are identified to maximize the</i> <i>Diversifying the countries that they export to/import from, to maximize the benefits and minimize the costs from trade.</i> <table border="1" data-bbox="435 1423 1312 1837"> <thead> <tr> <th></th><th>Knowledge, Application, Understanding and Analysis</th><th>Mark</th></tr> </thead> <tbody> <tr> <td>L2</td><td>For a well-developed and balanced answer on the costs and benefits from globalisation. It also has reference to all aspects of globalisation (trade, capital, labour). Clear and coherent analysis, grounded by economic concepts, with application to case material. Max 4 – Good analysis but with reference to only 2 aspects of globalisation.</td><td>4-6</td></tr> <tr> <td>L1</td><td>Answer lacks balance in terms of costs/ benefits or scope in terms of trade, capital, labour, or reference to case materials.</td><td>1-3</td></tr> </tbody> </table>		Knowledge, Application, Understanding and Analysis	Mark	L2	For a well-developed and balanced answer on the costs and benefits from globalisation. It also has reference to all aspects of globalisation (trade, capital, labour). Clear and coherent analysis, grounded by economic concepts, with application to case material. Max 4 – Good analysis but with reference to only 2 aspects of globalisation.	4-6	L1	Answer lacks balance in terms of costs/ benefits or scope in terms of trade, capital, labour, or reference to case materials.	1-3	
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		E	Makes a substantiated judgement that answers the question.	1-2	
		<p>Markers' Comments</p> <ul style="list-style-type: none"> Most students who did poorly for the question thought this question was about whether countries should/ should not trade. However, 'openness' refers to globalisation. Thus, all 3 types of flows should be referred to. Other students who did poorly for the question did not properly elaborate on how increasing (trade/ capital/ labour) would (positively or negatively) impact Singapore's macro goals. They should elaborate using economic concepts e.g. AD/AS where possible. 			
(e)		<p>Using Extract 8 and your own knowledge, analyse the impact on American producers, workers and consumers, when US tariffs are placed on Chinese imports, and evaluate if protectionism can ever be deemed appropriate.</p>			[10]
		<p>Explain how a tariff works:</p>  <ul style="list-style-type: none"> Country is a price-taker and is able to sell as much as it wants at the world supply price of P. (This is lower than the domestic equilibrium price where D (domestic) cuts S (domestic).) When tariff is imposed, $\uparrow P$ of imports from P to P₁ <ul style="list-style-type: none"> Higher price also enables Domestic production to increase from Q₀ to Q₂ Higher price causes consumers reduce quantity demanded from Q₁ to Q₃ Hence, $\downarrow Q$ of imports from Q₀Q₁ to Q₂Q₃ <p>Impact on US Consumers: (-) Consumer surplus falls from XCP to XAP₁. Loss of Consumer surplus of ACPP₁. This is because consumers are forced to pay a higher price of P₁, but suffer a fall in quantity of goods consumed to Q₃.</p>			

		<p>Impact on US producers:</p> <p>Producers who are in direct competition with Chinese imports (+) This will lead to increase in producer surplus from PGY to P1EY. Increase of producer surplus by P1EGP. This is because domestic producers receive a higher price and are able to sell a greater quantity. (+) Their revenue would increase from 0PGQ0 to 0P1EQ2</p> <p>Producers who are dependent on Chinese imports (-) <i>"He can pass a portion of his additional costs on to customers, but not all, he says, because he's competing against foreign companies that don't have to pay these tariffs. So instead, the money has largely come out of his company's profits, which means less growth, less innovation, and no new American jobs."</i> For other domestic producers who are dependent on the Chinese imports on which the tariffs are placed (e.g. tiny components that Digre needs for his speakers), this will have negative spillover effects on them. The tariffs imposed on tiny components imported from China will raise production costs for U.S. exporters. This then translates to higher prices to end-consumers (both domestic) and foreign consumers and reduce competitiveness of its exports. Assuming demand for U.S. automobile exports is PED elastic: $\uparrow P$ of goods \rightarrow more than proportionate $\downarrow Q$ of exports \rightarrow \downarrow export revenue.</p> <p>Impact on US workers: (+) Increase in domestic production from Q0 to Q2 for industries that are in direct competition with Chinese imports. They should see a decrease in demand-deficient unemployment.</p> <p>(-) However, for US producers that are dependent on factor input imports from China will experience an increase in cost of production. They will cause them to experience a loss in export competitiveness. Thus, some manufacturers like Digre to move factory production over to China \rightarrow loss of American jobs.</p> <p>Protectionism can be appropriate: However, despite the negative impacts, if U.S. has evidence of China engaging in predatory dumping by selling its Chinese goods in U.S. mkt at artificially low prices, <i>"Commerce Department found that China was dumping plywood into the United States at unfairly low prices,"</i> it would be appropriate for them to place tariffs. Dumping is a term that refers to the action of a foreign industry to sell a product either below its production cost or below the domestic market price in its own domestic market. Thus, the U.S. would want to impose tariffs to prevent U.S. domestic producers from being driven out of mkt (leading to widespread unemployment) and prevent Chinese firms from establishing monopolistic power in the domestic country. If Chinese imports achieve monopoly status \rightarrow China might raise prices and reduce output \rightarrow reduce consumer surplus.</p> <p>Protectionism is usually not appropriate: If China has a comparative advantage in producing the good, then they should be allowed to sell its goods to the U.S. at the low prices and not be subjected to tariffs imposed by the U.S. government. Tariffs will \uparrow price paid consumers & reduce the amount that can be consumed. Society</p>	
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	<p>suffers from deadweight loss (EFG & ABC on tariff diagram- Society's welfare is not maximized.)</p> <p>Furthermore, protection of local exporters might encourage complacency & inefficiency (e.g. productive/ dynamic inefficiencies)→ lower consumers' welfare.</p> <p>Overall Evaluation Protectionism may be appropriate in the SR if the US is able to prove that there is indeed dumping happening.</p> <p>However, given that protectionism hampers specialisation according to CA, which reduces overall efficiency in global resource allocation and may lead to mutually destructive trade wars, protectionism is not appropriate.</p> <table border="1"> <tr> <th colspan="3">Knowledge, Understanding, Application and Analysis</th></tr> <tr> <td>L2</td><td> <p>Sound analysis of the impact of trade tariffs on US consumers, producers and workers.</p> <p>Sound argument on whether protectionism is appropriate.</p> <p>Use of relevant case information to support analysis</p> </td><td>5-7</td></tr> <tr> <td>L1</td><td> <p>Answer that attempts to consider the impact of trade tariffs on US consumers, producers and workers.</p> <p>Answer attempts to touch on the reasons for protectionism but is not well explained.</p> <p>Contains major conceptual errors. No use of case material.</p> <p>Max 3m if answer only touches upon whether protectionism is appropriate.</p> </td><td>1-4</td></tr> <tr> <th colspan="3">Evaluation</th></tr> <tr> <td>E2</td><td>Evaluative judgment that reaches a conclusion based on the analysis offered</td><td>2-3</td></tr> <tr> <td>E1</td><td>Evaluative judgment without explanation or elaboration or superficial evaluation</td><td>1</td></tr> </table>	Knowledge, Understanding, Application and Analysis			L2	<p>Sound analysis of the impact of trade tariffs on US consumers, producers and workers.</p> <p>Sound argument on whether protectionism is appropriate.</p> <p>Use of relevant case information to support analysis</p>	5-7	L1	<p>Answer that attempts to consider the impact of trade tariffs on US consumers, producers and workers.</p> <p>Answer attempts to touch on the reasons for protectionism but is not well explained.</p> <p>Contains major conceptual errors. No use of case material.</p> <p>Max 3m if answer only touches upon whether protectionism is appropriate.</p>	1-4	Evaluation			E2	Evaluative judgment that reaches a conclusion based on the analysis offered	2-3	E1	Evaluative judgment without explanation or elaboration or superficial evaluation	1	
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	<p>Markers' Comments</p> <ul style="list-style-type: none"> Students tended to run out of time by this question and tended to only answer one aspect of the question i.e. the impact on American producers, workers and consumers OR whether protectionism is appropriate. Student who did better would draw the tariff diagram and use to appropriately explain how the relevant stakeholders are impacted. 																			

		<ul style="list-style-type: none"> • They should not simply fixate on the area change for the surpluses, but must also explain why the consumer or producer surpluses have changed. • Students are reminded to use case material. Although dumping was referred to in the case evidence as a justification for protectionism by the US, many students did not refer to it.
		[Total: 30]

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