H

ST. ANDREW'S JUNIOR COLLEGE
PRELIMINARY EXAMINATIONS – 2018 (JC2)
General Certificate of Education Advanced Level
Higher 2

ECONOMICS **9757/01**

Paper 1 **27 August 2018**

2 hours 15 minutes

Additional Materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your name and class on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

Start Question 1 and 2 on a fresh sheet of paper.
At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **7** printed pages and **1** blank page.

Answer all questions

Question 1: Steel Industry in India

Table 1: World Steel Output and Consumption (million tonnes)

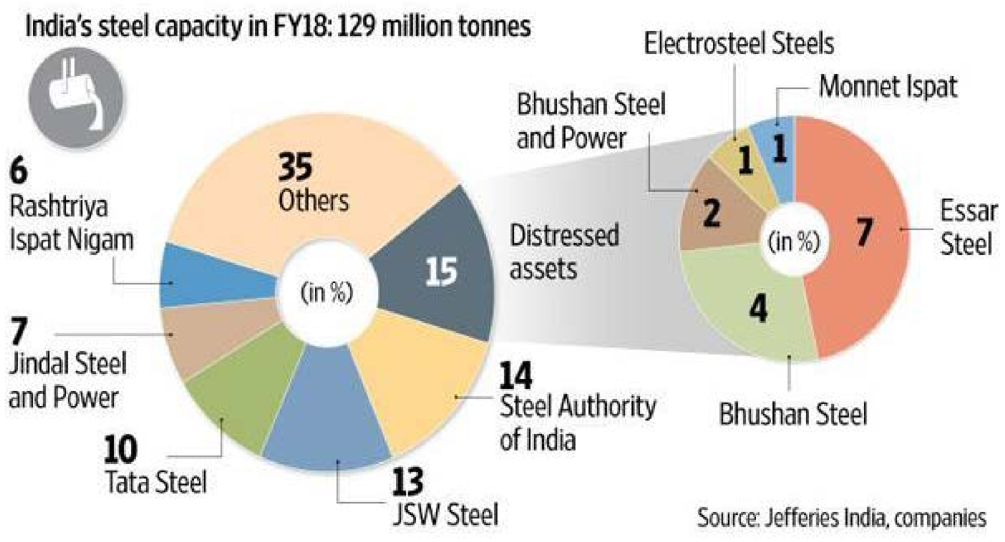
	2014	2015	2016	2017
Output	1,669	1,620	1,627	1,689
Consumption	1,546	1,500	1,516	1,587

Source: World Steel Association

Figure 1: World Steel Prices (USD/tonne)

Source: Tradingeconomics.com

Figure 2: Key Steel Producers in India



Extract 1 Steel industry gets protection

India's Steel Minister Narendra Singh Tomar said that additional steps will be taken to protect domestic steel industry, which is facing a bad patch, in wake of cheap Chinese imported steel. "China was trying to dump its cheap steel in India and as a result of it, the domestic steel industry was in distress. To protest domestic industry, we enhanced import duty and imposed safeguard duty. But these steps were not enough and we will be taking additional steps in this regard", said Tomar.

Steel ministry along with the Finance and Commerce ministries are engaged in a dialogue to work out the steps that need to be taken for protecting domestic steel industry in the near future, according to media reports. "China is offering steel at half price compared to domestic industry in India. The way China is working, it appears (that) an economic war was on," he said.

Giving relief to domestic steel producers against cheap in-bound shipments, the government on Friday imposed a minimum import price (MIP) on 173 steel products ranging between $341 and $752 per tonne. The minimum price will remain in place for six months only.

The Minister further said state-run steel production centres are being expanded and modernised and four new steel plants were being set up in Jharkhand, Odisha, Chhattisgarh and Karnataka.

Source: realtyplusmag.com, 01 Feb 2016, www.thehindubusinessline.com, 05 Feb 2016

Extract 2: 'Iron and steel industries are economy's backbone'

NAGPUR: Iron ore and steel industry is one of the basic industries of the country and plays an important role in strengthening the economy.

Delivering a talk on the 'Indian iron ore industry-an overview', CS Gundewar, controller general, Indian Bureau of Mines said that India was the fourth largest producer of steel in the world. Iron and steel was one of the largest industries supporting the country's economy.

At present India produces 65 million tonnes steel, but as per the 'National Steel Policy', the country is expected to raise this production to 180 million tonnes by the year 2020. But this, he said, would be possible only by exploring new mines. Though India has large resources of iron ores with estimated capacity of 28.52 billion tonnes, magnetite reserves could not be exploited due to the presence of these ores in the 'eco-fragile' zones mainly in Western Ghats. Gundewar also stressed on the need for more scientific and environment conscious mining by using eco-friendly technologies.

Source: Timesofindia.indiatimes.com, 15 May 2013

Extract 3: What is making Indian steel expensive?

A World Steel Dynamics (WSD) report has ranked India ahead of most countries, except those from the Commonwealth of Independent States, in terms of the cost curve. Yet, the sector is reeling from cheap imports and high inventory levels.

According to WSD data for January this year, production cost for hot-rolled coils in India was $349 a tonne, compared with $428 in China, $429 in South Korea, $448 in Japan and the global average of $418. Add to it the taxes, freight and the cost of capital, and the picture isn't really rosy for domestic steel makers, companies claim.

"Our internal freight rate is two-three times higher compared to China," says Sushim Banerjee, director-general of the Institute for Steel Development and Growth.

Logistics costs from Bellary to Delhi would be $60, while for the same distance in China, a producer would pay only $18, says Jayant Acharya, director (commercial and marketing), JSW Steel.

Former Tata Steel former managing director, J J Irani, says, "Most modern steel plants are shore-based, as the cost of transporting ores in large carriers is much cheaper than hauling it in trains. Korean and Japanese plants are all shore-based. They also import ores rather than mine ores."

Adapted from www.business-standard.com, 24 Sep 2015

Questions

(a) **(i)** Describe the trend of world steel prices from Jan 2016 to Dec 2017. [1]

(ii) With reference to Table 1, explain a possible reason for the apparent contradiction between the data and the trend of world price of steel in **(a)(i)**. [3]

(b) **(i)** Using an example, explain what is meant by a price floor. [2]

(ii) With the use of a diagram, explain how a minimum import price could achieve the Indian government's intended objective. [4]

(c) In view of the current market structure in the Indian steel industry, discuss the possible impact of the Indian government's removal of the minimum import price after six months on consumers and producers of steel in India. [8]

(d) **(i)** With the use of an example, explain what is meant by comparative advantage. [2]

(ii) Assess the options that are available to the Indian government to secure India's comparative advantage in steel production. [10]

[Total: 30]

Suggested Answers

(a)	**(i)**	**Describe the trend of world steel prices from Jan 2016 to Dec 2017.**	**[1]**
		The trend is generally a <u>rising</u> one. [1]	
		Markers' Comments Knowledge/skills • Most students were able to state the rising trend.	
	(ii)	**With reference to Table 1, explain a possible reason for the apparent contradiction between the data and the trend of world price of steel in (a) (i).**	**[3]**
		Table 1 seems to suggest that *there had been a* ***<u>surplus</u>*** in the market from 2016 to 2017 as every year, the production is greater than consumption.[1] Hence, the **<u>world market price of steel *ought to be falling*</u>**. [1] <u>Possible reason for 'anomaly'</u> [1] However, as **<u>output may not equate to supply</u>** (portion of steel may be produced but not offered for sale), Table 1 may not therefore show the supply, and hence, the surplus of steel from 2016 to 2017. It is possible to postulate that some steel producers may have tried to withhold some amount of produced steel from the market in order to induce an upward pressure on steel prices.	
		Markers' Comments Knowledge • This question was not well done by majority of the students. • Few students recognised that there was a surplus of steel yearly. Hence, few students were able to state the contradiction i.e. the work market price of steel had be rising yet Table 1 suggested that price of steel ought to be falling. • As such most students could not derive the reason for the contradiction. Skills Some students compared the change in output and consumption between the first year and the last year. This led them to conclude there was a shortage over time. • "Surplus" or "shortage" of goods is always measured with reference to a given original price at a specific time. It is a stock concept (measured at one specific time) and not a flow concept (measured over a period of time).	

(b)	(i)	Using an example, explain what is meant by price floor.	[2]
		A price floor is the legally minimum market price of a good or service and is set above the market equilibrium price. [1] E.g. A minimum import price on imported steel imposed by Indian government means that imported steel must not be sold less than the legally permissible price set by the Indian government. [1] Or A minimum wage is a form of price floor. It is the lowest wage a worker may be paid. Workers must not be paid lower than this legally permissible wage, usually set by governments or trade-unions. [1]	

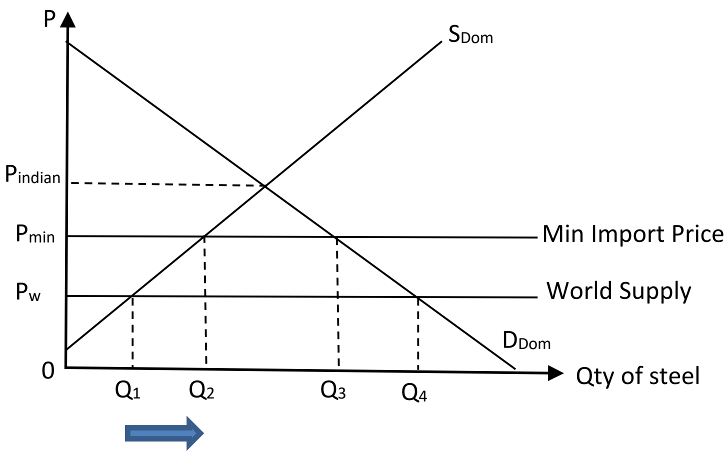
		Markers' Comments
		
		Knowledge
		• Students who did well were able to define the price floor. In addition, many recognised that an ***effective*** price floor would be set above the equilibrium price. They were also able to provide a relevant example which may or may not be related to the context of steel.
		• Students who did not do well usually were either carelessly or had no understanding of the concept.
		    o Careless students indicated that price floor was a maximum price.
		    o Some students gave inappropriate example. E.g. minimum price is imposed on demerit good such as cigarettes or alcohol to discourage consumption. This is a conceptual error. **The objective of minimum price is to protect the producers' incomes and not to discourage consumption.** Hence, the example of demerit good would not be correct.
		
		Skills
		• Better answers are the ones that made reference to the case material since it is a case study.	

	(ii)	**With the use of a diagram, explain how a minimum import price could achieve the Indian government's intended objective.**	**[4]**

- The objective of the minimum import price is to protect domestic steel producers or **to protect steel workers** **by raising the price of imported steel**.

- Given that local steel producers are facing a bad patch in wake of cheap Chinese imported steel ($0P_w$), Indian government adopted minimum import price, which brought the equilibrium price to $0P_{min}$.
- As price of imported steel increases, quantity demand for imported steel by Indian consumers falls.
- At the same time, domestic consumers switched from imported steel to domestic steel. Domestic firms increase output from $0Q_1$ to $0Q_2$, a success of imposing minimum import price.

Fig 1: MIP impact on Indian (Domestic) Steel Market



Markers' Comments
Knowledge

- Students who did well used well-labelled diagrams to show how minimum import price achieved Indian government's **objective of protecting the Indian (domestic) steel market by reducing quantity of imported steel.**

- Their explanation of the diagrams clearly showed their understanding of the relationship between the two substitutes and how minimum import price achieved the Indian government's objective.

- There were 2 possible diagrams that students could use to show how minimum import price (MIP) could reduce the quantity of imported steel in Indian (domestic) steel market. Students could either draw Fig 1 or Fig 2.

Fig 2a: Imported Steel Market

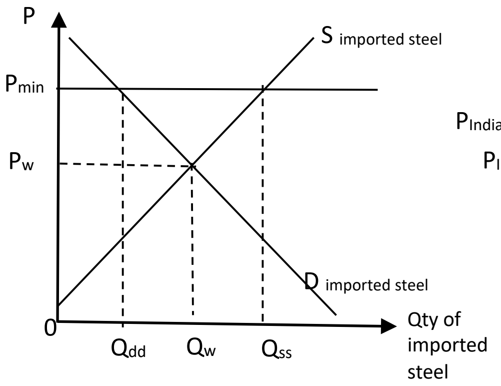
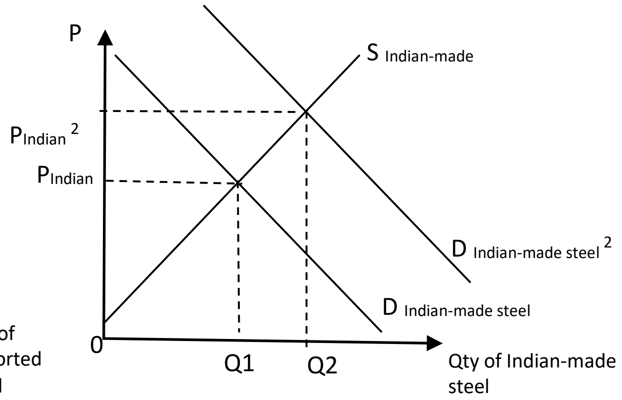


Fig 2b: Indian Made Steel



- Fig 2a illustrated the minimum imported rpice with reference to the Imported Steel Market only, which led to a creation of a surplus. Fig 2a shows that quantity demanded (Qdd) of imported steel is lower than the original equilibrium quantity (Q_w). At the same time, demand for indian-made steel increased from D to D2, resulting in an increase in equilibrium quantity of Indian-made steel from Q1 to Q2. Hence the Indian government achieved their objective in reducing imported steel.

- Students who did well were able to clearly distinguish between the 2 concepts - **<u>“change in demand”</u>** vs **<u>“change in quantity demanded”</u>**.

  - They explained how **<u>the minimum import price *(increased price of import)*</u>** thus ***<u>reduced the “quantity demanded”</u>*** for imported steel **<u>by indian steel consumers</u>**.

  - This in turn **<u>raised the “demand” for Indian domestic steel</u>** as Indian steel consumers switch to domestic steel. Assumption that the overall domestic demand for steel remaining unchanged was given.

Skills

- Those who did not do well were not clear that the objective is to reduce the quantity of imported steel in order to protect the domestic market. Many just incompletely stated that the objective was to “protect the domestic firms”.

- Clumsy phrasing and vague/omitted labelling of the diagram (is it Market for Indian (domestic) Market or Market for imported steel?) often led marks not being fully awarded.

(c)		**In view of the current market structure in the Indian steel industry, discuss the possible impact of the Indian government's removal of the minimum import price after six months on consumers and producers of steel in India.**	**[8]**

Removal of minimum import price means that imported steel will be bought and sold at the original price previously.

Current Steel Market Structure is an oligopolistic one. Current steel market dominated by 5 largest producers with a combined market share of 51% (Fig. 2).

Steel **producers** in India – **Positive** impact

- The expectation of a return of foreign competition with the removal of minimum import price will force local producers to further explore ways to be even more efficient. Dominant oligopolistic steel producers may have used their supernormal profits to invest heavily on R&D to seek more efficient production methods and produce more quality steel to better compete with foreign suppliers (e.g. China).

- Some dominant firms may even collude in order to consolidate their resources for R&D and gain greater market share. With greater market share comes higher IEOS. This can help indian made steel be more price competitive as producers pass cost savings to consumers. Continued effort to be more competitive may allow such dominant local steel firms to grow even stronger in due course, further entrenching their oligopoly position.

Steel **producers** in India – **Negative** impact

- The smaller steel producers are likely to be the distressed ones. With the impending removal of minimum import price only after six months of implementation, such small steel producers would unlikely have had the time nor the financial resources to ready themselves for the return of foreign stronger competitors.
- Assuming that there is no collusion with bigger dominant firms, their low output and less ability to reap iEOS, they are likely to lose customers to the foreign suppliers.
- They could suffer from falling TR, profits and thus, exit the industry altogether.
- Their exit may allow foreign firms to take over their market share.

Steel **consumers** in India – **Positive** impact

- However, the removal of minimum import price will no doubt reduce cost of production (COP) of steel consumers, who use steel as a factor of production. Lowered COP for steel consumers could mean higher profits, assuming unchanged TR.
- This is especially true for heavy steel users such as car and equipment manufacturers.
- With heightened foreign competition, existing oligopolists will even be more unlikely to employ collusion tactics for fear of losing significant amount of customers e.g. via predatory pricing

- This could bring about greater cost savings to consumers, steel consumers may enjoy even lower prices than those charged by Chinese steel producers.

Steel **consumers** in India – **Negative** impact

- Removal of minimum import prices is likely to lead to entry of foreign steel producers in Indian steel market.
- Should these foreign producers, being more efficient than local ones, and dominate the Indian steel market in the foreseeable future, steel consumers in India may become increasingly reliant on foreign steel.
- Heavy reliance on such a critical input may put the domestic steel consumers at risk of future unexpected trade dispute or transport delay.

EVALUATION

- Dominant oligopolistic Indian steel producers are unlikely to exit the industry than the smaller local steel producers. This is due to their stronger past super-normal profits/ financial reserves either to withstand foreign competition or to plough into the R&D and/or marketing efforts to gain further market share.
- However, R&D may not always be successful. In the event that R&D outcome is not realised in time, the dominant oligopolistic Indian firms may not be able to compete with foreign firms and lose their market share when MIP is lifted.
  - As more foreign firms enter the once oligopolistic indian steel market, **it may eventually become monopolistic competitive**.
  - Alternatively, on the other hand, if a single foreign firm manage to dominate the Indian steel market, **it may even become monopolistic.**

- Given steel industry is one key pillar of Indian economy (Ext 2), it is unlikely that Indian government will allow foreign firms to dominate the domestic steel industry. Hence, steel consumers will continue to be able to import steel at a lower price than before removal of minimum import prices and not run the risk of having to buy steel exclusively from only foreign steel producers even in the longer term.

Level (Marks)	Knowledge, Application, Understanding, Analysis
L2 (4 – 6)	- Clear explanation of impact on both consumers and producers. Balanced answer given based on sound economic arguments. - Explanation needs to include both positive and negative impact on the consumers and producers.
L1 (1 – 3)	- Weak explanation (incomplete or contains errors) of impact presented. - Lack of supporting evidence from case materials.
E (1 – 2)	- Suitable judgement provided for producers and consumers – 2m. - Merely stand given without substantiation – 1m.

		Markers' Comments Knowledge • Many students correctly identify that Indian Steel market is oligopolistic in nature by calculating the concentration ratio. • Students who did well were able to make reference to the market structure and suggest how dominant oligopolistic firms would behave in view of the lifting and impending lifting of the minimum import price o Answers that shows good understanding of how oligopolistic firms behave make reference to their ability to make supernormal profits , tendency to collude and mutual dependency • Many students were able to state the positive and negative impact of firms (profits, survival in market) and consumers (lowered cost of production/choice). • Students who did not do well were not able to identify the market structure correctly. A worryingly large number identified Indian steel market as MC structure. Skills • A balanced response is observed for a large number of scripts. • Some scripts did not contain any evaluation at all. It is strongly advised for students to give conclusive judgement to their answers in order to earn the evaluative marks for questions that are 7m and above	
(d)	**(i)**	**With the use of an example, explain what is meant by comparative advantage.**	**[2]**
		• Define comparative advantage (CA) – A country is said to have CA if it is able to produce a good with less opportunity cost than another country producing the same good. • Example: Production of vegetables in Singapore vs Malaysia • Singapore faces land scarcity and lack of expertise in farming. On the other hand, Malaysia has land and farming know-how. • Hence, per kilogramme of vegetables produced in Singapore, Singapore may need to sacrifice more resources and hence output from the next best sector (e.g. tourism services). Hence, opportunity costs in terms of tourism services produced will be much higher in Singapore than in Malaysia. [1]	
		Markers' Comments Knowledge	

		• Students who did well had a good understanding of what CA refers to. They understood the importance of comparing ***opportunity costs*** between countries when discussing CA. I,e when a country has CA in the production of a good, it has a 'lower opportunity cost than another country'. • Those who did not do well talked about the "Theory of CA" instead. Theory of CA builds on the concept on CA by extending to how countries choose to specialise and could mutually benefit from trade. Theory of CA is not required by the question. Skills • It is important to show with an example how a country has less opportunity costs in the production of a good compared to another. • A number of scripts illustrated CA using tables. Since 1 mark is given to an example, the use of table would be excessive. A simple comparison of the amount of another good foregone by the two countries will suffice.	
	(ii)	**Assess the options that are available to the Indian government to secure India's comparative advantage in steel production.**	**[10]**

		INTRODUCTION
		• A country's CA depends on 1) quality and quantity of factors of production and 2) availability of suitable production techniques/technology.
		• Options that are available to the Indian government to secure CA must at least ensure no erosion/loss of (1) and (2).
		
		• Based on extract, options available include
		    o #1: modernising state-run production centres
		    o #2: improve transport network/infrastructure to cut freight costs
		    o #3: build more shore-based plants
		
		BODY
		• **Option #1:** State-run steel production centres are being expanded and modernised (Ext 1). Doing so could help steel firms
		    ▪ Expansion helps to reap EOS by expanding scale of production and lower unit COP
		    ▪ Modernisation helps to increase efficiency and productivity by using modern technology; as such reduce unit COP
		
		• Lower COP could help to secure CA.
		    o Lower COP implies less funding/resources has been sacrificed from elsewhere to pay for the steel production → lower opportunity cost
		
		    o Also, with more efficient and productive technology to produce steel, this could also mean fewer units of resources are needed to produce the same quantity of steel, thus freeing up such scarce resources to produce more units of other goods → lower opportunity cost	

Advantages/Limitations

- Concern remains whether such state-run centres will strive to be as cost efficient as possible. As steel is one large industry in India (Ext 2), such state-run centres may have an even more important objective – create jobs. Hence, the state-run firms may compromise cost efficiency and instead choose to employ excessive workers. In so doing, these state-run firms may not be able to help India secure its CA.

- **Option #2:** Improve transport network/infrastructure to reduce internal freight rate (Ext 3)
  - Improve the transport infrastructure network (construct dedicated rail tracks, etc) to cut down on freight cost to transport raw materials to steel production plants as well as finished products to the ports to be exported.

- **Option #3:** Build more shore-based plants
  - Could explore building shore-based plants like those in Korea and Japan.

  - Cuts down freight/transport costs (Ext 3 – much cheaper to carry ore in ships than hauling ore in trains).

- Both options lower transportation cost. This could help secure CA.
  - Lower COP implies less funding/resources has been sacrificed from elsewhere to pay for the steel production → lower opportunity cost

Advantages/Limitations

- Option 2 would be highly necessary if ore deposits are located far away from steel plants. Huge investment would be needed to lay rail tracks – hence may strain govt budget. Should the govt need to borrow to finance this project, financial crowding out effect may retard actual economic growth.

- Option 3 would allow India to reap long term benefits, as shore-based plants will forever terminate the need to haul ores via trains, a more expensive option of obtaining raw materials for steel producers.

- Although there may be pollution, pollution would unlikely affect large population due to location near sea – generates minimal negative externality.

EVALUATION

- Though improving the transport network could help to secure CA for India, this method will require continual upgrading of the network once the current ore mines get exhausted. The network will need to reach newer ore mines, which means a drain on future government budget as well as making the existing network under-utilised.

- The Indian government should consider building only shore-based steel plants so as to cut down on the need to continuously improve the transport network. Given India's long shoreline, the government is unlikely to have to vacate or evict any existing occupants of the land, thereby reducing any opportunity cost of steel production. In addition, due to its proximity to the sea and away from population, the minimal negative externalities generated should help align Indian government's aim to be eco-friendly in its quest to achieve economic growth.

Level (Marks)	Knowledge, Application, Understanding, Analysis
L2 (5 – 7)	- Clear explanation of **<u>any two</u>** options available, detailing how India's CA in steel production could be secured. - Explanation needs to draw suitable evidence from the case materials.
L1 (1 – 4)	- Superficial explanation (incomplete or contains errors) of options was given. - Lack of supporting evidence from case materials.
E (1 – 3)	- Appropriate assessment provided with justification based on sound economic argument. - Merely stand given without substantiation – 1m.

Markers' Comments

Knowledge

- Students who did well understood the **factors that change CA i.e. 1) change in technology, and 2) change in factor quantity and quality of factor endowment.**
- They were also able to draw evidences from the case materials (shore-based plants, R&D, explore new mines, etc) and elaborate on how such measures will help secure CA for India.
    - They clearly explained how each of the policies helped to change the factors affecting CA, and in turn at least maintain, if not lower, the opportunity costs of steel production in India.

- Those who did not do well were not able to explain how each of the policies change CA.
- There were several misconceptions and awkward expressions. E.g.

Misconceptions	Correction
• "Higher export competitiveness" ≠ CA • Higher productive capacity ≠ CA • Productivity ≠ productive capacity ≠ efficiency ≠ CA	Though each concept is relevant to explaining CA, it should be highlighted how each concept helps to lower opportunity cost Productivity and productive capacity are also two different concepts and these terms should not be used interchangeably.

Skills

- Students should improve on the way they explain how CA changes. Students should highlight how each factor could lower the opportunity cost incurred E.g.
    - Taxes and subsidies, by themselves, do not alter the CA of a country. One way is to explain that by lowering taxes and providing subsidies, firms can retain more profits and when they plough the profits into R&D, they can improve their efficiency, and reduce their cost of production in the long run. If successful, firms will then use less resources per unit of steel produced (i.e. more efficient in production). Since less resources are used, the opportunity cost is lowered (less resources would have to be sacrificed when the choice is made to produce more steel).

[Total: 30]

Question 2: The Debate on Globalisation

Table 2: Current account balance of various economies (US$, billions)

	2011	2012	2013	2014	2015	2016
India	-62.5	-91.5	-49.1	-27.3	-22.5	-12.1
U.S.	-465.9	-426.2	-349.5	-373.8	-434.6	-451.7
China	136.1	215.4	148.2	236	304.2	196.4

Source: *World Bank*

Table 3: China's inflation rate (annual %)

Year	2011	2012	2013	2014	2015	2016
Inflation rate (%)	5.41	2.64	2.63	2.0	1.44	2.0

Source: *World Bank*

Extract 4: China eyes improved India ties in case of Sino-U.S. trade war

China is currently facing down a list of import tariffs levied by the Trump administration, agitated by the country's $375 billion trade surplus with the United States. In response, it has hinted at relaxing rules on some American imports and suggested dialogue rather than escalating a potential trade war.

That is not all, however. China is now taking steps to protect itself if a trade war does come to pass, and is looking to India as a potential ally, although India's government is not all too happy with its own China trade deficit. China wants to treat other countries, especially major partners, well in case U.S. tariffs force Chinese exporters to depend more on markets outside the United States, analysts say. India is a prime target. Beijing knows India finds the trade relationship uneven, experts say, increasing the urgency to please it.

"Indian officials see China pursuing a 'beggar-thy-neighbour' policy and undermining India's manufacturing sector by dumping cheap, subsidised goods in the Indian market while importing raw materials from India," says Mohan Malik, a professor at the Asia-Pacific Centre for Security Studies in Honolulu, Hawaii. India has filed the largest number of anti-dumping cases in the World Trade Organisation (WTO) against China, he notes.

A closer trade relationship with India means more opportunities in the future, as India is expected to be the fastest-growing economy for the next decade. India's GDP, the world's fourth-largest, is growing at around 6.5% -- close to China's own rate of acceleration.

However, China has cause to fear India's economic expansion as Indian wages are generally lower than Chinese equivalents, keeping manufacturing costs down, says Stuart Orr, professor of strategic management at Deakin University in Australia. India would also not be burdened by U.S. tariffs aimed at China. "If India increases its imports from the U.S., the doors will be open for India to export more to the U.S. as well," Orr says. "As China's wage rates continue to rise, China has every basis for fearing an India with a developed manufacturing capability, fueled by the demand of more exports to the U.S.," he says.

Source: *Forbes*, 3 April 2018

Extract 5: China's vanished current-account surplus will change the world economy

The State Administration of Foreign Exchange (SAFE) said on Friday that China had recorded a deficit of US$28.2 billion in its current account for the first three months of 2018, in what is the first quarterly deficit since the second quarter of 2001. Economists said it could signal a fundamental shift in China's international payment position.

Ding Shuang, the chief China economist with Standard Chartered in Hong Kong, wrote in a note that China has run a current account surplus on an annual basis in the past 25 years and "people tend to take China's surplus for granted". However, "a moderate shock, against the backdrop of intensifying trade frictions, can push China's current account into deficit," he wrote.

The merchandise trade surplus dropped 35 per cent year-on-year to US$53.4 billion in the first three months of this year, SAFE said. Meanwhile, the service trade deficit, including tourism, was US$76.2 billion, resulting in an overall current account deficit, according to China's official balance of payment figures.

Ding forecasts that China's current account will likely return to a surplus in the coming months, but the surplus will be just 1% of GDP this year and 0.5% next year. The trade ruckus with the U.S. could reinforce the downward trend.

Adapted from *South China Morning Post*, 4 May 2018 and *The Economist*, 17 May 2018

Extract 6: Globalisation or de-globalisation?

A cursory glance at economic preferences of people around the world point at two prominent trends. Firstly, those in advanced countries are increasingly interested in de-globalisation.

The term de-globalisation is used to highlight the trend of several countries wanting to go back to economic and trade policies that put their national interests first. These policies often take the form of tariffs or quantitative barriers that impede free movement of people, products and services among countries. The idea behind all this protectionism is to shield local manufacturing by making imports costlier. The present talk around 'trade war' and 'de-globalisation' cropped up after the U.S., in March, imposed 25 per cent and 10 per cent duty on steel and aluminium imports, respectively, from certain countries, citing national security and job creation as the triggering factors.

The second trend, on the other hand, is that less developed countries have become vanguards of interconnected economy, as it provides them, through the expansion of markets and infusion of foreign capital and technology, with the chance to develop economically. The proponents say globalisation represents free trade, which promotes global economic growth, creates jobs, allows labour to move from country to country to market their skills and makes companies more competitive.

An IMF Working Paper looked at how globalisation affects the distribution of incomes across and within countries. "In rich economies, globalisation still represents a source of economic growth, but the expected gains are lower than in poor and emerging market economies, where globalisation increases economic well-being and reduces poverty. While in the average developing economy the poor as well as the wealthy benefit from globalisation, in many advanced economies globalisation often has little effect on the incomes of the poor," they claimed. This is a point that explains why a majority of people in economically advanced countries are rallying against globalisation, leading to protectionist trade practices.

The economists have an advice for the governments. “Government policies matter in making the benefits of globalisation more inclusive. Investments in education that raise skill levels, as well as taxes and transfers that spread the benefits more broadly, can help globalisation fulfil its promise of generating gains for all,” they argued.

Adapted from *Forbes*, 6 May 2015 and *The Asian Age*, 25 June 2018

Questions

(a) Using Table 2, compare the current account balance of India and the U.S. from 2011 to 2016. **[2]**

(b) How far do Tables 2 and 3 show an improvement in China’s economic performance from 2011 to 2016? **[5]**

(c) With reference to Extract 4, explain the potential macroeconomic impact of U.S. tariffs on both China and India. **[5]**

(d) Extracts 4 and 5 mention some of the challenges faced by the Chinese economy in recent times. **[8]**

Using the data and your own relevant knowledge, evaluate **two** policy options the Chinese government may consider in overcoming **any two** of these challenges.

(e) With reference to data where appropriate, assess the extent to which world economies should pursue deglobalisation. **[10]**

Total: 30 marks

Suggested answers

<table>
<tr><td>(a)</td><td>Using Table 2, compare the current account balance of India and the U.S. from 2011 to 2016.</td><td>[2]</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td></td><td>Similarity: Both India and US are facing a current account deficit from 2011 to 2016.

OR

Both countries’ current account deficits are improving/becoming smaller.

Difference: India’s current account deficit is always smaller than that of US.</td><td>

[1]

[1]</td></tr>
<tr><td></td><td>Markers’ Comments

Knowledge
While a handful of students were able to recognise and express that a negative current account balance was a current account deficit, there were still quite a number of students who did not use the term “current account deficit” in their answers.
Skills
As mentioned above, good students exhibited good answering skills by using the term current account deficit in their answers. It would NOT be acceptable to say “negative” balance. They also exhibited good comparison skills by using two comparison criteria in order to elicit 1 similarity and 1 difference.
The comparison criteria could be as follows:
Compare the general trend across time
Compare the magnitude/level across time
Compare the rate of change (e.g. rate of improvement) across time
Many students were able to compare the general trend across time (i.e. both countries exhibited current account deficit across years or improving current account deficit across years). However, some students could not derive the other comparison (i.e. the difference) accurately.
It would not be accurate to use absolute changes such as “50.4 US$ billion improvement of current account deficit in India” to prove that the improvement in India’s CA deficit is faster.
More accuratelypercentage changes should be used to show that India’s CA deficit improved at a faster rate than the US.
Some did not interpret the question or read the question carefully. As a result, these students compared the data with that of China’s. China is not required in the question at all!</td><td></td></tr>
<tr><td>(b)</td><td>How far do Tables 2 and 3 show an improvement in China’s economic performance from 2011 to 2016?</td><td>[5]</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td></td><td>Introduction:</td><td></td></tr>
</table>

- China’s economic performance can be measured through the 4 macroeconomic indicators i.e. economic growth, inflation rate, unemployment rate and BOP position.

Thesis:

- Table 1 shows a rising CA surplus, which may imply rising AD in China and hence, actual growth and an increase in employment.
- Furthermore, a rising CA surplus may also reflect an improving BOP position of short term BOP surpluses, assuming BOP equilibrium.
- Table 2 shows a slowing inflation rate in China which could reflect moving towards the goal of low and stable inflation.

Anti-thesis:

- However, a rising CA surplus may not necessarily mean an improvement in economic performance as it is not reflect the entire BOP, which also takes into account flows in the KFA.
- Additionally, a rising CA surplus in the long term may result in long term BOP surpluses, which worsens China’s economic performance in achieving long term BOP equilibrium.
- A slowing inflation rate may also mean the economy’s growth is slowing down, therefore worsening China’s economic performance.

Evaluation:

- Given that Tables 1 and 2 only provide China’s CA balance and inflation rate respectively, there is insufficient data to accurately conclude if there has been an overall improvement in China’s economic performance as the data provided does not give a complete picture of the four key areas of economic performance.
  Hence, the tables show an improvement in China’s economic performance to a small extent.

Markers’ Comments

Knowledge

- Quite a number of students were able to explain why current account surplus is beneficial by linking to positive impact on other KEI such as economic growth etc. Same goes to their explanation relating to low inflation rate.
    - However, these students answer would have been better if they are able to recognise the following:
        - Increasing current account surplus would result China’s government to achieve the aim of favourable BOP equilibrium.
        - Slowing inflation rate would result China’s government to achieve the aim low and stable inflation.
- Many students were able to recognise that the economic performance of a country is measured by the key economic indicators (KEIs). However, a number of students were not aware that the economic performance of a country, in this case, China, must be assessed by analysing ALL 4 KEIs holistically.

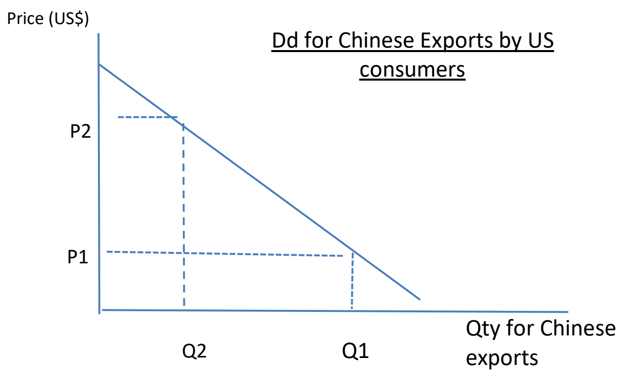
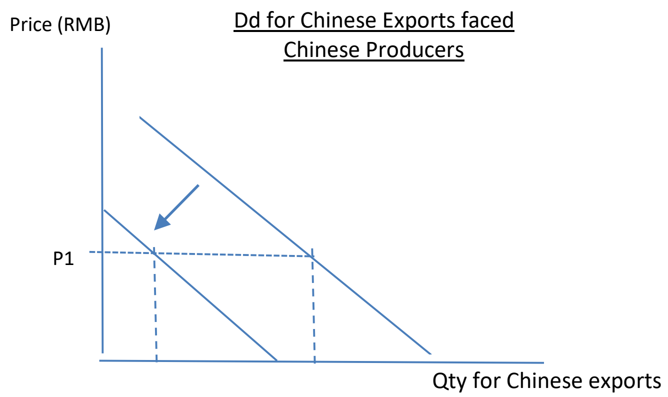
	• The above pitfall in knowledge had resulted in students not being able to provide a more holistic evaluation of the economic performance of China at the end of their answers. The students should have stated that other missing data such as economic growth rate and unemployment rate should be provided together with the existing data in order to give a complete picture of the economic performance of China. Skills • Students should learn how to apply the skill of questioning assumptions to derive the anti-thesis for the question. Some students did not manage to see that current account surplus does not mean that there is BOP surplus because the capital and financial account might be in deficit. • Good students were able to question the factors that cause inflation rate to slow down and explain how slowing inflation rate might indicate a worsening economic performance in China.	
(c)	**With reference to Extract 4, explain the potential macroeconomic impact of U.S. tariffs on both China and India.**	**[5]**
	Define tariff: Tariffs are duties paid for certain types of imports. OR Explanation of the impact of the tariff on Chinese goods. Macroeconomic impact of U.S. tariffs on China: • A U.S. tariff on Chinese products would make Chinese goods more expensive in the U.S., resulting in a fall in quantity demanded for China's exports. • Ceteris paribus, this may cause a decline in AD, resulting in real national income decreasing via the multiplier effect (negative economic growth), increasing the level of unemployment in China. OR • Ceteris paribus, this may worsen China's CA and hence, BOP position. Macroeconomic impact of U.S. tariffs on the India: • As India would not be burdened by the U.S. tariffs aimed at China (Extract 1 para 5), India may potentially be able to trade more with the U.S. • If export revenue of India exceeds its import expenditure, this may increase AD, ceteris paribus, causing an increase in real national income via the multiplier effect, resulting in actual economic growth as well as an increase in employment. OR • Ceteris paribus, this may improve India's CA and hence, BOP position. • If export revenue of India is smaller than its import expenditure, this may decrease AD, ceteris paribus, causing a fall in real national income via the multiplier effect, resulting in negative economic growth as well as an increase in unemployment. OR • Ceteris paribus, this may worsen India's CA and hence, BOP position.	**[1]** **[2]** **[2]**
	Markers' Comments Knowledge • Students who did well understood from the extract that the tariffs was <u>only imposed on China by US</u>. They also explained the objective and workings of tariffs well **i.e. tariff is meant to increase Chinese**	

import prices in US. In turn, this could reduce Chinese export revenue since US is a significant trading partner of China.

- Hence, students could explain that China stood to experience mostly negative macroeconomic consequences e.g. unfavourable BOT and in turn BOP, unemployment and negative growth. India, on the other hand, may benefit as US generally could divert trade away from China to India.
- Many used the AD/AS framework well in their explanation.
- Those who did not do well misinterpreted that tariff was imposed on both China and India. They also failed to clearly explain the how tariff could impact macroeconomic goals.

Skills

- There were several awkward expressions, particularly due to the use between “exports” and “imports". Trade involves 2 parties in transaction, it is important to indicate whose point of view was being looked at.
- Example

<table>
<tr><th>Mistake</th><th>Correction</th></tr>
<tr><td rowspan="2">“Tariffs will result in a fall in quantity demanded for export.”</td><td>“Tariffs imposed by the US on China will result in a fall in <u>quantity demanded </u>for Chinese exports by consumers <u>in US</u>”

</td></tr>
<tr><td>“Tariffs will result in a fall in <u>demand</u> for Chinese exports <u>faced by exporters in China</u>.”

</td></tr>
</table>

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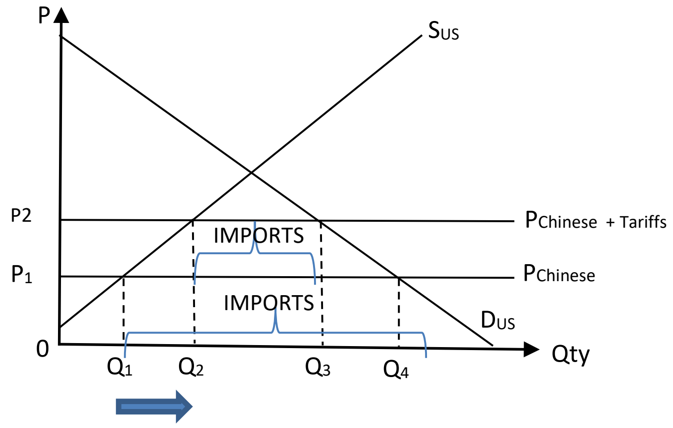
"Tariff will cause a fall in quantity of imports from China by US consumers (from Q1Q4 to Q2Q3) in US.



(d)	**Extracts 4 and 5 mention some of the challenges faced by the Chinese economy in recent times.** **Using the data and your own relevant knowledge, evaluate <u>two</u> policy options the Chinese government may consider in overcoming <u>any two</u> of these challenges.**	**[8]**

Introduction

Challenges faced by the Chinese economy:

1. Looming trade war between China and the U.S.
2. Potential loss in competitiveness to countries such as India
3. China's declining CA balance

These challenges faced by China have varied negative impacts on economic growth, employment and BOP position in China.

Body

<u>Challenge #1</u>
The looming trade war may result in the loss of one of China's largest markets abroad, which may negatively affect China's export revenue and hence, economic growth, unemployment as well as BOP position.

Policy considerations:

1. Trade policies to appease the U.S.

   Evidence: It has hinted at relaxing rules on some American imports and suggested dialogue rather than escalating a potential trade war (Extract 4 para 1)

   By relaxing rules on some American imports, this may help ease some tension between China and the U.S. as the U.S. would have greater access to China's market, potentially reducing the CA surplus China has with the U.S. to some degree by reducing China's export revenue from the U.S., and increasing its import expenditure to the U.S.

In the longer term, this would be beneficial to not only the U.S., but to China as well as the improved trade relations would still mean that they would be able to continue to trade with the U.S., rather than shutting out all opportunities to trade.

These trade policies may reduce the extent of the decrease in export revenue as compared to a trade war with the U.S., hence, alleviating the impact on China's economic growth, unemployment and BOP position.

2. Trade policies to improve trade relations between China and other countries such as India

    Evidence: Undermining India's manufacturing sector by dumping cheap, subsidised goods in the Indian market (Extract 4)

    China should address the dumping allegations by India and use fairer trade practices to improve trade relations with India. Furthermore, given that India is expected to be the fastest-growing economy for the next decade (Extract 1), fairer trade practices should encourage greater trade between China and India, allowing China to ride on India's growth as a source of external growth. Hence, this may help to increase China's export revenue in the longer term, positively impacting its economic growth, unemployment and BOP position.

Evaluation: However, there is no guarantee of success with trade policies as China has also threatened to impose tariffs on U.S. goods to China, which may further worsen the already volatile trade relations between the two countries. Similarly, China may refute India's allegations on dumping, potentially worsening trade relations between the two countries.

<u>Challenge #2</u>

Evidence: China has cause to fear India's economic expansion as Indian wages are generally lower than Chinese equivalents, keeping manufacturing costs down (Extract 4 para 3).

A loss in price competitiveness may signal a decline in China's future export revenue and as a result, have negative implications on it economic growth, unemployment and BOP position.

Policy considerations:

1. Supply-side policies

    For example, China may need to move further up the value-added chain in order to remain competitive in the global economy. This may involve education and training to restructure the economy, in harnessing a new area of comparative advantage to increase export price competitiveness internationally. This should help to increase export revenue in China, boosting actual economic growth, employment and improving the BOP position, ceteris paribus.

Evaluation: In moving up the value-added chain, it may also be important for China to look into increase its non-price competitiveness of exports, rather than just price competitiveness, as higher value-added products usually require greater polish and are of higher quality.

Challenge #3

Evidence: China had recorded a deficit of US$28.2 billion in its current account for the first three months of 2018, in what is the first quarterly deficit since the second quarter of 2001 (Extract 5 para 1).

A deficit in the CA could signal a worsening balance of trade and as a result, negative growth and a fall in employment.

Policy considerations:

1. One of the wider-known macroeconomic policies in China is the rebalancing of growth, from externally-driven sources, to more internally-driven sources. In recent years, China has been striving to rebalance from export-driven growth to that of consumption-led growth. The refocusing of their drivers of growth reduce reliance on the global economy to drive more stable growth and employment.

   Evaluation: Rebalancing of growth may take some time to change as it involves large macroeconomic changes and a fundamental change in mindsets of consumers from saving, to consumption.

Note: Students may choose to discuss **any appropriate policy** option to tackle the various challenges China may face.
Accepted policies include:

- Expenditure reducing (contractionary MP and FP)
- Expenditure switching (depreciation)
- Retaliatory protectionism

Synthesis

In view of the various challenges China is experiencing, China may need to prioritise the issues at hand in order of importance, in order to effectively reduce its negative impacts on the macroeconomy. In so doing, China will better be able to achieve its aims of high and sustained economic growth, low unemployment and a favourable BOP position. Furthermore, given that some policy options require some time before its effects can be seen in the macroeconomy, it would be wise of the Chinese government to consider a combination of short term and long term policy options in order to see the best outcome in mitigating these challenges.

Level	Knowledge, Application, Understanding, Analysis	Marks
L2	For a well-developed answer that demonstrates a good understanding of the issues faced by the Chinese economy. Responses show sound understanding of causes of the problems and how the policies may alleviate the challenges faced by China, as well as the shortcomings of the policies.	**4-6**
L1	For an under-developed answer that demonstrates some understanding of the challenges faced by the Chinese economy. Policy options offered may largely be rehashed without consideration of the context of the situation. Answers may contain misconceptions and tend to be one-sided.	**1-3**
E	For an explained judgement.	**2**
	For an unexplained judgement.	**1**

Markers' Comments

Knowledge

- Students who did well explained the 2 distinct issues clearly and matched 2 policies to the 2 issues explained. They were not only able to explain the 2 policies but could also explain their limitations.
- These students showed a strong understanding of the importance of addressing root causes in the choice of policies.
- Those who did not do well tended to have conceptual mistakes when explaining the workings of policies. It should be noted that
    - While size of multiplier is an important factor that determines the effectiveness of **<u>any expansionary demand side policies (</u>**MP, FP and ERP), **a small multiplier size is due to high marginal propensity to withdraw rather than small population size.**
    - **When using <u>expenditure reducing policy such as contractionary MP and FP to reduce CA deficit</u> by reducing import expenditure, it is good to assume that:**
        - **Economy is at full employment level;**
        - **Economy is under a flexible exchange rate system** (government has no control to appreciate /depreciate currency)
    - **When using <u>depreciation (I.e. expenditure switching) to reduce CA deficit</u> , it is good to assume that economy is operating under 1) a fixed exchange rate system and 2) not operating at full employment**

	▪ It is important to bring in Marshall-Lerner condition correctly whenever discussing about effectiveness of depreciation/appreciation • While there were students who explained about the root cause of the problem in their discussion of policies, there were also many who didn't and instead focused on protectionist measures which would limit the scope of the essay. However, it was good to see that those who suggested protectionism understood that it should only be used as a short term measure as it does not tackle the root cause and could have negative repercussions. • A fair number of students did not synthesise their arguments and missed out on evaluation marks. Skills • A number of students who highlighted "slowing growth" as a 1st issue tended to miss out stating a 2nd issue. o It would be more appropriate if student were to identify the factors/ issue that contributed to the slow growth as mentioned in the extract i.e. 1) CA deficit, 2) high wages, or 3) looming trade war.	
(e)	**With reference to data where appropriate, assess the extent to which world economies should pursue deglobalisation.**	**[10]**
	Introduction Globalisation has its advantages and disadvantages. However, not all economies are equal and hence, the extent to which these economies see the benefits and costs of globalisation may differ largely. More often than not, deglobalisation is pursued because of national interest, which may relate to any of the 4 macroeconomic or 2 microeconomic aims of a government. **Thesis** Economies **may** choose to pursue deglobalisation if the costs of globalisation exceeds its benefits. *Evidence: In rich economies, globalisation still represents a source of economic growth, but the expected gains are lower than in poor and emerging market economies, where globalisation increases economic well-being and reduces poverty (Extract 6 para 4).* Data appears to suggest that the benefits of globalisation for developed countries are small relative to the costs of globalisation. Hence, these economies may choose to pursue deglobalisation in order to reduce the costs of globalisation. 1. Some economies may choose to pursue deglobalisation in order to achieve a healthier BOP position:	

Evidence: China is currently facing down a list of import tariffs levied by the Trump administration, agitated by the country's $375 billion trade surplus with the United States (Extract 4 para 1).

Economies that are currently experiencing a CA and/or BOP deficits, such as the U.S., may want to pursue deglobalisation in order to reduce these deficits. By implementing protectionistic measures such as tariffs, imports become relatively more expensive, resulting in a decrease in quantity demanded of imports and therefore, import expenditure. Ceteris paribus, this should reduce the CA and BOP deficits, allowing economies such as the U.S. to achieve a healthier BOP position.

2. Some economies may also choose to pursue deglobalisation in order to achieve greater levels of economic growth and employment:

   Evidence: The idea behind all this protectionism is to shield local manufacturing by making imports costlier. The present talk around 'trade war' and 'deglobalisation' cropped up after the U.S., in March, imposed 25 per cent and 10 per cent duty on steel and aluminium imports, respectively, from certain countries, citing national security and job creation as the triggering factors. (Extract 6).

   Shielding local manufacturing by making imports costlier would cause a substitution effect with foreign-produced goods to that of domestically produced goods as they are now relatively cheaper. This would result in a decrease in import expenditure and an increase in consumption. Ceteris paribus, this should increase AD and hence, real national income via the multiplier effect. As more output is produced, there is an increase in derived demand for labour, resulting in greater levels of employment.

3. Some economies may also choose to pursue deglobalisation in order to reduce income inequality.

   Evidence: In many advanced economies globalisation often has little effect on the incomes of the poor (Extract 6 para 4).

   Developed economies may lose their comparative advantage in the production of labour-intensive manufactured goods to developing countries with cheaper labour. As these jobs tend to be filled by the less-educated and poor, they may find themselves structurally unemployed, worsening the income gap between the rich and the poor. The imposition of protectionist measures that shield such domestic industries (as explained previously) allows the poor retain the work that they do, and may hence alleviate the widening income disparity that was a result of globalisation.

Anti-thesis

However, not all economies may choose to pursue deglobalisation. Economies may **not** choose to pursue deglobalisation if the benefits of globalisation exceeds its costs.

1. Some economies may not choose to pursue deglobalisation in order to achieve greater levels of growth and employment.

   Evidence: It provides them, through the expansion of markets and infusion of foreign capital and technology, with the chance to develop economically (Extract 6 para 3).

   Developing economies may enjoy larger consumer based because of globalisation as it allows for greater movement of goods and services abroad. This allows them to sell relatively cheaper goods abroad, raising their export revenue. Ceteris paribus, this increases AD and hence real national income via the multiplier effect.

   Developing economies stand to benefit from the gains in transfer of capital and technology brought forth by globalisation. As globalisation allows for greater movement of capital and technology, this may increase FDI from developed economies to developing economies. Ceteris paribus, an increase in FDI would cause an increase in the investment component of AD, causing an increase in real national income via the multiplier effect, allowing developing countries to experience actual economic growth. Furthermore, this would increase derived demand for labour, increasing the level of employment.

   Transfer of capital and technology could also result in an increase in the LRAS of the developing country as it adds to the quality of factors of production. This would result in an increase in productive capacity of the economy, resulting in potential economic growth.

Evaluation/conclusion

How far world economies should pursue deglobalisation may depend on:

1. The stage of development of the economy

   As developed economies are increasingly seeing rising costs and declining benefits of globalisation, many developed economies are more inclined towards deglobalisation as they are further away from achieving their various microeconomic and/or macroeconomic goals. Developing countries, on the other hand, continue to enjoy the benefits of globalisation and may therefore see little benefit of pursuing deglobalisation.

2. The policies implemented by the various governments to deal with the costs of globalisation, while maximising on its benefits

   Evidence: Government policies matter in making the benefits of globalisation more inclusive. Investments in education that raise skill levels, as well as taxes and transfers that spread the benefits more broadly, can help globalisation fulfil its promise of generating gains for all (Extract 6).

   While developed economies may appear to face the brunt of the costs of globalisation, suitably chosen government policies may help to alleviate these costs, making globalisation more desirable as a whole. For example, the investment in education may be important to reduce the degree of structural unemployment in an economy due to loss in areas of comparative advantage. This would increase occupational mobility, allowing displaced workers to find other sources of employment elsewhere.

Evidence: In rich economies, globalisation still represents a source of economic growth, but the expected gains are lower than in poor and emerging market economies (Extract 6 para 4).

Given that in developed countries, globalisation is still a source of growth, such economies may need to rethink the pursuit of deglobalisation and make use of appropriate policies that may allow them to continue to ride the wave of globalisation.

Level	Knowledge, Application, Understanding, Analysis	Marks
L2	For a well-developed response that demonstrates good use of information from the data to support their arguments for **and** against globalisation. Answers make use of sound economic theory and show good links to the macroeconomic aims of an economy.	**5-7**
L1	For an under-developed response that shows some arguments for **or** against globalisation. Answers tend to be largely theoretical in nature and may not relate to the macroeconomic aims of an economy.	**1-4**
E2	For an explained judgement.	**2-3**
E1	For an unexplained judgement.	**1**

Markers' Comments

Knowledge /skills

- Students who did well were able to explain both benefits and disadvantages of de-globalisation by appropriately citing evidence from the case study to support their points.
- This shows good interpretation of case-study and application of their knowledge on globalisation

	• There is a very fine line between the arguments against globalisation and the arguments for deglobalisation. A fair number of students focused their answer on the negative outcomes of globalisation instead of what the pursuit of deglobalisation would help to achieve. While subtle, the former doesn’t really address the question as it still does not explain why world economies should pursue deglobalisation.
	• It should also be noted that the question is focused on the economy; hence, arguments should largely be focused on attainment of micro/macroeconomic aims. A handful of students discussed impacts on consumers and producers, which did not address the question requirements.
	• Those who did not do well fell into 2 categories:
	  o Those who clearly did not understand the concept of globalisation
	  o Those who regurgitated or rehashed memorised answers.
	    ▪ E.g. many wrote about the need to de- globalise in order to protect infant industry which is clearly not found in any of the extracts.	

H

ST. ANDREW'S JUNIOR COLLEGE
PRELIMINARY EXAMINATIONS – 2018 (JC2)
General Certificate of Education Advanced Level
Higher 2

ECONOMICS **9757/02**

Paper 2 **11 September 2018**

2 hours 15 minutes

Additional Materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your name and class on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

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 each question on a fresh sheet of paper.
At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **3** printed pages.

1.	Besides possessing dominant positions in many of the world's most important markets, budget airlines are stealing passengers from full-service carriers. Fierce cost-cutting, unbundling of services as well as booming economies of the developing world are but some contributing factors to the roaring success of budget airlines. Last year, for the first time, they carried more than one billion fliers – nearly 30% of the 3.7 billion who took to the air. Adapted from The Wall Street Journal, Aug 2017		
	(a)	Explain the factors that determine the price elasticity of demand, income elasticity of demand and cross elasticity of demand of a good.	[10]
	(b)	Discuss the relative importance of the above demand elasticity concepts in explaining the rise in popularity of budget airlines among air travelers in the past decade.	[15]
(a)			

Command: Explain

Content: PED, YED, XED

Context: Nil

Schematic Plan

Define PED, YED, XED

Explain at least one factor for each of the elasticity concepts. Provide examples.

Introduction

The various elasticity of demand concepts allow economists to determine the responsiveness of consumers to the change in the causal factor. Each of the elasticity concepts is in turn affected by its own sets of factors.

Body

- **PED** measures the responsiveness of quantity demanded of a good with respect to a change in price of the good itself c.p. (provide formula).
- The PED value is always negative – assumes Law of Demand applies to the good
- Size of PED value informs of the responsiveness of consumers to the change in price of the good itself, c.p. The larger the (absolute) value, the more responsive consumers are.

Suggested Factor – E.g. Degree of necessity

- PED value of a necessity is expected to be low and less than 1 (i.e. PED<1).
- Given a rise in price, a consumer will only reduce the quantity demanded of the goods less than proportionately due to the continued need to consume the good.
- For example, even if the price of salt rises by 10%, a consumer will unlikely reduce his consumption by more than 10%, if at all. This is as salt is one necessary component of one's diet to maintain a healthy body.

- Likewise, it is unlikely for a consumer to increase consumption of salt more than proportionately to the given a fall in its price, as there is absolutely no need for an average healthy and rational person to do so. Hence, the PED value of salt is said to be less than one; demand for salt is price inelastic.

- **YED** measures the responsiveness of the demand of a good to a given change in income c.p. (provide formula).
- The YED value is positive for normal good) and negative for inferior good.
- Size of YED value informs of the responsiveness of consumers to demand for a good when they experience a change in income, c.p. The larger the absolute value, the more responsive they are.

Suggested Factor – Nature of good

- When a good is Inferior in nature, a given change in income will lead to opposite change in demand for good. For example, a consumer will increase demand for an inferior good (e.g. lower quality meat, canned meat) and a decrease in demand for normal/luxury goods when he experiences a fall in his income.

- ***Fall in income*** → desire to conserve financial means to fulfil basic needs by giving up 'good-to-haves' such as luxury food items (e.g. expensive cuts of meat) and ***increasing demand*** for 'must-haves' such as potato or rice for subsistence purpose. Hence, YED for potato is negative.

- **XED** measures the degree of responsiveness of the demand for a good to a given change in the price of a related good or service, ceteris paribus.
- The XED value is positive for substitutes) and negative for complements.
- Size of XED value informs of the responsiveness of consumers to demand for Good X when the price of Good Y changes, c.p. The larger the absolute value, the more related Good X and Good Y are.

Suggested Factor – Degree of relatedness of good

- Degree of substitutability between two goods (i.e. Weak vs close substitutes) determine the absolute value of the XED between them.
- For example, Pepsi and Coca Cola are close substitutes. The fall in price of Pepsi will lead to a much more than proportionate fall in demand for Coca Cola than the fall in demand for coffee. This is because Cola drinkers are more ready

- to switch to cheaper Pepsi (and hence demand much less Coca Cola) than coffee drinkers.
- Coffee drinkers generally do not view Pepsi and coffee as close substitutes. Hence, XED for Coca Cola and Pepsi will be much higher and that for coffee and Pepsi will be much lower.

<u>CONCLUSION</u>

- There may be multiple factors which could ultimately determine each of the elasticity values. In such a situation, the dominant factor would usually be the sole determinant of the elasticity value of the good prevailing at that time in consideration.

Level (Marks)	Knowledge, Application, Understanding, Analysis
L3 (8 – 10)	Answer shows thorough knowledge and an excellent ability to explain at least one factor for all three elasticity concepts in a precise, logical and reasoned manner. Top grade answer ought to include the following: - Definitions - Examples to illustrate - Explanation of how the factor affects the elasticity values (**EITHER** different size of values – big vs small **OR** signs the values take – positive vs negative)
L2 (5 – 7)	Answer explained at least one factor each for at least two elasticity concepts. Answer is mostly accurate but there may be undeveloped explanation of concepts.
L1 (1 – 4)	Answer shows some knowledge of elasticity concepts (mere definitions and formulae given). Factors are more stated than explained. Meek attempts at suggesting examples to support answers. There may be basic errors in phrasing of the key terms and highly inadequate explanations. The answer could be mostly irrelevant or inaccurate.

Markers' Comments

Knowledge

- Those who did well provided factors that were well explained with relevant examples. Expressions/ phrases used were also accurate phrasing. E.g.
  - Qty DDed vs Demand
  - Use of "ceteris paribus" when appropriate
  - <u>PED</u>: PED cannot be elastic or inelastic. PED is a value/number (i.e. PED is more/less than 1). It is the **demand** that is either **price inelastic** or **price elastic**.

- XED: XED value is positive / negative; coefficient of XED is more/less than 1; change in demand of good X w.r.t change in price of good Y.
- YED: Change in demand given change in consumer's income,

- Notably, some students were confused when explaining the size of elasticity values vs the signs of elasticity values.

Skills

- Time management is an issue for some students. E.g. They wrote too much for (a), unnecessarily providing as many as 4 factors for PED alone when they could use the time to develop other parts of the answers.
- Quite a number did not explain and elaborate the factors – they merely stated the different values for PED based on different factors. For e.g., if a good is a necessity, its PED value is < 1 whereas if a good is a luxury, its PED value is > 1.

(b)

Introduction

- The rise in popularity suggests a significant increase in the equilibrium quantity of passenger flights, i.e. Qe. (Important to explain why there was **a huge rise in Qe**.)

Body

- **Fierce cost-cutting – suggest that supply rises (bring in PED)**
  - Increase in supply of budget carriers leads to movement down demand curve
  - Hence, P falls and Quantity demanded rises.
  - The value of PED for budget air-travel is likely to be high. This is because the customers are largely lower income / budget conscious travelers. Hence, they are more price sensitive; would rather forego comfort/convenience, etc.
  - Evaluation:
    - Likely to be a big reason as budget airlines are new phenomenon in the air travel market over the past decade.
    - Budget airlines can attract many price sensitive customers who previously did not have a choice but to fly with full-service carriers.
    - Can also attract significant amount of low income travelers who previously could not afford to fly at all (e.g. students, casual workers, retirees, etc)
- Unbundling of services – rise in demand / rise in Qd **(bring in XED)**

- Ditching of frills better matches the needs of certain groups of travellers.

- Full-service carriers may compete by providing discounts (P falls). However, XED assumed to be very low due to significant differences between budget and full service carrie services (in terms convenience when boarding planes, choice of destinations, availability of connecting flights, etc). Hence, such discounts may not be able to claw back significant number of customers from budget airlines.

- Alternative, in the event that there is no price cuts by the full-service carriers, XED will not be useful at all.

- Burgeoning economies **(Bring in YED)**
  - Offers huge increase in demand by swathes of population across the globe who can now afford to fly. As air travel may be a luxury good to most of them, rise in income earned led to much mtp rise in demand for air travel. This is especially so for big, developing economies such as India and China.

  - Note that there is some exodus from budget to full-service carriers too. However, this is assumed to be less significant due to the considerable margin between budget and full-service carriers.

<u>Conclusion</u>

- Given the dynamics of the economic conditions over time (simultaneous and multiple changes in income, price of the goods itself and price of other goods), it is theoretically impossible to determine the singular, most important elasticity concept that led to rise in Qe of budget air travel.

- Furthermore there could be other factors that also affect the market equilibrium. For example, there might be increased fears of flying due to terrorism threats or concerns about aviation safety. These might cause a dip in demand which would then dampen the overall rise in Qe of budget air travel. In view of these external factors, it would also be difficult to assess which demand elasiticity was most important in explaining the rise in Qe of budget air travel.

- However, given the main target audience of budget air travel, the burgeoning economies of the developing world may seem to be the key trigger that fueled the rise in popularity of air travel over the past decade.

Level (Marks)	Knowledge, Application, Understanding, Analysis
L3 (8 – 10)	Answer shows thorough understanding of question asked and demonstrated mastery of content to clearly and comprehensively (all three elasticity concepts brought up) answer the question. Only minor, non-critical errors allowed.
L2 (5 – 7)	Answer attempted to compare and rank at least two elasticity concepts in explaining the rise of budget airline popularity. Relevant causal factors were brought up and could pose as a decent argument in response to question asked.
L1 (1 – 4)	Answer shows some knowledge of how elasticity concepts could affect sales volume of budget airlines. Explanation is largely clumsy or inaccurately phrased. There may be basic errors in theory, in adequate explanations or contain only a few valid points. The answer could be mostly irrelevant or inaccurate.
E3 (4 – 5)	Clearly worded justification on why ranking of elasticity concepts is as such. Convincing argument based on sound economic analysis, possibly also drawing insights from beyond the context tested.
E2 (2 – 3)	Attempt at justifying ranking of elasticity concepts but weak economic reason provided. Phrasing does not sound convincing. Certain degree of mastery of comparative analysis should be present.
E1 (1)	Merely a stand provided.

Markers' Comments

Knowledge

- Those who did well understood were able to relate the rise in popularity of budget airlines to the rise in equilibrium quantity i.e. Qe.
- Consequently, they proceeded to explain the rise in demand for budget airlines using the factors available in the preamble.
- Many were confused between XED and PED.
    - PED is considered with respect to change in the price of the good itself.
    - XED is considered with respect to a change in price of another good.
        - To use XED, the causal factor for rise in demand for budget airlines ought to be a rise in price of full-service airline tickets.

Skills

- Those who did well presented systematic analysis of the answer, focusing on the usefulness of one elasticity concept at a time.
- Many forgot to link back to the requirement of the question, choosing instead to elaborate on how budget airlines ought to make use of the elasticity values. Hence, answers were rather off tangent in some parts.
- Quite a handful drew graphs successfully in support of their answer.

2.	A firm's level of profits tends to rise and fall with dynamic changes in the global economy.		
	(a)	Explain whether a firm will continue to operate in the short run when faced with a rise in various types of costs.	[10]
	(b)	Globalisation is likely to change the market structure a firm operates in and the level of its profits. Discuss.	[15]

<u>INTRODUCTION</u>

- Firms are assumed to be profit-maximising entities. To maximise profits, firms will seek to produce at the output level where marginal costs equals to marginal revenue.
- Firms can make super-normal, normal and sub-normal profits. Profits = TR – TC

- When faced with rising business costs in the short run, and assuming that total revenue remains the same, firms' profits will be reduced. In such a situation, the manager may need to decide one of the two options he has – to continue with the business or to close down.

<u>BODY</u>

- The decision to continue or shut down depends on whether 1) TR > TVC or 2) TR < TVC respectively.

- A firm operating in the short run incurs two types of costs – TFC and TVC by hiring fixed and variable factors of production respectively.

<u>A Rise in Total Fixed Cost</u>

Suppose a firm initially earns $2000 in total revenue, incurs $1000 as fixed costs and $400 as variable costs. It is earning $600 super-normal profits. Assuming no change in total revenue and its variable cost, any increase in fixed costs will not result in a firm shutting down. It will continue its operation.

E.g. Assume a firm's fixed costs rise to $1800. Despite incurring a loss of $200 [$2000 – ($1800 + $400)] now, the firm will not shut down. This is because its loss will be even greater (i.e. $1800, the full, increased fixed costs) if it chooses to shut down.

Likewise, if its fixed costs rise to $2200 (above its total revenue), it should still continue so as to incur lower loss of $600 ([$2000 – ($$2200 + $400)] than otherwise (i.e. $2200, its full, increased fixed costs). This shows that changes in fixed costs do not affect a firm's decision to continue operation or shut down in the short run.

A Rise in Total Variable Cost

In another case, suppose the firm still earns $2000 in total revenue, incurs $1000 as fixed costs and $400 as variable costs, a change in variable cost may lead the manager to shut the firm down.

E.g. A rise in variable costs to $1400 will cause the firm to make a loss of $400 [$2000 – ($$1000 + $1400)]. However, the firm should still continue its production as the loss ($400) will be smaller than otherwise ($1000, the full fixed costs).

On the other hand, if the variable costs rise from $400 to $2400, then the firm should shut down, as the loss of shutting down will be smaller($1000, the full fixed costs) than if it continues operating [$2000 – ($1000 + $2400) = $1400]. This shows that rise in variable costs does determine whether the firm should shut down or not.

<u>CONCLUSION</u>

- The manager needs to consider various factors when deciding whether to shut down or continue a business given a rise in costs. Rational behaviour dictates that he ought to continue with the business so long as doing so incurs lower losses.

Level (Marks)	Knowledge, Application, Understanding, Analysis
L3 (8 – 10)	Answer shows thorough knowledge and an excellent ability to explain the consequences of a rise in TFC and TVC in terms of affecting a firm's decision to shut down when it incurs a loss. Full marks to be given when answer contains all of the following: - Rise in TFC (regardless of amount) – this is to show the change in various types of cost - Rise in TVC (but still < TR) - Rise in TVC (but > TR)
L2 (5 – 7)	Answer explains at most two out of the three bullets in L3. Answer demonstrates sufficient grasp of the question.
L1 (1 – 4)	High L1 given to an answer that shows some knowledge of shutdown condition but explanation is severely lacking or mistakes are aplenty/irredeemable. Low L1 given to an answer which is mostly irrelevant or inaccurate.

Knowledge

- A good number of students could recognise the requirements of the question and went on to explain the shutdown condition i.e. TR < TVC.
- While many understood the condition, they should also explain how TFC does not feature in the decision to shut down since question is on "various types of cost"
    - Some mixed up TFC with TVC. Accordingly, the explanation is totally unacceptable as it defies logic.

Skills

- Good answers used examples to bring clarity.
- Answers that provided Step-by-step explanations and not merely stating the obvious, were given high marks.
- Graphical approach is the most acceptable, as it clearly illustrates all the necessary concepts in a succinct visual.

- Some kept on repeating the shutdown condition without explaining it. The use of various presentation (graphical, followed by texts/equations) DO NOT constitute explanation. They are merely different representations of the same thing – the shutdown condition.
- Quite a number of scripts did not talk about a rise in costs. Some of those scripts were saved by the sufficiently passable presentation of shutdown condition.

(b) Introduction

- Globalisation is likely to exert certain influence on the market a firm operates in. Depending on the market's susceptibility to global influence in terms of barriers to entry, the product type as well as the number of buyers, the firm in question may find itself operating in a different market structure, and earning different levels of profits, should the economy be subjected to greater globalisation forces.

Body

- The <u>market structure</u> a firm operates in is determined by the following characteristics:
    - Barriers to entry
    - No. of buyers and sellers
    - Nature of products (unique or substitutes)

  <u>For example</u>, In the Singapore bakery market, a few local bakeries hold significant market share e.g. BreadTalk, Bengawan Solo and Prima Deli. The bakery market could be said to be operating under an oligopolistic market due to
    - its relatively high BTEs (strong brand and product quality, high market dominance)
    - mutual dependence (offering discounts and new flavours at the same time)

- o few sellers (not many competitors selling premium quality bakery products).

- Globalisation brings with it the removal of barriers across borders. Such barriers relate to labour, technology, capital and goods and services.
- Thus, a greater degree of globalisation allows:
  - o Foreign competitors to compete with domestic producers in the domestic markets.
  - o Domestic firms can also expand their market by exporting their goods and services to external markets or even set up firms in the foreign market.
  - o Domestic firms may also import cheaper factors of production from overseas

Thesis: Globalisation changes market structure and profits
- With the changing taste & preferences, desire for more choices of the buyers as well as the encouragement of FDI by the government, new players emerge (Paris Baguette, Duke's Bakery, Chateraise, Bread Society, etc) in recent years to compete with local bakeries for a share of the market.
- Even smaller local bakeries also sought to upgrade themselves in order to stay competitive (Swee Heng, Tiong Bahru Bakery) in face of stronger competitors from overseas.
- If the larger bakeries are unable to hold up their brand by ensuring the price and non-price competitiveness of its bread, they will increasingly lose their market share.
- The presence of more foreign competitors means that there are more sellers. As each previously oligopolistic firm loses its market share, the bakery market structure may change from an oligopolistic to a monopolistically competitive one.

- While the local bakeries may lose its domestic market share, they may gain market share in foreign markets and eventually earn higher revenue. For example, Breadtalk has realised expansion plans in bigger foreign markets such as China and Indonesia. Given that these markets are much bigger than the local Singapore's market, the demand (i.e. AR curve) that Breadtalk faces will now be much higher than if it did not expand overseas.
- The same is being observed with Prima Deli. It has also expanded overseas in countries such as Australia and Philippines by not just selling confectioneries but also baking ingredients and ready to cook meals.
- With larger output, Breadtalk and Prima Deli will also be able to enjoy significant IEOS.
- All these will result in higher profits for both firms.

Anti-thesis: Globalisation does not change market structure and profits
- Certain markets will remain unaffected by the wave of globalisation.

- These markets could be protected by the government as they are considered either as 1) strategic industries (e.g. Japan's car manufacturing firms) or

2) relate to national security (Lockheed Martin providing military aircraft and equipment to the USA govt).

- In other case, it could be due to the immobility of factors of production. E.g. provision of goods and services which cannot be duplicated by others (travel services to visit Mt Fuji in Japan).

- As such, the characteristics of such markets may not change even when a country gets more globalised. The market structure in which a firm operates prior to the wave of globalisation will likely remain relatively unchanged.
- Accordingly, the change in profits may also be due to other factors and not just globalisation.
- E.g. disruptive technology and smart urban planning can change the way people travel and reduce people's demand for privately owned cars. This may reduce the demand for cars world-wide in general. In this case, despite government's protection, car manufacturers in Japan may not be able to continue to earn significant supernormal profits.
- E.g. Mt Fuji erupts and makes any visits unsafe.

- Despite the wave globalisation, certain firms could still act strategically to protect their market share from being eroded. Apple and Samsung had been the world leaders of the smartphone market. After more than a decade, during which many smartphone makers have also entered the fray after tapping on the technology in producing smartphones, Apple and Samsung are still arguably the world leaders.

- The main reason could be the continual raising of barriers to entry by Apple and Samsung (highly innovative hardware and software offerings over the decade) in order to entrench their lead in this market. As such, globalisation of ideas/technology continued to allow Apple and Samsung to take advantage of and develop sufficient arsenal to defend their position in this market.

Conclusion

- With the relentless search of ever lower COP and market outreach, successful and entrepreneurial firms will ride on the wave of globalisation to fully realise their potential profits. In so doing, competition in the markets tend to rise and even a monopoly may end up facing fierce competitors in due course throughout most part of the world.

- While it is true that such a day will come for most markets, that day may require differing amount of time depending on the complexity of goods/services sold and the profile of the consumers. The more complex the goods/service and finicky the consumers are, the longer it will take for globalisation to transform the competition landscape of the market existing firms operate in.

Level (Marks)	Knowledge, Application, Understanding, Analysis
L3 (8 – 10)	Answer showed thorough knowledge and an excellent ability to explain both the impact of globalisation and the lack thereof on the market structure in which a firm operates and the profits it earns. Suitable examples were brought up to support arguments.
L2 (5 – 7)	Answer managed to somewhat explain how globalisation might or might not impact the market structure of a firm and profits earned by a firm. Answer is mostly accurate but there may be undeveloped explanation of facts and theory. May lack suitable examples to back up the arguments.
L1 (1 – 4)	Answer showed some knowledge of globalisation and market structure but simply failed at putting them together to form a cogent response to the question. Meek attempts at suggesting examples to support answers. There may be basic errors in theory, in adequate explanations or contain only a few valid points. The answer could be mostly irrelevant or inaccurate.
E3 (4 – 5)	Strong conviction of the stand provided, largely based on sound economic argument/reasoning having considered the relevant situations. Best answers will contain real-life scenarios to support stand taken.
E2 (2 – 3)	Attempt at providing a simple justification of the stand and may or may not be based on economic argument/reasoning. Reasoning may be flawed or unconvincing.
E1 (1)	Merely a stand provided.

	Knowledge • Those who did well provided sufficient scope to deal with changes in **BOTH** market structure and profits. • These students brought in various relevant concepts such as EOS, price and non-price competitiveness, natural monopoly in domestic market were skilfully employed to support the arguments. • Some were not clear about the various typical characteristics of the market structures. For example, oligopolistically competitive firms will eventually earn normal profits. • Some were not clear about the change in market structure after economies partake in globalisation. For example, a monopoly in Country A may no longer remain as a monopoly once the monopoly crosses border, as most likely, the firm will not be the sole producer of the good. • Most remembered to talk about how globalisation could affect a firm's revenue. However, some forgot to talk about cost advantages brought about by globalisation. **Skills** • Good use of examples as evidence to support arguments. • Perhaps due to time constraint, a number of answers did not provide sufficient scope/balance to the answer. These are unlikely to score above L2. • Majority gave a summary rather than evaluation. Consequently, such scripts scored minimal evaluation marks (1 or 2 marks out of 5).

3.	In the US and UK, public libraries have been facing cuts in government funding and there is a rise in the number of public library closures. In Singapore, the National Library Board (NLB) has been revamping old libraries and opening new ones. In 2017, the government provided an operating budget of $246.97 million to NLB.	
	Explain whether governments should fund public libraries and discuss the factors that governments should consider when allocating resources to public libraries.	[25]

Introduction

Government usually intervenes when market fails.

Body

Public library services could be merit goods. Governments of some countries deem it as being under-consumed due to positive externalities and imperfect info of full private benefit of library services

Positive externalities of public library services

- E.g. People who access public library services such as books-related activities, wifi and reference books usually can improve their literacy, social and intellectual developments. They become more literate. Higher literacy rate can result in more economic development benefiting 3rd parties such as firms and government in terms of higher profits and tax revenue → external benefits

External benefits cause divergence in MPB and MSB → private consumption of library services lower than social optimal level.

Imperfect info of MPB means even lower private consumption level than socially optimal

Subsidies help to increase the level of library services consumption by internalising the external benefit

In developing countries or even in developed countries where there are poor communities, the private consumption of public library services may be much lower than socially optimal level.

Governments can allocate resources to public libraries in the form of subsidies, direct provision and campaigns to encourage people to go to the libraries. However, when allocating any resources to public libraries, government may want to consider factors such as:

- **<u>Objectives of government</u>**
  - Subsidies bring about allocative efficiency if public library is indeed deemed as a merit good → increase consumption of public library services
  - Subsidies improve equity ; for greater access by the lower income → brings down the MPC of public library services or brings up the MPB of public library services.

    - E.g. In Singapore, full subsidy is given to the public. Government deemed library as an important merit good. There is huge DWL if not subsidy is given.
- **Effectiveness of policies** to achieve objectives e.g. MEB hard to calculate so may be hard to decide how much to subsidise in cases where partial subsidies are more appropropriate
- **Changing levels of external benefits** that public library brings about, hence changing levels of subsidies.
    - Overtime, the marginal external library that the public library brings may become lower due to obsolescence of the resources and alternative ways of reading and accessing books through e.g. E-library. So MSB become lower.
    - Obsolescence of library resources can reduce the MEB of libraries since knowledge gained becomes irrelevant to 3rd parties when perhaps shared by readers.
    - E-library offers more up to date resources that are riding the reading trends/ interest/ needs of the nation. In this case 3rd party benefits may be higher since relevant info could be shared by readers with 3rd parties.
    - The MSB of “brick and mortar” public library services falls and reduces the socially optimal level of public library services.
    - Hence level of resources allocated to public library will naturally fall.
    - In US and UK, government chose to close public libraries since their relevance have fallen; in Singapore government chooses to revamp old ones so that libraries continue to be relevant
- **Resource scarcity / Budget constraint** and need to re-prioritise → closing down libraries. E.g. Land previously occupied by libraries need to be developed for housing, commercial purposes.
- Over time has readership and literacy rates improve in countries, it could mean that the level of library services privately consumed have already met the socially optimal level → no need for government intervention at all.

Conclusion

- Whether/how government allocated resources typically depends on its objectives to achieve, cost/benefits (effectiveness of interventions, changing needs/circumstances.
- No fixed factors to consider. Differs between countries and over time
- Therefore, US and UK chose to close down whereas, Singapore decides to increase resources.

L3	Ability to describe the different factors that different government may consider when allocating resources. Answer is supported with thorough knowledge of theories and relevant policies. There are good comparisons on the different approaches by different government	15 – 20
L2	Ability to describe the factors that government may consider when allocating resources. Answer is supported with knowledge of theories and relevant policies, but with some error in analysis	9 - 14
L1	The answer shows some knowledge but does not indicate that the meaning of the question has been properly grasped. Basic errors of theory or inadequate development of analysis.	1 - 8
E3	For an answer that critically build on the analysis and answers the question. There is a well-reasoned judgement (as required by the question)	4-5
E2	For answer that makes some attempt at evaluation and conclusion that answers the question.	2-3
E1	For answer that gives an unsupported evaluative statements.	1

	Markers' Comments Knowledge • While majority of the answers recognised that public libraries are merit goods, most answers explained <u>either</u> positive externalities in consumption <u>or</u> imperfect information as a source of market failure. **Better answers attempted an explanation of both,** which provided a more holistic explanation of how merit goods lead to market failure. • Those who did not do so well for the question misidentified that public libraries are public goods, or explained why public libraries are not public goods, instead of focusing on what they are. Skills • While the factors provided by most students were able to come up with good factors that the government may needs to consider when allocating resources, many tend to be fairly generically explained, without much reference to the preamble or a contextual situation. • Those who did well had good examples to illustrate each factor, while those who did not fare as well had more theoretically-rehearsed answers, or even GP-like arguments, which lacked economic analysis.

4.	Discuss the extent to which conflicts in government macroeconomic objectives limit the scope for the use of macroeconomic policies.	[25]
5.	**(a)** Explain how a country's deficit on its balance of payments could affect its standard of living.	[10]
	(b) Discuss how best a government should address potential concerns arising from a persistent deficit on its balance of payments.	[15]
6.	"Rising protectionism in the West has become a threat to Asia's prosperity." Tommy Koh, ambassador-at-large for Singapore's Ministry of Foreign Affairs.	
	(a) Explain why protectionism exists.	[10]
	(b) Discuss whether the Singapore government's approach towards international trade should be adjusted in view of rising worldwide protectionism.	[15]

Introduction:

Government's macro objective are to achieve the following:

- Stable economic growth
- Low and stable inflation or price stability
- Low and stable unemployment rate
- Favourable BOP

Thesis

Depending on the objectives and issues faced, government can choose a range of policies to meet objectives and address macroeconomic issues. However, in achieving ... potential trade offs.

Depreciation of currency → boost (X-M) & address Balance of Payments (BOP) deficit → increases economic growth but increases inflation rate.

Depreciation causes exports to be cheaper in foreign currency and imports to be more expensive in domestic currency. ... quantity demanded for exports by foreign countries ... domestic country decreases. ... (PEDx + PEDm >1), there will be an increase in net export revenue. An improvement in net export revenue will improve the Balance of Payments.

At the same time, as net exports increases, AD increase. If there is no increase in AS and economy is near full employment of output, the boost in economic growth will demand pull inflation.

Expansionary Fiscal Policy and Monetary Policy → increase growth but higher inflation rate and possibly BOP deficit due to increase M

Expansionary fiscal policy is a demand-side policy that seeks to increase G and I by reducing income and corporate tax respectively, as well as increase G. On the other hand, expansionary monetary policy will increase C and I as the cost of borrowing is reduced with a lower interest rate. C, I and G will increase AD. If there is no increase in AS and economy is near full employment of output, the boost in economic growth will demand pull inflation.

As seen in figure below, the increase in AD from AD0 to AD1 to AD2, without an increase in AS, has resulted in an increase in real GDP from Y0 to Y1 while general price levels have increased sharply from P0 to P2, a demand pull inflation.

Schematic Plan

Explain BOP deficit

↓

Explain consequences of BOP Deficit

↓

Explain how these consequences (postively and negatively) impact (material and non material/ current and future) SOL

Introduction

The Balance of Payments (BOP) is a summary record of all the international transactions between the residents of a country and the rest of the world over a period of time, usually one year. It consists of the Current Account, Capital and Financial Account and Official Reserves Account. A BOP deficit occurs when the total international receipts from abroad are less than the total international payments to abroad over a period of time. This could happen when there is a deficit in the CA or the KFA or both.

Body

Negative Impact on SOL

1. A balance of payments deficit can have a contractionary effect on the economy. For example, a balance of payments deficit caused by a CA deficit brought about by a fall in export earnings and rise in import expenditure reduces the level of aggregate demand.
2. Assuming the economy is at or near full employment, this fall in aggregate demand, ceteris paribus, will cause a fall in national output from Y1 to Y2, a fall in general price level from P1 to P2 and an increase in unemployment due to lower output levels as illustrated in Figure 1. Eventually, the initial fall in net exports will

Introduction

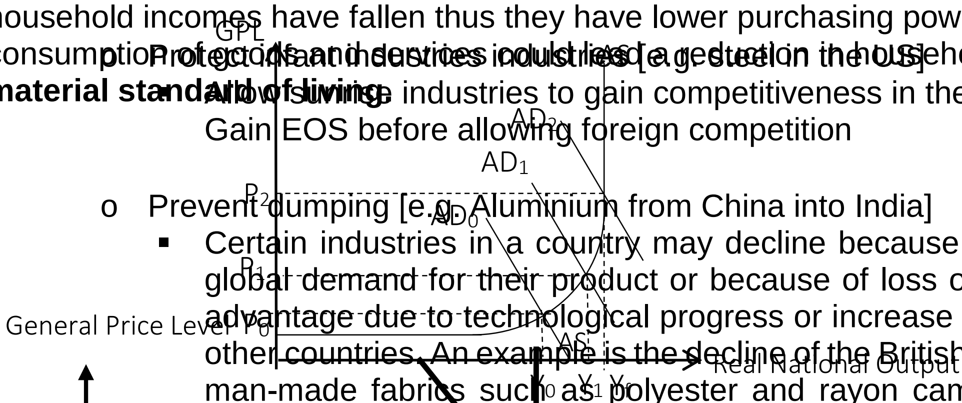
- Define protectionism. *Protectionism is the act of imposing trade barriers to ...*
- Give a short preview of essay: *Countries may engage in protectionist policies such as imposition of tariffs and quotas for various purposes. There are several arguments for protectionism that are practised worldwide.*

Body

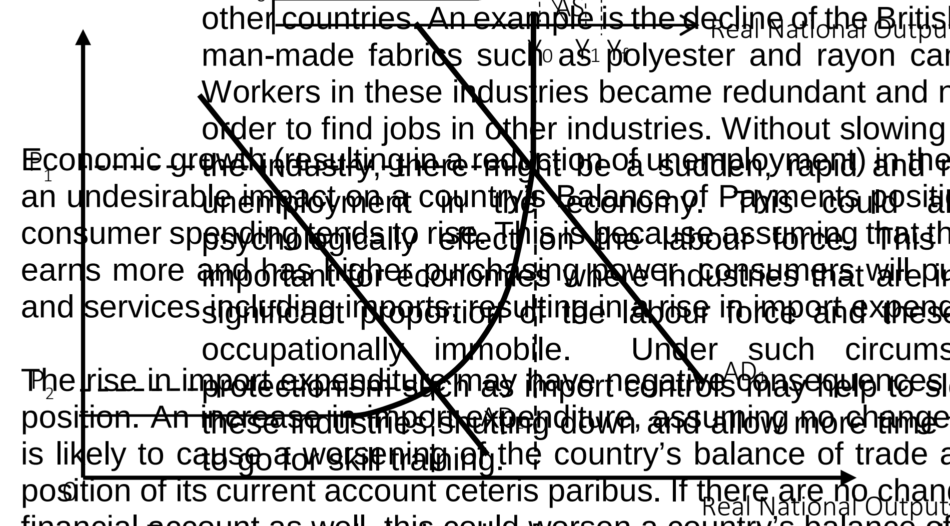
- Explain any 3 arguments for protectionism
  - o Correct Balance of Trade deficit [e.g. US vs China: solar panels]
    - Balance of trade deficits occur when a country's total expenditure exceeds its total earnings in its external trade. This can be caused by importing too much and is undesirable as it leads to a depletion of foreign currency reserves. Balance of payments deficit caused by balance of trade deficits would lead to leakage from the economy.
    - Thus, the government may try to reduce import expenditure to correct the balance of trade deficit by restricting imports. Assuming initially a balance of payments deficit, when the balance of trade deficit is reduced, the country's balance of payments deficit will decrease as well.
  - o Protect sunset industries
    - Certain industries in a country may decline because of a decline in the global demand for their product or because of loss of their comparative advantage due to technological progress or increase in competition from other countries. An example is the decline of the British cotton textile when man-made fabrics such as polyester and rayon came into the market. Workers in these industries became redundant and needed re-training in order to find jobs in other industries. Without slowing down the decline of the industry, there might be a sudden, rapid and massive increase in unemployment in the economy. This could also have negative psychologically effect on the labour force. This point is especially important for economies where industries that are in decline employs a significant proportion of the labour force, and these workers might be

result in a greater decrease in national income through the multiplier process, leading to negative economic growth.

The fall in national income will induce a fall in consumption by households because household incomes have fallen thus they have lower purchasing power. A lower level of consumption of goods and services could lead a reduction in households' **current material standard of living**.



3. If households feel pessimistic about the economic outlook, they may decide to save more in anticipation of the possibility of a further reduction in income in the future. This uncertainty and anxiety could also affect **non-material standard of living.**
4. A fall in investment level and production level will lead to rising unemployment in the economy as firms reduce their demand for labour and other factors of production. Unemployed workers might face anxiety and stress if they continue facing difficulties in looking for a job. As their household income falls, both their **material and non-material standard of living** might worsen.
5. If the BOP deficit was due to a deficit in the KFA arising from a fall in FDI and foreign investors pulling out FDI from the country, LRAS might shift to the left, reducing the productive capacity of the economy. This would negatively affect **future standard of living** as the potential output of the economy decreases.
6. Under a flexible/managed float exchange rate regime, a persistent balance of payments deficit will result in a depreciation of the country's currency as this would lead to a fall in the demand for and an increase in the supply of the domestic currency in the foreign exchange market. With the depreciation, imported inflation may result if the economy is heavily dependent on imports, leading to higher cost of living. This would affect consumers' purchasing power and hence negatively affect their **material standard of living**.



Economic growth (resulting in a reduction of unemployment) in the economy may have an undesirable impact on a country's Balance of Payments position. As income rises, consumer spending tends to rise. This is because assuming that the average individual earns more and has higher purchasing power, consumers will purchase more goods and services including imports, resulting in a rise in import expenditure.

The rise in import expenditure may have negative consequences on a country's trade position. An increase in import expenditure, assuming no changes in export revenue, is likely to cause a worsening of the country's balance of trade and may worsen the position of its current account ceteris paribus. If there are no changes in its capital and financial account as well, this could worsen a country's balance of payment position.

In the event that economic growth results in higher prices of domestic goods and services, this would erode export competitiveness. If the inflation rate in the country is higher than in trading partner countries. Assuming that the demand for exports is price elastic, this would cause a more than proportionate fall in quantity demanded of the country's exports causing export revenue to decrease.

The increase in import expenditure and a fall in export revenue due to the loss of competitiveness of domestic goods is likely to cause a worsening of the country's balance of trade and worsen the position of its current account, ceteris paribus. If there are no changes in its capital and financial account as well, this could worsen a country's balance of payment position.

In addition, the increase in import expenditure and fall in export revenue will cause a net increase in supply of domestic currency in the foreign exchange market assuming ceteris paribus, resulting in a depreciation of the country's currency.

LR ss-side policies to prevent further dd-pull inflation can cause unemployment

LR supply side policies often involve improving the quality, quantity of factors of production. [illegible] workers are encouraged and given financial support to undergo training to upgrade their skills, firms also given financial supports to adopt new technology to make their production process more

occupationally immobile. Under such circumstances, temporary protectionism such as import controls may help to slow down the rate of these industries shutting down and allow more time for affected workers to go for skill training.

- o Protect infant industries [e.g. steel in the US]
  - ▪ Allow sunrise industries to gain competitiveness in the global market. Gain EOS before allowing foreign competition
- o Prevent dumping [e.g. Aluminium from China into India]
  - ▪ Certain industries in a country may decline because of a decline in the global demand for their product or because of loss of their comparative advantage due to technological progress or increase in competition from other countries. An example is the decline of the British cotton textile when man-made fabrics such as polyester and rayon came into the market. Workers in these industries became redundant and needed re-training in order to find jobs in other industries. Without slowing down the decline of the industry, there might be a sudden, rapid and massive increase in unemployment in the economy. This could also have negative psychologically effect on the labour force. This point is especially important for economies where industries that are in decline employs a significant proportion of the labour force and these workers might be occupationally immobile. Under such circumstances, temporary protectionism such as import controls may help to slow down the rate of these industries shutting down and allow more time for affected workers to go for skill training.
- o Protect strategic industries [e.g. energy and water, cars in Japan, agricultural for food security]
  - ▪ A key industry is one that is deemed important or vital to a country's political and economic interests or security and therefore requires protection by the government. Common examples of key industries include water, electricity, food source and defence. Being dependent on other countries could be threatening for a country's survival as other countries could use these goods as a threat or bargain.
  - ▪ Singapore's dependency on water from Malaysia can be an example of that situation where disputes between both countries could escalate to Malaysia threatening to cut off water supply to Singapore. To avoid being in this position, Singapore has devoted huge amount of resources to increase water production domestically.
  - ▪ Another key industry is military or defence weaponry production. Most countries would have their own defence industry and Singapore Technologies, a local company produces some of Singapore's military hardware such as SAR21, Bionix and submarines.

Conclusion

- The above are some reasons why countries adopt protectionism. Essentially it is to protect the national interests.

efficient and productive. Supply side policies can bring about underlying shift in the structure of the economy, such as a shift away from labour-intensive industries to capital intensive industries – where more skilled labour is required. This makes it difficult for certain segments of the population, who are unable to upgrade their skills, to find jobs. Structural unemployment can thus happen in manufacturing industries, where sophisticated machinery has been replacing workers. If the workers are unable to get the training to get jobs in the same factories they worked in before, they will become unemployed. A mismatch of skills between the unemployed and the skills required by producers seeking current factors of production may result in structural unemployment unless the workers are retrained and are equipped with the relevant knowledge, skills and expertise to be absorbed into the newly developed sector.

7. If the BOP deficit was due to a large amount of consumer goods imports, the current standard of living might be affected.

Level	Knowledge, Understanding, Application and Analysis
L3 (8-10)	Clear explanation of why countries practise protectionist policies with at least 3 arguments for protectionism with clear link to macro goals. Good use of examples.
L2 (5-7)	Basic explanation of why countries practise protectionism with some link to macro goals.
L1 (1-4)	Incorrect or poor explanation of reasons for protectionism.

Positive impact on SOL

2) If the BOP deficit was due to large import expenditure on capital goods, the LRAS might shift to the right, bringing about potential growth. For example, developing countries might import machines and technology to increase productive capacity, which means that the future standard of living would increase.

Alternatively, as shown in the figure below, when there is an increase in aggregate supply from AS0 to AS1 with a corresponding increase in AD, the economy experiences both actual growth (shown by the increase in real national income from Y0 to Y1) and potential growth (shown by the increase in productive capacity from Yf1 to Yf2). As firms are increasing their output, there is an increase in demand for factors of production including labour. However, the number of jobs created (as a result of the increase in productive capacity) in the economy might be higher than the jobs lost, thus further lowering unemployment in the economy.

Markers' Comments

Knowledge

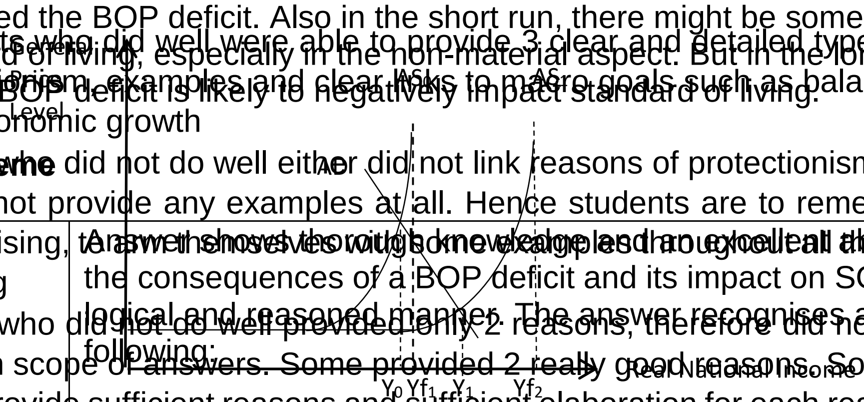
- Students who did poorly had the following misconceptions:
  - Inappropriately provided a tariff diagram to show how a tariff would reduce unemployment and mistook this for a reason.
  - Wrongly state that protectionism is to protect the inflow of investments or the inflow of foreign workers.
    - Protectionism only protects against foreign imports.

Conclusion

To conclude, how standard of living is affected by the BOP deficit would depend on what caused the BOP deficit. Also in the short run, there might be some positive impact on standard of living, especially in the non-material aspect. But in the long run, a persistent BOP deficit is likely to negatively impact standard of living.

Skills

- Students who did well were able to provide 3 clear and detailed types of reasons for protectionism, examples and clear links to macro goals such as balance of payments and economic growth
- Those who did not do well either did not link reasons of protectionism to macro goals or did not provide any examples at all. Hence students are to remember while they are revising, to arm themselves with some examples throughout all the topics they are revising
- Those who did not do well provided only 2 reasons, therefore did not provide a wide enough scope of answers. Some provided 2 really good reasons. So students should try to provide sufficient reasons and sufficient elaboration for each reason to obtain L3 marks



Mark Scheme

Level 3 8 - 10	Answer shows thorough knowledge and an excellent ability to explain the consequences of a BOP deficit and its impact on SOL in a precise, logical and reasoned manner. The answer recognises all of the following: - A BOP deficit could both positively and negatively impact SOL - A BOP deficit could affect both material and non-material SOL **OR** current and future SOL
	Note for markers: For full 10m, the answer should recognise BOP deficit could affect material and non-material SOL **AND** current and future SOL.

Such trade-offs may limit the use of the policies, especially if the trade-offs are also goals that govt wishes to maintain.

(b) Discuss whether the Singapore government's approach towards international trade should be adjusted in view of rising worldwide protectionism. [15]

Introduction

- Singapore economy is characterised as *small and open with limited resources*
- Singapore government's general approach towards international trade is one that *embraces free trade, focuses on exporting goods and services where she*

However, limitations do not necessarily mean there are no trade offs.

The policies themselves may be limited due to the reasons. In some cases, some of macroeconomic policies may even complement each other.

Domestically driven vs externally driven economy

For small, resource scarce and open economies (e.g. Singapore) demand side policies (e.g. Fiscal policy and interest rate centered monetary policy) that focus on stimulating the domestic components of AD may not work effectively. Given Singapore's small population and a small multiplier, injection must be sufficiently large before achieving significant improvement in economic growth and employment.

As such Singapore chooses to rely on exchange rate policy (adopting an appreciating stance) to ensure that price of imported raw material in domestic currency (S$) are priced low. This ensures that cost of production for goods/services for both domestic consumption and exports are price competitive.

The impossible trinity

In some cases, the combination of policies that countries choose may also limit the scope for the use of macroeconomic policies. Using Singapore as a case again, given our reliance on trade and therefore free capital mobility, the use and control over interest rate centred monetary policy is lost. Hence, Singapore, cannot use interest rate centred monetary policy to stimulate domestic components, particularly I and C of the AD.

Economic Outlook

Poor economic outlook generally limit the scope of the use of macroeconomic policy. Expansionary demand-side policies may not be effective when consumers and firms expect that economy may shrink. Rather than spending, they may save. This reduces C and I respectively.

In Japan, decades of poor economic outlook resulted in a liquidity trap, where interest rates have been reduced to a level where they cannot be further lowered. Despite so, the increase in C and I are still not picking up.

Globalisation

The rise of globalisation means that recession from one part of the world can quickly spread around the global economy. The 2008 financial crisis is a case in point. The impact of government policies may be [illegible] by the global economy and become more limited. International co-ordination of macroeconomic policies may be needed. For example, officials from different nations may need to meet to evaluate the world's economic conditions and come up with solution collectively.

Level 2 **5 - 7**		**Anti-thesis:** Answer explains the consequences of a BOP deficit, but might not have made clear links to SOL. Answers may be limited due to [illegible] Answers accurately explains impact [illegible] on SOL Answer explains impact on SOL, or positive and negative impact on SOL, or current and future SOL) As long as any one type of balance is recognised, the answer can be awarded L2. Answer explains both positive and negative impact on SOL
Level 1 **1 - 4**		Answer shows some knowledge of BOP but might not have recognised that the question is on the consequences of a BOP deficit. There may be basic errors in theory, inadequate explanations or which contain only a few valid points. The answer could be mostly irrelevant or inaccurate.

Markers' Comments

Knowledge

- Students who did well were able to provide correct conceptual understanding of balance of payments, the sub-accounts (current, capital and financial), and the consequences of these deficits that were a result of these deficits.
- Students who did poorly had misconceptions. Common ones include:
  - **Confusion between budget and balance of payments:** budget refers to spending and revenue of the government, while BOP refers to the inflow and outflow of transactions of a country. Furthermore, a government's budget is transacted in domestic currency, for example, Singapore's budget, taxes are collected and spending are done in Singapore dollars. However, balance of payment is often in foreign currency. Hence the two concepts are different in essence.
    - Hence, because of the above, students who did poorly tend to mix up budget reserves and foreign exchange reserves. They would say that government budget is required when there is a balance of

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comparative advantage (e.g. pharmaceuticals, medical devices, refined oil, etc) and very proactive in seeking for opportunities to sign FTAs with trade partners → this is particularly important since domestic market is small.

- Singapore adopts an appreciating exchange rate policy to reduce the cost of imported raw materials. Being a resource scarce nation, we depend on imported raw material for production of exportable goods/services and for domestic consumption.
- *With rising worldwide protectionism, Singapore will face challenges such as increased import costs and fall in demand for SG exports.*

Body

Thesis: Singapore government's approach towards international trade should be adjusted in view of rising worldwide protectionism because of the negative implications on SG economy.

Potential disadvantages:

- o With rising protectionism worldwide, Singapore may face a rise in raw material costs. Being a resource poor nation, Singapore is dependant on import of raw materials for production of goods/services [illegible]. Hence Singapore firms that rely on imported factors of production may face a rise in cost of production → SRAS [illegible] → [illegible] economic growth, employment
- o Also, given Singapore small and open nature, rising worldwide protection may negatively affect our balance of payments current account position. With rising worldwide protectionism, trade partners (countries such as China and Indonesia which Singapore exports our goods and services to) may raise trade barriers → SG export price competitiveness → P of SG exports in foreign currency → Qd for SG exports → assuming PEDx>1, export revenue for SG → **current account worsens.** Furthermore, capital inflow to Singapore may fall as MNCs make it more difficult to invest in Singapore in order to retain investments in their own domestic economy. Fall in FDIs to Singapore → **capital account worsens.**
- o [illegible] rising worldwide protectionism will cause domestic firms to reduce investments due to poor business expectations → I falls → AD falls → slowdown in growth or negative growth; furthermore, I [illegible] **cause productive capacity to be negatively affected**
- o Rising protectionism might cause domestic firms to have lesser access to global markets → firms are unable to enjoy EOS → COP increases → firms may not achieve **productive efficiency**. Also, increase in COP may mean firms are unable to enjoy large profits like before → reduces firms ability to engage in R&D → **dynamic efficiency** negatively affected.
- o Singapore is not able to control events world-wide and stop the West from engaging in protectionism. Hence, these negative consequences are inevitable

if Singapore chooses to remain an open economy. This could explain how a case for adjustment in economic policies could be made in the future.

payments deficit. It would be better if they could explain how this is linked, for instance, because of the balance of payments deficit, the government may need to borrow from external organisations such as the International Monetary Fund (IMF) and these would incur interest costs. These interest payments and debt would then have to be financed through taxes. Hence, the government's budget would be depleted or that it would reduce the available budget for other sectors of the economy.

- **Mix up of, not clear about investment and hot money.** Students were not able to explain that hot money flows are more likely to be volatile, and deficits would reduce investments inflow into the country as investors' returns are lower. However, this does not clarify if it is also hot money.

Outcomes of macroeconomic policies complement each other

While there are possible conflicts in macroeconomic goals, there are also instances where the attainment of a given macroeconomic goals may bring about the achievement of another. For example – long term economic growth may result in low and stable inflation given an increase in productive capacity.

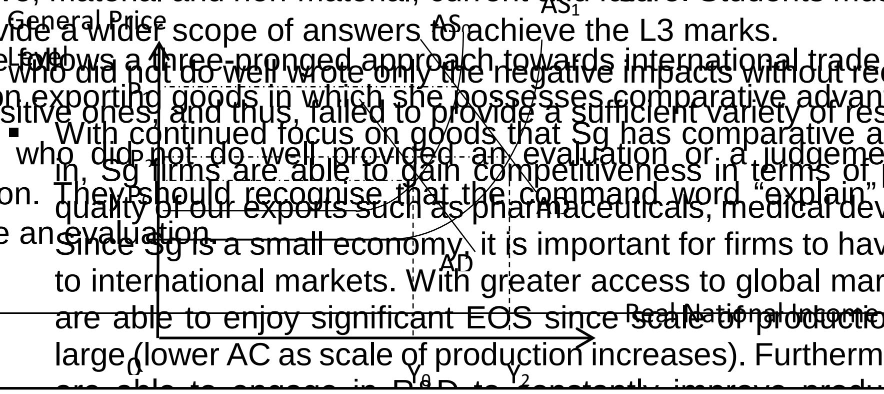
The key for all economies is striving not just for strong or high economic growth, but long term economic growth (both actual and potential growth). No country can rely solely on stimulating aggregate demand (AD) to achieve long terms economic growth. Once the economy reaches full employment, any increases in AD will not result in any actual economic growth but just increases in general price levels (from P_0 to P_1) as reflected in figure below.

- Instead of largely relying on international trade as a source of growth, Singapore must also strengthen our domestic economy so that we could grow domestically. One area is for Singapore to focus on improving the provision of high-tech, value added services. The Industry Transformation Map (ITM) seeks to achieve this purpose. The ITM aims to create 3,000 jobs in the financial services sector and additional 1,000 jobs in the financial technology (FinTech) sector will be created each year up to 2020. It helps to enhance local connectivity and collaborate with local banks to create common utilities such as electronic payments and digital ID, while sustaining economic growth.

Skills

- Students who did well made good reference to the command word "impacts". There may be differing impacts, such as positive and negative, material and non-material, current and future. Students must be able to provide a wider scope of answers to achieve the L3 marks.
- Those who did not do well wrote only the negative impacts without recognising the positive ones, and thus, failed to provide a sufficient variety of response.
- Those who did not do well provided an evaluation or a judgement to the question. They should recognise that the command word "explain" does not require an evaluation.

Anti-thesis: Singapore government's approach towards international trade need not be adjusted because of the strong foundations laid out by the government, which should be able to withstand the threats from rising protectionism



- Singapore follows a three-pronged approach towards international trade
  - Focus on exporting goods in which she possesses comparative advantage in
    - With continued focus on goods that Sg has comparative advantage in, Sg firms are able to gain competitiveness in terms of price and quality of our exports such as pharmaceuticals, medical devices, etc. Since Sg is a small economy, it is important for firms to have access to international markets. With greater access to global market, firms are able to enjoy significant EOS since scale of production can be large (lower AC as scale of production increases). Furthermore, firms ... produced exports remains price inelastic. [PEDx<1]

increasing AS in the long run (from AS to AS_1), it will be able to expand AD and also keep inflationary pressures low by preventing the GPL from rising too quickly. The resultant overall rise in GPL is from P_0 to P_2. Real national income increases ...

  - Modest and gradual appreciation of SGD, with flexibility of adopting zero appreciation during worldwide recession (e.g. in 2009 global financial crisis)

imported raw materials (e.g. crude oil and food) for survival, and for export competitiveness. With a stronger SGD, imported raw materials are cheaper when measured in SGD, and this reduces the ... reduces the risk of SG's exports becoming too expensive which may cause export revenue to fall (assuming PED>1 in the SR, and import is constant) → dampens AD → negative or slow growth; also, BOP ...

Conclusion

- To a large extent, possible trade offs in macro policies should not limit the use of macro policies. More importantly, it is the cause of the issues and the presence of ...
- Countries may place more emphasis on trade-offs under special circumstances e.g political consideration. While others may be able to accept the trade-off and consider the different conditions that need to be present for a policy to be implemented.

Student mental effects on ...

(b)

Identify concerns arising from BOP deficit

(link to answer in (a) which would have identified the consequences of a BOP deficit)

Discuss policies to deal with the concerns

(Explain how they work and evaluate them)

Conclude that the best policies to adopt would depend on the root cause of the BOP deficit

Introduction

In view of the possible detrimental effects on the macro-economy and hence, standard of living, as explained in (a), governments generally adopt the following types of policies: (i) Expenditure-Reducing Policies, (ii) Expenditure-Switching Policies, (iii) Supply-Side Policies [illegible]

Body

Policy #1:

Cause of BOP Deficit:

CA deficit due to rising import expenditure [illegible] revenue), *because of rising domestic incomes*

Concern Arising from BOP Deficit:

Currency Depreciation which [illegible] lead to imported inflation

Assumptions about the economy:

- Economy is operating at full employment level
- Economy is under a flexible/managed float exchange rate regime

An expenditure-reducing policy aims to reduce the demand and limit spending on imports by reducing overall expenditure in the economy. This results a fall in aggregate demand and in turn, national income falls. When national income falls, the demand for imports will also fall, since import expenditure is income induced. This in turn reduces the balance of payments deficit.

For example, contractionary fiscal policy might be adopted. Taxes (e.g. personal income taxes, corporate income taxes) might be raised and government expenditure reduced. An increase in personal income taxes will lead to a fall in disposable income. This will lead to a fall in the level of consumption expenditure (C). An increase in corporate income taxes will lead to a fall in post-tax profits which results in a fall in the level of investment (I).

The fall in the level of government expenditure (G), consumption expenditure (C) and investment expenditure (I) will reduce the level of aggregate demand (AD), resulting in a fall in national income. This will induce a fall in demand for imports, hence leading to a fall in total import expenditure. Balance of trade and current account deficit would thus be reduced, thereby improving the overall BOP position.

In the longer term, the reduction in AD is deflationary and would reduce the general price level especially if the country is near full employment level of income. The downward pressure on general price level improves the price competitiveness of exports and increases demand for exports.

L3	A thorough knowledge of theories and policies. Ability to describe the conflicts of macro objectives, given the implementation of a macroeconomic policy in a precise, logical and reasoned manner.	15 - 20
L2	There should be evidence of knowledge of theories and policies relating to conflicts of macro objectives, given the implementation of a macroeconomic policy. Answer is relevant but explanation may be incompletely explained.	9 - 14
L1	The answer shows some knowledge but does not indicate that the meaning of the question has been properly grasped. Basic errors of theory or inadequate development of analysis.	1 - 8
E3	For an answer with critical [illegible] analysis and answers the question. There is a well-reasoned judgement (as required by the question)	[illegible] 5
E2	For answer that makes some attempt at evaluation [illegible] the question.	2
E1	For an answer that gives an unsupported evaluative statement.	1

- A flexible exchange rate [illegible] Singapore in times of [illegible] economic crisis, demand for Sg exports may fall. Continuing to appreciate SGD might have negative implications on Sg economy since export revenue might fall. Hence, Sg govt may choose to maintain a zero appreciation approach during this period to ensure exports is less likely lose export competitiveness.
- Hence, SG's monetary policy centred on exchange rate should continue to remain flexible and adjust accordingly to global changes.
  - o Embraces free trade → actively signs FTAs with new countries, particularly the Asian countries.
- The Singapore government is proactive in seeking opportunities to secure FTAs with major trade partners. With an extensive network of 22 bilateral and regional FTAs signed since 1992, Sg is building her resilience against global economic fluctuations. The more notable ones include China-Singapore FTA, US-Singapore FTA, EU-Singapore FTA, ASEAN FTA etc, and these are the largest economies in the world. This ensures sufficient demand for Sg exports and also affordable imports of FOPs with the elimination of trade barriers between these countries.
  - → less fluctuations to AD caused by X and M changes
  - → less fluctuations in GPL caused by imported inflation
- FTAs are also vital in ensuring healthy capital inflow and outflow. Being an economy very open to capital flows, stability of investment flows is important to ensure sustainable growth (healthy and steady increase in I → AD increase; LRAS increase)
- Unlikely to be a target of/hurt by protectionist measures by other nations
- Have secured FTAs with major trade partners such as US, China, EU.

Conclusion

Despite rising worldwide protectionism, Singapore should push for freer international trade by seeking closer partnership with other countries, particularly the Asian countries. This is especially so given our small and resource scarce economy. Therefore, it is imperative that Singapore continues seek news areas of comparative advantage, in order to withstand against the volatile changes in the increasingly globalised world, and avoid direct competition with our trading partners. Though the existing approaches have been working well, the government should continue to refine the approaches in view of global economic changes and advances. One example is the Sri Lanka-Singapore FTA signed in 2018, which allows Singapore to leverage on Sri Lanka's fast-growing economy to promote domestic growth. Given its geographical proximity, an FTA with Sri Lanka will definitely help Singapore mitigate disadvantages that she may face in view of growing worldwide protectionism.

Assuming the demand for exports is price elastic, a rise in export earnings will reduce the balance of trade and current account deficit, hence improving the overall BOP position in the long run.

Evaluation

However, this policy would not be appropriate if the economy was not operating at full employment and there are concerns about falling national income and rising unemployment. This policy would further worsen these concerns.

Policy #2 (to address concerns of falling national income, rising unemployment due to a fall in demand for exports):

Cause of BOP Deficit:

CA deficit due to rising import expenditure (in excess of export revenue), *because of a increasing price competitiveness of imports relative to domestic goods.*

Concern Arising from BOP Deficit:

Fall in AD, national income and employment levels

Assumptions about the economy:

Economy is NOT operating at full employment level

The aim of this policy is to change the relative price of domestic goods and foreign goods (imports) so that people will substitute foreign goods with domestic goods.

An example of such a policy is to depreciate the currency. This would make country's exports cheaper in terms of foreign currency and imports more expensive in terms of the domestic currency. Since imports are more expensive in domestic currency, people will switch away from imports to consume more domestically produced goods and services. At the same time, this makes exports more competitive and the demand for exports would rise.

Assuming Marshall Lerner condition (i.e. PEDX + PEDM>1), balance of trade and current account deficit would be reduced, thereby improving the BOP position.

Evaluation

However, this policy might not be appropriate if there are concerns about inflation in the economy. Currency depreciation would result in imported inflation (especially if the country is highly dependent on imported raw materials) and could also lead to demand-pull inflation as AD increases.

Level	Knowledge, Understanding, Application and Analysis
L3 (8-10)	Good two-sided explanation with clear use of economic analysis on whether Sg government should adjust her current approaches. Sg's current approaches is well elaborated using economic analysis with at least 1 macro and 1 micro challenge that Sg faces with rising protectionism OR 1 internal and 1 external challenge that Sg faces with rising protectionism Good answers should have a good scope of both Macroeconomic (internal and external)
L2 (5-7)	Good two-sided explanation with clear use of economic analysis on whether Sg government should adjust her current approaches. Some analysis on Sg's current approaches [illegible] explanation on Sg faces with rising global protectionism. Some link to macro and/or micro challenges that Sg government faces
L1 (1-4)	One-sided answers. Weak understanding of Sg current approaches.
E3 (4-5)	For an evaluation with justification using economic analysis base on the context of Singapore
E2 (2-3)	For an evaluation with basic justification
E1 (1)	For an unexplained evaluation

Markers' Comments

Knowledge

- Those who attempted this question generally showed good knowledge of the various conflicts in macroeconomic objectives.
- However, a fair number of students did not realise that while the illustration of conflict of objectives were important, the crux of the question was focused on conflicts as a result of policy options used by the government. As such, many neglected to explain the various macroeconomic policies in their answers, reducing the quality of the essay.

Skills

- In general, most thesis paragraphs were well-explained. However, a disproportionate amount of the essay seemed to focus on the thesis, without adequate consideration to the anti-thesis.
- Those who fared better had well-reasoned anti-thesis paragraphs that focused on how some policies can help to achieve multiple macroeconomic objectives, policy options that may be used together to reduce said conflict(s), or how other factors may also reduce the scope of the policy.

Markers' Comments

Knowledge

- Some students did not show Singapore's approach, and therefore couldn't answer correctly whether adjustment could be made to Singapore's approach.
- Some students misunderstood the meaning of an "approach". These students provided no policies at all despite the question asking for adjustment of approach. Perhaps they think approach is simply pro-trade or not, which is not sufficient. Approach here referred to policies.
- Had a mistaken understanding that rising protectionism is by all countries. However, rising protectionism is only by some countries such as countries in the West. However, this may impact Singapore indirectly since the tariffs are not directed at Singapore's exports. Singapore's exports of intermediate goods will be reduced if for instance, China's exports decreases due to the tariffs by the US. This is because the fall in exports will reduce the demand for Singapore's intermediate goods.
- Those who did not do well were unaware of Singapore's approach towards trade. Singapore can't really use protectionism as there are no domestic industries, so imposing tariffs on certain products may result in a rise in price (without a corresponding replacement with domestically produced goods. E.g. food products.

Skills

- Students who did well were able to explain how rising protectionism affected Singapore's exports and subsequently its effect on Singapore's macro goals, such as slower or

This policy would also only be appropriate if Marshall Lerner condition holds. If the demand for both their exports and imports were very price inelastic and the summation of elasticities was less than 1, then the BOP would not improve.

Currency depreciation should also be a short term policy because a continual fall in the value of the currency could lead to a fall in investor confidence, resulting in a withdrawals of FDI. This would worsen the KFA deficit and also lead to a fall in LRAS, worsening the initial concerns of slower actual and potential growth.

<u>Policy #3 (to address concerns of falling national income, rising unemployment, falling productive capacity due to a lack of competitiveness):</u>

Cause of BOP Deficit:

KFA deficit due to a fall in attractiveness of country as a destination for FDI, *possibly because of falling labour productivity*

negative economic growth. The students also provided good contextualised knowledge of Singapore, and therefore were able to provide relevant adjustments to Singapore's approaches to international trade.

- Those who did not do well misunderstood the meaning of "adjustment" and thought that an adjustment to Singapore's approach of free trade is protectionism. This is a rather narrow view of an approach towards trade and ignores the other approaches that Singapore can adopt:
  - Sign FTA with other more approachable countries
  - Use supply side measures to enhance our competitiveness so as to mitigate higher export prices (because of tariff on our imports)
  - Use exchange rate depreciation
- Some students misunderstood the question completely and answered advantages and disadvantages of free trade or protectionism. They provided regurgitated answers that does not answer the question at all.

CA deficit due to fall in export revenue, *because of falling competitiveness of exports, possibly due to falling labour productivity*

Concern Arising from BOP Deficit:

Fall in AD, national income and employment levels

Fall in LRAS

Assumptions about the economy:

Economy is NOT operating at full employment level

For example, investment in training could improve the quality of the labour force and raise the labour productivity and hence lead to a rise in LRAS. Government could provide subsidies to encourage firms to upgrade the skills of their workers. Assuming the increase in labour productivity brings about a fall in per unit labour cost, cost of production decreases and this causes an increase in SRAS. This would bring about a fall in the general price level of domestically produced goods and services and in turn lead to a rise in the price competitiveness of exports. Additionally, the quality of exports might also rise due to innovation arising from a higher quality labour force. This will increase export revenue and reduce the current account deficit. Furthermore, as domestically produced goods and services are more attractive relative to foreign goods and services. There could be a reduction in import expenditure as consumers switch from imported goods and services to domestic goods and services. The balance of trade and current account deficit will be reduced.

At the same time, foreign investors might be encouraged to invest because of the high labour productivity, this would also increase LRAS as well as improve the capital and financial account, improving the BOP position.

Evaluation

Supply-side policies are not easily implemented as firms might not be willing to send workers for training as there will be loss of output during training. Firms may also underestimate the true benefits of education and training. Hence, the amount of training undertaken may be less than socially optimal. Workers also face difficulties in learning new skills, especially the older workers. In most cases, the government needs to increase its spending on subsidies on training and incentives for research and development. As such, these policies can drain the government's resources, diverting resources away from other areas of competing needs.

There is a time lag in the implementation of supply-side policies, which may compromise its effectiveness as economic conditions are very dynamic.

Conclusion

The best policies a government should adopt to address potential concerns arising from the deficit would depend on the root cause of the deficit. Depending on the root cause of the deficit, the concerns arising from a BOP deficit could be very different.

If the BOP deficit is persistent and is a result of a loss of competitiveness of a country, both in terms of its exports as well as its attractiveness for FDI, structural changes might be required in the economy. Otherwise, the detrimental effects on actual and potential growth, and current and future SOL, as outlined in (a), would be a serious cause for concern. In such instances, supply-side policies to improve productivity would likely be the best policy. Expenditure reducing policy would not be appropriate as it would further reduce actual growth. Expenditure switching policy could help in the short term but would probably not be sustainable in the long run. Taking the example of currency depreciation, it would not be possible for a currency to keep depreciating as investors might lose confidence in the economy, causing further withdrawals of FDI.

However, if the BOP deficit is due to large import expenditure on capital goods, then as outlined in (a), there might not be a cause for concern as the country's productive capacity might grow. This could lead to an increase in export competitiveness in the future as prices fall and quality increases. Similarly, if the BOP deficit is due to large amounts of local firms investing overseas, thus leading to a net outflow of FDI, in the long run, these investments may yield positive returns and eventually there will be receipts of interest, profits or dividends from investments abroad, resulting in an eventual currency inflow in the current account. In these cases, the government might choose not to adopt any policy to correct the BOP deficit.

	Level 3 **8 - 10**	Answer shows thorough knowledge and an excellent ability to explain at least 2 policies to correct a BOP deficit, in view of the specific concerns arising from the deficit. There should be a clear explanation of how the policy would address those concerns and hence, a recognition that the best policy would depend on the cause of the BOP deficit. Answer should have demonstrated balance by discussing how the policies could work well to correct BOP deficit but at the same time, have limitations. The arguments should be made in a precise, logical and reasoned manner. Note for makers: For top L3 marks (i.e. 10marks), the answer must have discussed 3 policies.	
	Level 2 **5 - 7**	Answer explains policies to correct a BOP deficit but might not have made clear links to how each policy addresses specific concerns arising from the deficit. Answer is mostly accurate but there may be undeveloped explanation of facts and theory. Answer has achieved some balance (e.g. discussed how a policy might work well as well as recognised its limitations or discussed how different policies work for different causes of a BOP deficit) Note for makers: For top L2 marks (i.e. 7marks), the answer must have discussed at least 2 policies which address different causes of a BOP deficit and discussed some limitations of the policies.	

Level 1 **1 - 4**	Answer shows some knowledge of macroeconomic policies. There may be basic errors in theory, in adequate explanations or contain only a few valid points. The answer could be mostly irrelevant or inaccurate.

E3 ***4 - 5***	*There is a critical evaluation of the policies discussed and economic arguments are synthesised to arrive at well-reasoned judgements in a good summative conclusion.* *There is recognition that the best policies would depend on the concerns arising from the BOP deficit, which in turn, depends on the cause of the BOP deficit.*
E2 ***2 - 3***	*There is some attempt at evaluation or a summative conclusion.* *While the judgement is relevant to the question, it may not be well-explained or based on relevant analysis*
E1 ***1***	*Unsupported or unexplained evaluative statement(s) or judgements are made.* *Note to markers: As long as there is attempt to explain limitations of a policy, even if there is no summative conclusion, give 1m.*

Markers' Comments

Knowledge

- As with part (a), there was a mix up between investment and foreign direct investment, investment and hot money. Hence some students said that an increase in interest rates would help to attract foreign direct investments, when the correct term should be hot money.
- Clarity is lacking in using terms such as not using expenditure switching and reducing – students may want to use these terms for better clarity. While it is not wrong to use contractionary fiscal policy, a better and more precise policy is expenditure reducing policy as this gives emphasis to the reduction in expenditure to reduce imports

Skills

- Students who did well addressed the concerns and the causes of the balance of payments deficit. For instance, when there is a BOP deficit in the current account due to a loss of export competitiveness, a possible way is to depreciate the currency to reduce the deficit as well as address the concerns arising from a fall in national income and rise in unemployment.
- Students who did not do well didn't address the concerns at all but merely regurgitated policies from the lecture notes.
- Sometimes the concerns and the causes were addressed but these were not clear or explicit enough. It would be better if they could explain the purpose of the policy is to address the specific concern at the start and at the end of the paragraph.
- Some students address the concerns in the introduction and failed to address them throughout the essay.