5 (a) Explain why a government should avoid a large and persistent balance of trade surplus and deficit. [10]

Question Analysis		
Command Word	 "Explain" Start: BOT surplus & deficit End: Negative consequences, and hence a concern for the government No evaluation needed 	
Concept	Unpack BOT surplus and deficitHarms of BOT surplus and deficit	
Context	General	

Introduction:

The balance of trade (BOT) is the difference between a country's export revenue (X) and import expenditure (M). Most countries aim for either BOT <u>small</u> surplus (X > M) or a BOT equilibrium, where the X = M.

Requirement 1: Governments tend to avoid a large and persistent BOT deficit because it could lower the standard of living (SOL) for future generations.

Note to students:

You are encouraged to provide at least more than 1 negative consequences due to a large and persistent BOT deficit.

A large and persistent BOT deficit implies that a country's X-revenue keeps falling and M-expenditure keeps rising. This suggests that the AD is likely to fall. <u>If the country is</u> **producing far below the full capacity**, this may lead to negative economic growth due to the reverse multiplier process. In this case, the fall in AD results in an **unplanned rise in inventory stocks**, signalling **firms** to **decrease output** and hence, RNO falls, resulting in negative economic growth. Furthermore, this also **reduces the derived demand for factors of production** (e.g. labour), causing firms to **hire fewer and fire more workers**, **increasing demand-deficient unemployment.**

The fall in derived demand for factor payments also **reduces factor payments**, resulting in a fall in household income, **reducing purchasing power**, and inducing a fall in C by the amount equal to Marginal Propensity to Consume (MPC) x the magnitude of the fall in income. This causes AD and RNO to fall again. This process repeats itself until **RNO falls by a multiplied amount** equal to (1 / mpw x original fall in AD).

A BOT deficit implies a country's X < M. If a country does not have sufficient foreign reserves, it may have to **borrow from trading partners to finance the BOT deficit** to manage the fluctuations in its exchange rate, assuming the country is in a fixed or managed float exchange rate regime. A large and persistent deficit makes this more likely and

increases the size of the foreign debt. This increases the principal sum and interest payments that have to be **repaid in future**. A government may be forced to raise taxes (e.g. personal income tax) for future generations to raise enough revenue to pay its debts, reducing household disposable income and the purchasing power of the future generation. This could reduce the quantity, quality and variety of goods and services that can be **enjoyed in future**, reducing their tangible aspect of well being, and hence material SOL of the future generation.

Additionally, if this reduces household access to healthcare or nutrition, it could also **reduce the quality of health**, leading to more illnesses and a lower life expectancy. If the lower purchasing power reduces access to education, it could deter some students from further studies, lowering the average years of formal education. Coupled with lower life expectancy, this could lower the HDI value, ceteris paribus, which suggests a lower non-material standard of living of the future generation.

Note to students:

- (i) A BOT deficit could lead to a currency depreciation. Link to the effects of a depreciation such as increase COP and decrease in SRAS. This is especially harmful for import reliant countries with lack of natural resources.
- (ii) A large and persistent BOT deficit may lead to poorer quality / lower access to better quality imports
 worsens SOL for the residents

Requirement 2: Governments tend to avoid a large and persistent BOT surplus because it may have negative impact on other macroeconomic objectives.

A large and persistent BOT surplus implies a country's X-revenue is always larger than the M-expenditure greatly. For countries that are very near to the full capacity, this large and persistent BOT surplus suggests that the AD is rising but there is limited spare capacity. As AD increases, results in an **unplanned fall in inventory stocks**, signalling firms to **increase output**. However, this also **increases the derived demand for factors of production** (e.g. labour), causing firms to **hire more workers**, but due to the **limited spare capacity**, the increase in demand for resources lead to **higher factor payments**, hence increasing unit cost of production of firms. This leads to higher GPL as the **firms pass on the higher COP** to the consumers via a higher GPL, **leading to demand-pull inflation**. This could also trigger a **wage-price spiral**, as workers demand for higher wages to cope with the increasing GPL as incomes remain stagnant. This may cause an increase in the cost of production for firms, further increasing the GPL as they pass this increase in costs to households.

Note to students: You are encouraged to use the point below to explain the -ve consequences of BOT surplus – this is part of the globalisation and international trade topic. While this point may not be so commonly explained, this is a good point for you to include when explaining the impact of BOT surplus.

A large and persistent BOT surplus could invite trading partners to adopt protectionism (e.g. tariff) to either reduce their import spending or protect their own export revenue and

domestic consumption. A tariff, a unit tax may be levied on the country's foreign imports, will raise the price of the exports for the country experiencing a BOT surplus. Assuming its goods are not unique and there are substitutes available from other trading partners, the demand for its exports will be price elastic [|PEDx|>1]. The rise in price will result in a more than proportionate fall in quantity demanded for its exports, causing the export revenue to fall. This will reduce AD (AD0 to AD1), ceteris paribus.



The fall in AD results in an unplanned rise in inventory stocks, signalling firms to decrease output. Assuming the economy is operating below the full employment output, RNO falls, resulting in negative economic growth. Furthermore, this also reduces the derived demand for factors of production (e.g. labour), causing firms to hire fewer and fire more workers, increasing demand-deficient unemployment. The fall in derived demand for factor payments also reduces factor payments, resulting in a fall in household income, reducing purchasing power, and inducing a fall in C by the amount equal to Marginal Propensity to Consume (MPC) x the fall in income. This causes AD and RNO to fall again. This process repeats itself until RNO falls by a multiplied amount equal to (1 / (1-MPC) x original fall in AD).

Note to students:

(i) A BOT surplus could lead to a currency appreciation affecting price competitiveness of its exports. Students should not be in a circular argument, for example, a trade surplus leads to a appreciation, hence qty dd of export decreases, trade deficit, negative growth. For this point to be analytical, students should be explaining the context where only a few industries are causing the huge trade surplus, and the appreciation of currency affects many other uncompetitive industries in the country.

Level	Descriptors	Marks
L3	 Analysis are complete and accurate – focusing on the negative consequences of both BOT deficit and surplus 	8-10

	 Tools of analysis like a diagram is well drawn and effectively explained in the answers Answers provide some relevant examples of countries 	
L2	 Analysis are incomplete and contain several inaccuracies Tools of analysis like a diagram is incomplete and / or not used in the explanation. 	5-7
L1	 Generally irrelevant answer. Severe conceptual mistakes. Lacking economic analysis and concepts 	1-4

(b) Discuss the policies the Singapore government can adopt to maintain a healthy balance of trade. [15]

Question Analysis		
Command word	 "Discuss the policies" Start: Policy that can achieve healthy BOT position End: healthy BOT position (to link to small surplus either by raising X-revenue or reducing M-expenditure) Evaluation: limitations of each policy and which is better 	
Concept	 Unpack healthy BOT Policies to achieve healthy BOT 	
Context	Singapore	

Introduction:

A healthy BOT typically refers to a slight BOT surplus that is not too large or persistent. Singapore tends to be rather small in domestic size and market given our population and land size, we are reliant on export growth and imported resources for production. This means that to achieve BOT healthy position, the Singapore government has to ensure export-competitiveness as well as cut down import-spending.

Requirement 1: Assuming Singapore is experiencing a BOT deficit, the government can adopt an **expenditure-switching policy** such as an expansionary supply side policy to **improve exports' competitiveness and hence, reducing the BOT deficit by increasing X-revenue.**

(Also accept any policies that seek to enhance X-competitiveness)

The Singapore government can **increase the number of signed Free-Trade Agreements** with other countries like Africa. The FTAs expand the number of exports market that Singapore can sell the goods to without any trade barriers, **increasing the demand for Singapore's exports**. This increases the total export-revenue that Singapore can earn. This may also help to diversify where Singapore can export to and import from. For example, if the price of a particular commodity from one trading partner has increased due to a shortage, this could cause M to increase greatly, harming Singapore's BOT. If Singapore was able to import a similar good from another trade partner at a lower price, this would minimise the impact of the increase in M. If Singapore experiences a fall in demand for its exports in one trade partner, it could focus on developing its industries to cater to another country, minimising the fall in X.

At the same time, the government can increase **spending on research and development to spur process innovation, so as to maintain or improve Singapore's comparative advantage (or to improve the price competitiveness and/or quality of our exports).** For example, Singapore has developed niche and high value markets to increase its X. Some examples include oil refinement, financial services, pharmaceuticals etc.

• Doing so increases efficiency and productivity in methods of production, allowing firms to use fewer factors of production to produce the same level of

output. This reduces the unit cost of production, increasing willingness and ability of firms to produce, increasing SRAS (SRAS0 to SRAS1). To remain competitive, firms pass down cost savings to consumers as lower GPL, both for domestic goods and good for exports. The fall in the price of Singapore's exports implies improved price competitiveness. Assuming the demand for Singapore's exports is price elastic [|PEDx| >1] given there are substitutes from other trading partners, the fall in price will result in a more than proportionate rise in quantity demanded. This results in the revenue gained from greater units sold to exceed the revenue lost from lower prices. Export revenue will ultimately increase.

- Meanwhile, the more efficient production method may also **improve the quality of the exports** \Box **increases the demand for our exports** \Box hence, increase the total export-revenue.
- At the same time, the lower price of domestically produced goods and services would cause consumers to switch to cheaper local goods instead of the more expensive imports assuming XED > 0, causing the demand for imports to fall, this reduces import expenditure.

The rise in X and fall in M means the BOT (X - M) can improve. If the BOT was originally in a deficit, this may allow the BOT to improve to a slight surplus.

Evaluation of R1:

- FTAs does not guarantee that there will be higher demand for Singapore's exports as it is also depending on the quality of the exports and the foreign consumers' tastes and preferences.
- Given the uncertain nature of research and development, process innovation is not guaranteed. Also, it generally takes a long time for meaningful improvements in methods of production to be developed. This implies the price competitiveness of Singapore's exports are likely only to improve in the long run, limiting the effectiveness of this policy on BOT in the short run.

Requirement 2: Assuming Singapore is experiencing a BOT deficit, the Singapore government can adopt an appreciation of our SGD to mitigate cost-push inflation and hence, improving our exports-competitiveness.

Singapore's currency is appreciated
foreign imported FOPs are cheaper in local \$\$
lower unit COP higher SRAS due to higher willingness and ability to produce more
pass
on the lower COP to consumers in terms of lower GPL
improve X-price
competitiveness
increase the attractiveness of our exports and hence, more foreign
consumers are willing and able to buy from Singapore. Assume that the PEDx > 1, quantity
demanded for Singapore's X increases more than proportionately when the price of X falls
gain in revenue greater than the loss in revenue, overall total X-revenue increases.

This means that if the original BOT position was in deficit, this could have improve the BOT position to a healthy surplus.

Note to students: Answers which explain how Singapore can use appreciation to reduce X or depreciation to improve the competitiveness of Singapore's X are not the most accurate, as these policy directions are not the intention of Singapore's XR policy. Its main stance is

always a slow gradual appreciation to reduce imported costs, boosting competitiveness of its exports.

Evaluation:

- This policy requires Singapore government to have sufficient foreign reserves to manipulate the currency appropriately. Therefore, it **may not be sustainable for Sg's government to continuously intervene in the long-run** if the country has lost its comparative advantage.
- The effectiveness of this policy is only applicable to Singapore since we are heavily reliant on imported FOPs due to our lack of natural resources. However, in times of deep worldwide recession, this policy may not be effective as the appreciation of SGD may also reduce the export-competitiveness since foreign consumers find our Sg's exports more expensive to them. And in times of recession, the willingness and ability to pay for goods and services is already low, hence leading to a larger fall X-revenue instead.

Note to students:

This is also an acceptable response although Singapore government rarely uses this move to control our BOT position.

The use of expenditure reducing policy such as a contractionary fiscal policy.

The government can reduce government expenditure (G), which is a direct component of AD. The government can also raise personal income tax, reducing household disposable income, their purchasing power and hence consumption expenditure (C). They can also raise corporate income tax, reducing the after-tax profits of firms and hence lower expected returns to investment. This would reduce investment expenditure (I). The fall in G, C and I will reduce AD (AD0 to AD1), ceteris paribus.

This will cause an unplanned rise in inventory stocks, signalling firms to reduce output. If the economy is operating below the full employment output, RNO would rise. This implies less economic activity, reducing the derived demand for factors of production, reducing factor payments and household income.

If Singapore's imports are normal goods, YED > 0, the demand for imports will fall, reducing import expenditure. Assuming export revenue remains constant, the BOT (X - M) will improve. Given the BOT was originally in deficit, this will allow the BOT to be in equilibrium or a slight surplus.

Evaluation of this point:

If the economy is operating below the full employment output, a contractionary policy may result in a slowdown or even fall in RNO, which may reduce household incomes, increase demand deficient unemployment, and lower material standard of living. While contractionary policies could be effective, it may not always be appropriate due to the trade offs between other macroeconomic aims.

Evaluative conclusion:

Given the nature of the Singapore's economy which is rather small and open, it is imperative that Singapore maintains a healthy BOT position to achieve our macroeconomic objectives.

Since Singapore has a healthy government budget and foreign reserves, manipulating our Singapore's currency is the most crucial tool to help maintain our health of BOT, and the government has more direct control over this. At the same time, Singapore government continues to forge strong relationships with many countries, so that we can leverage on the larger foreign markets to sell our domestic goods and services. In the long term, the most effective approach will be to continuously expand our country's capacity and innovation capabilities. This is because it does not just enhance the competitiveness of the goods and services and hence, allow us to maintain our comparative advantage, it can also help Singapore to achieve sustained economic growth as well.

Level	Descriptors	Marks
L3	 Analysis is complete and accurate – focusing on at least 2 policies to maintain a healthy BOT position. Clear links to improve X-revenue and/or reduce M-expenditure Well-contextualised to Singapore's context 	8-10
L2	 Analysis are incomplete and contain several inaccuracies Minimal or incidental contextualisation to Singapore 	5-7
L1	 Generally irrelevant answer. Severe conceptual mistakes. Lacking economic analysis and concepts 	1-4

Level	Descriptor
E3	A well supported conclusion of which is the most effective or appropriate policy with insightful justification that considers all arguments of the essay holistically.
E2	A conclusion of which is the most effective or appropriate policy to achieve a healthy BOT position using appropriate at least 1 criterion and / or valid reasoning.
E1	An attempt to conclude which is the most effective or appropriateness policy to achieve a healthy BOT.