4 (a) Explain two reasons why changing the exchange rate can be more effective than changing the government spending to address high inflation in Singapore. [10]

Question Analysis	
Command word	"Explain" ● Start: Appreciate exchange rate ● End: how the GPL can be reduced via the fall in AD or the increase in SRAS ● No evaluation needed
Concept	● High inflation □ sustained increase (at a fast rate) in GPL ● Monetary policy – exchange rate ● Characteristics of Singapore – small and open economy
Context	Singapore

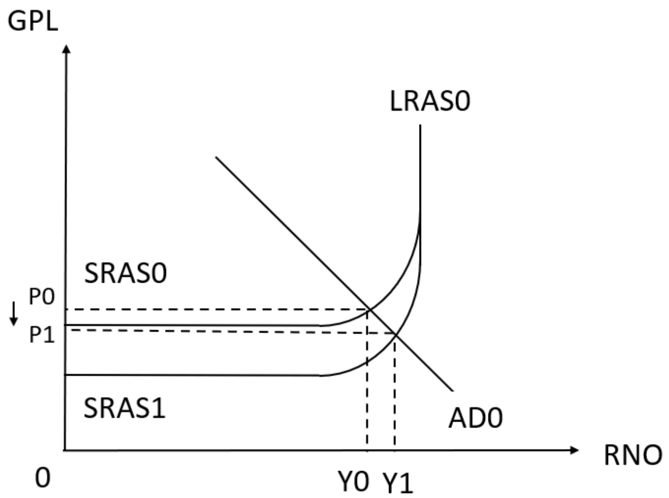
<u>Note to students:</u>

To score analytically for this question, you are required to explain the key characteristics of Singapore and explain how the monetary policy tool of exchange rate is much more effective to address inflation in Singapore. This means that you are to link to how the changes in AD / AS due to appreciation of SGD can help to reduce GPL. The focus is on reduction in GPL, rather than the impact on RNO / RNY.

Requirement 1:
Contractionary monetary policy in terms of <u>**appreciating**</u> the Singapore dollar (SGD) is **more effective** than reducing government spending to overcome high inflation in Singapore because it **reduces imported cost-push inflation.**

Given Singapore's **limited natural resources, it relies heavily on imported factors of production**. This implies that **rising prices of imports is one of the largest causes of inflation in Singapore**.

<u>Explain how an appreciation of SGD can help with imported inflation:</u>
Appreciating the SGD reduces the price of imports in local currency SGD, ceteris paribus. This **lowers the unit cost of production** in Singapore, increasing the willingness and ability of firms to produce, increasing the SRAS (from SRAS0 to SRAS1).



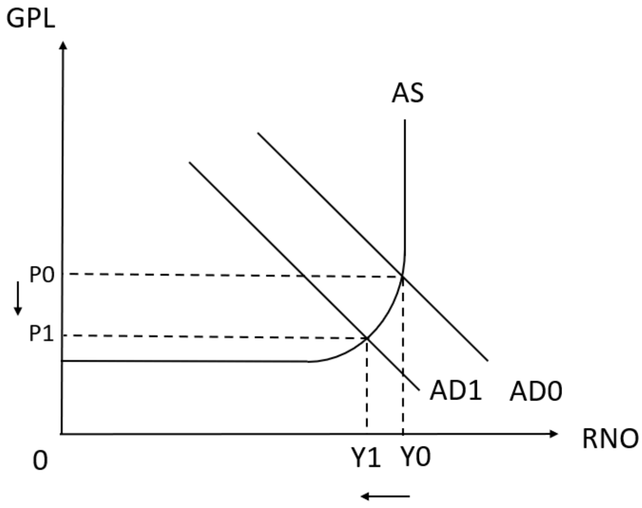
Assuming that the economy is operating <u>below the full employment output</u>, firms pass on the cost savings down to consumers in terms of lower prices, causing GPL to fall from Po to P1. This overcomes imported cost push inflation.

(For analytical reasoning – students are encouraged to provide some reasoning why exchange rate is better than changing govt spending). *Reducing government spending <u>has no direct effect on controlling the price of imported resources</u> since it involves changing the government spending and direct tax rates, hence cannot overcome cost-push imported inflation, which is extremely significant for Singapore.*

Requirement 2:
Contractionary monetary policy in terms of **<u>appreciating</u>** the Singapore dollar (SGD) is **more effective** than reducing government spending to **overcome high demand-pull inflation** in Singapore because it targets the **biggest component of AD** – export revenue**.**

Since Singapore has a **small domestic population**, it is **heavily reliant on the export revenue** as its growth engine. This means that the **component of X-revenue takes up the largest proportion** of its GDP. In comparison, its **domestic C, I and G are relatively smaller as a proportion of its GDP**. While reducing government spending would allow AD to fall, it will **not** be as significant as reducing export revenue (X).

<u>Explain how an appreciation can help with demand-pull inflation:</u>
In the short term, an appreciation causes the **price of Singapore's exports to be more expensive in terms of foreign currency**. This causes trading partners to **switch to cheaper substitutes, reducing the demand for Singapore exports** and hence export revenue, which significantly reduces AD in the short term, ceteris paribus.



Assuming that the economy is currently near or at full employment, this causes an unplanned rise in inventory stocks, signalling to firms to reduce output. Thus, **derived demand** for factors of production will **fall**, reducing the competition for the limited scarce resources, hence **bidding down prices of factor inputs and lowering unit cost of production. The cost savings are passed on to consumers as lower GPL seen from the fall in P0 to P1, alleviating demand-pull inflation.**

Note to students: R1/R2 should

- *Recognise that contractionary policies must be used to overcome high inflation.*
- *Identify and explain how the characteristics of Singapore economy make government spending (G) less effective than appreciating the SGD (the answers should not merely state but a comparison should be made)*
- *Explain how appreciating the SGD addresses both cost-push and demand-pull inflation*

Level	**Descriptors**	**Marks**
L3	● Analysis are complete and accurate ● Characteristics of Singapore economy explained ● Tools of analysis like a diagram is well drawn and effectively explained in the answers	8-10
L2	● Analysis are incomplete and contain several inaccuracies ● Characteristics of Singapore economy are either unexplained (merely stated) or completely absent in the explanations ● 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 whether inflation or deflation is a more serious concern to a government. [15]

Question Analysis	
	"Discuss" ● Start: inflation/ deflation problem ● End: harmful consequences on either the economy, economic agents or conflicts with other macroeconomic objectives that are concerning to government. Evaluation: which is more harmful and therefore a more serious concern to the government based on certain assumptions and premise
Concept	● Unpack the definitions of inflation and deflation ● Consequences of inflation and deflation
Context	General – open context Students are encouraged to come up with the contexts to support their justifications and evaluations.

Requirement 1: High rates and unstable inflation is a concern to the government due to its adverse impact on the standard of living of its citizens and its impact on the economy such as BOT.

Inflation refers to a sustained rise in the general price level in the economy. While a low and stable inflation rate is generally good for an economy, **high and unstable inflation rate** could result in the **rise in GPL to exceed the rise in income of households.** This is likely to occur when the economy continues to experience an increase in AD **near the full employment level**. This is also more likely to occur for **fixed-income earners or retirees**.

- As a result, households could experience a **fall in real income and hence purchasing power.**
- This causes households to **consume fewer and worse quality of goods and services, reducing their tangible aspect of well being, and hence material standard of living.**

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.

High and severe rates of inflation makes the country's exports less price competitive in relation to other countries, and hence, contribute to the lower demand for the country's exports. This reduces the country's export revenue and if the country is already in a BOT deficit, this means that the BOT deficit will worsen and the country may end up borrowing from other countries to finance its spending on imports. This leads to national debt and hence a concern to the governments.

> Note to students: You are encouraged to write at least 2 possible negative consequences due to high inflation to score well at the A-levels.
>
> Other acceptable answers include
> (i) Uncertainty from high and unstable inflation, fall in business and consumers' confidence □ fall in consumption and investment expenditure, hence AD □ negative economic growth via the reverse multiplier process and its negative consequences.
>
> (iii) High inflation tends to worsen income / wealth inequality. High income / wealthy households are also disproportionately owners of capital, land, property or financial assets. Income from such assets have traditionally kept pace with the rate of inflation because they are able to renegotiate rents based on inflation. Hence, high inflation is likely to increase the income of the rich more than the income of the poor, whose income is mostly from wages for labour. This could widen the income gap, which could increase the Gini Coefficient, reflecting a rise in non-material standard of living.

Evaluation of R1:
However, if the rate of inflation is gradual / moderate and the economy is operating below the full employment output, inflation could be a sign of a rising AD and associated with higher RNO and real household incomes. In such cases, inflation is likely to increase standard of living instead. Therefore, not all types of inflation is a concern to the government.

Requirement 2: High rates of deflation is a concern for a government as it may cause negative actual economic growth and increase demand deficient unemployment.

Deflation refers a sustained fall in the general price level in the economy. High rates of deflation can be harmful as it usually occurs when the **AD is falling and the economy is producing far below the capacity**. 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). Furthermore, this continuous fall in GPL may lead to consumers and firms withholding consumption and investment spending as they expect prices to fall even further, which contributes to the sustained fall in AD, worsening the economic growth of the country.

Note to students: You are encouraged to write at least 2 possible negative consequences due to deflation to score well at the A-levels.

Other acceptable answers include
(i) Deflation **increases the real value** of debt payments, which may force some firms and consumers to **default on loans**, raising the general level of financial uncertainty in the economy. Firms may choose to defer potential investments (I falls) contributes to the fall in AD and hence, impact on negative economic growth.

(iii) Deflation creates pessimism in the country weakens confidence levels and its negative impact on AD and hence, RNO.

Evaluation of R2:
However, not all types and causes of deflation is a concern to the government. If the deflation is a result of a significant fall in unit cost of production or advancements in technology (expansion in LRAS), consumers and firms may instead be more optimistic about the future outlook of the economy and the country is able to achieve potential economic growth.

Evaluative Conclusion:
In conclusion, whether or not inflation or deflation is harmful to the economy depends on the **state of the economy**, **magnitude and the persistence** of the inflation or deflation.

For **developed countries when they are producing very near to full employment**, it is likely that the **inflation is a more severe problem than deflation**, as it is more likely that the inflation rate is high and likely to be persistent, unless the government is able to put in place certain measures to address the problem. For developing countries when they are currently producing far below the full employment, it is likely that the **deflation is a more severe problem than inflation as it is likely to be associated with a fall in AD.**

In general, as long as the **inflation or deflation rates is very high and very persistent, the adverse effects discussed are likely to be more severe** and hence, more of a concern.

Level	Descriptors	Marks
L3	● Analysis are complete and accurate – focusing on the negative consequences of both inflation and deflation ● Tools of analysis like a diagram is well drawn and effectively explained in the answers	8-10
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

Evaluation:

Level	Descriptors
E3	A well supported conclusion of whether inflation or deflation is more harmful with insightful justifications (more than 1 criteria) that considers all arguments of the essay holistically.
E2	A conclusion of whether inflation or deflation is more harmful with ONE appropriate criteria and / or valid reasoning.
E1	An attempt to conclude whether inflation or deflation is more harmful that is unsupported or unconvincing.