Essay Question 6:

Singapore's Prime Minister has stated that 'Globalisation will be under pressure, but it is imperative for countries to cooperate, for businesses to operate across many generations, to tap resources, to bring skills and talents and experiences together, and then serve markets all around the world.'

Source: pmo.gov.sg/Newsroom/PM-interview-with-BBC-for-Talking-Business-Asia, 2 March 2021

(a) Explain the benefits and costs of globalisation to Singapore. [10]

(b) Discuss the most appropriate policy measures that the Singapore government should take to increase the benefits and reduce the costs of globalisation. [15]

Suggested answers:

Part (a):

Introduction:

Globalisation is the process through which an increasingly free flow of goods and services, capital, labour, and technology leads to the integration of economies and societies. It is brought about by improvements in information and communication technology, lower transportation costs and economic liberalisation, allowing countries to enhance their comparative advantage.

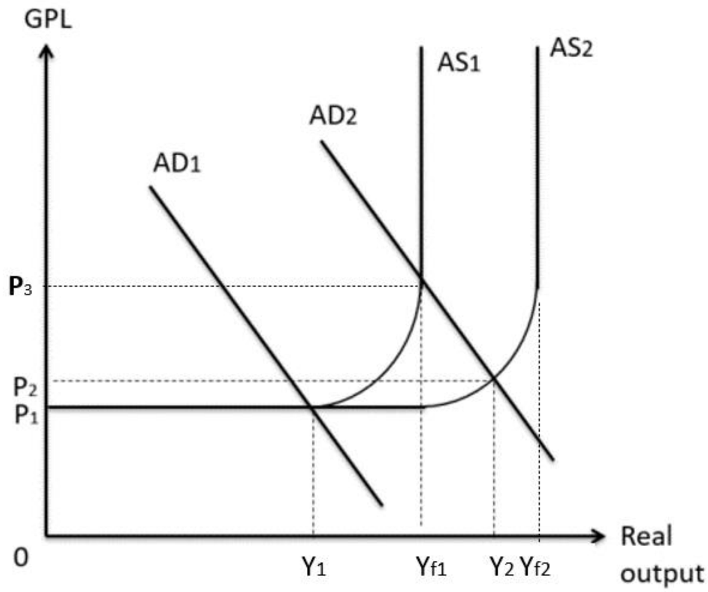
Development #1: Explain at least two benefits of globalisation to Singapore

Due to the nature of its economy, Singapore is likely to benefit significantly in terms of her macroeconomic aims.

Benefit 1: Actual and potential growth

Firstly, globalisation brings about an increase in trade volumes. As a small economy, Singapore lacks natural resources. However, she has the factor endowments such as capital goods and a skilled workforce compared to other countries. Since she has a lower opportunity cost in producing higher value-added goods such as petrochemicals, she is therefore able to produce these goods with lower opportunity cost and export them to the rest of the world. With globalisation, she now has access to larger foreign markets and if she can maintain her comparative advantage and engage in trade, it is likely that the increase in export revenue would be more than the increase in import expenditure. An increase in (X-M) will lead to an increase in AD. With reference to Figure 1 below, assuming that the Singapore economy is operating below full employment. The rise in income from the initial rise in AD causes a rise in income-induced consumption resulting in a further increase in AD. As one's spending becomes another's income there will be multiple increases in AD until a new equilibrium is reached whereby there will be a multiple increase in real national income from Y1 to Yf1, bringing about actual growth.

Figure 1:



Secondly, globalisation means freer mobility of capital flows. Being an open economy, Singapore would be able to benefit from globalisation as FDI makes up a significant proportion of its GDP. The increase in FDI from large firms such as Google and Dyson will lead to an increase in AD bringing about actual growth. The increase in investment means an increase in the net capital stock in the economy, thus increasing the economy's productive capacity to produce goods and services. This is depicted as an increase in AS, thus leading to potential growth. As shown in Figure 1, AS curve shifts from AS1 to AS2 increasing potential growth from Yf1 to Yf2. As the increase in AD is in tandem with the increase in AS, Singapore will benefit from this increase in economic growth, and will be able to enjoy sustained economic growth, as seen in Figure 1 where there is a further increase in real output from Yf1 to Y2, accompanied by a fall in GPL from P3 to P2.

Benefit 2: Increased employment

The increase in (X-M) and FDI will also lead to increased employment in the economy. The increase in AD and thus real output will mean that the firms will need to employ more factors of production. Since labour is a derived demand, there will be an increase in the aggregate demand for labour, leading to a fall in demand-deficient unemployment.

With that, consumers will enjoy higher income, higher purchasing power and therefore will be able to consume more goods and services, leading to an increase in material SOL.

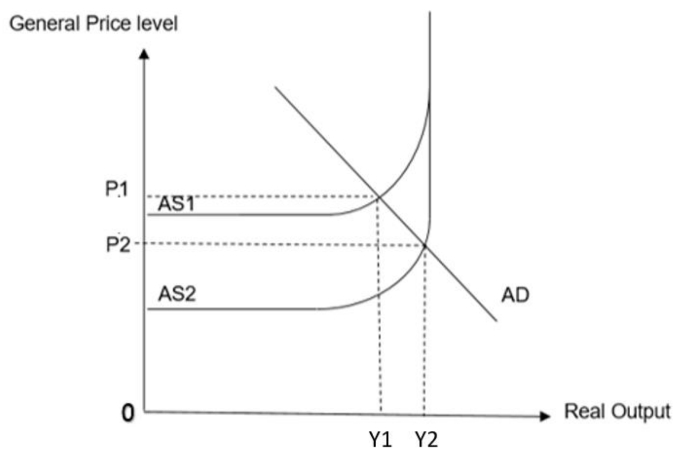
<u>**Development #2: Explain at least two costs of globalisation to Singapore**</u>

Cost 1: Increased vulnerability to external shocks (e.g. susceptible to <u>supply</u> shocks)

As a country becomes increasingly integrated through globalisation, this increases its susceptibility to imported inflation in the case of higher price of imported raw materials and other final goods and services → ↑unit cost of production → ↓SRAS from AS2 to AS1 as shown in Figure 2 below → ↑GPL from P2 to P1 → result in cost-push inflation in domestic country.

For example, the Russia-Ukraine war has caused a surge in oil and other commodity prices to multi-year highs as Russia is the world's third largest oil producer behind the United States and Saudi Arabia. As oil is a crucial factor input for production, the soaring oil prices will result in higher unit cost of production and lower potential profits per unit. Firms therefore are able and willing to produce fewer units of output. This affects all firms and industries resulting in a fall in SRAS.

Figure 2: Increase susceptibility to inflation in other economies



Economies like Singapore who is import-reliant will therefore be highly susceptible to such imported inflation, compared to relatively closed economy such as China since the former have relatively large imports. Furthermore, rising costs of imported inputs is a threat to its export competitiveness if there is high import content. Due to increased imported prices of raw materials, exporters may have to raise the prices of their exports. As a result, it causes the exporting countries to lose their export price competitiveness.

Increased vulnerability to external shocks (e.g. susceptible to <u>demand</u> shocks)
In addition, globalisation means that countries are more interconnected which means that Singapore is more vulnerable to external shocks. For example, the sub-prime mortgage crisis in the US was partly responsible for the Global Financial Crisis in 2009. When faced with a worldwide recession, a small and open economy like Singapore will be more vulnerable to external shocks as compared to other economies. Singapore was the first Asian country that suffered from the negative impact of the Global Financial Crisis. The fall in foreigners' incomes will lead to a fall in consumption and fall in demand for Singapore's exports. The loss of business confidence will result in a fall in FDI in Singapore which will adversely impact the Singapore economy. This is because Singapore is largely dependent on (X-M) and FDI for growth and employment.

Cost 2: Loss in comparative advantage and structural unemployment

Given that globalisation allows for the transfer of technology, this could lead to changes in factor endowments of different countries. This causes a small and open economy such as Singapore to gain and lose comparative advantage more frequently since CA is a dynamic concept. For instance, MNCs might shift their production lines elsewhere in search of lower costs of production. The fall in FDI in the sunset industries in Singapore results in a fall in demand for workers in these industries. Due to occupational immobility, these workers' skills are now obsolete, and they cannot take up jobs in other industries. At the existing wage, the quantity demanded is less than the quantity supplied of workers, resulting in a surplus of workers, causing a downward pressure on their wages, hence increasing the income gap between the workers in the sunset industries and those in the sunrise industries. Rising income inequality can bring about a range of macroeconomic and social consequences since lower-income households are deprived of the ability to stay healthy and accumulate physical and human capital, which will lower the labour productivity of the economy in the future. Furthermore, extreme inequality may damage trust and social cohesion which may in turn discourage investment.

Level	Knowledge, Application/Understanding and Analysis	Marks
L3	For a well-developed analysis on the costs and benefits of globalisation, with the use of well-labelled and well-explained diagrams.	8 – 10
L2	Relevant answer but benefits and costs may be incompletely explained. Underdeveloped answer, where only either benefits OR costs were explained.	5 – 7
L1	For an undeveloped answer that is descriptive, lacking in application of economic theory, and/or contains serious and pervasive conceptual errors, and/or is largely irrelevant.	1 – 4

Part (b):

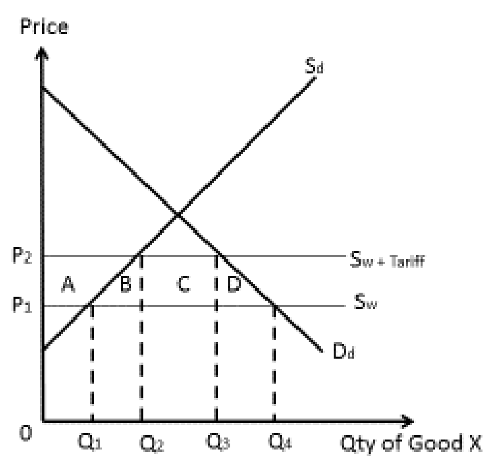
Introduction:
Globalisation can bring about both benefits and costs to an economy. For a small economy like Singapore with small domestic demand, it is important to embrace globalisation to benefit from it fully. The essay looks at the various policies available to the Singapore government to increase the benefits and reduce the costs of globalisation to its economy.

Development #1: Explain how the signing of FTAs allows Singapore to increase the benefits of globalisation and reduce the costs of globalisation

Free Trade Agreements are binding agreements between 2 or more countries to reduce or remove trade barriers and facilitate cross border movement of goods and services between the territories of the parties. With FTAs, Singapore's exports may be more price competitive in member countries and we will also gain access to larger markets. This is due to the removal of trade barriers like tariffs, which thus lowers the price of exports.

Signing of FTAs increases export revenue (increases the benefits of globalisation):
With reference to Figure 3 below, assuming that tariffs were originally placed on imports, the price of good X initially was P2, and Q3 units were consumed.

Figure 3:



Upon opening the market to free trade through the signing of FTAs, domestic consumers are able to enjoy the lower world price of P1 and consume more quantities of good X (from Q3 to Q4). If good X were an intermediate good used for producing final goods and services meant for export, the lower price of P1 would thus lower the unit cost of production for firms that require good X in their manufacturing processes. This helps to increase supply and hence lowers prices of these goods produced in Singapore. Therefore, **export price competitiveness increases**.

With lowered export prices, assuming demand for these exports is price elastic, there will be a more than proportionate increase in its quantity demanded. This increases export revenue as exports become more price competitive.

The signing of FTAs also allows for Singapore to **access more markets overseas**. This allows firms to reap economies of scale, as they produce a larger output to meet the higher demand overseas. Specialisation can occur, and workers thus become adept at their work and are able to produce more output per man-hour. This lowers unit cost of production, hence further lowering export prices. In addition, since producers can sell to other countries freely, this increases the market size and further increases export revenue through higher export demand. Finally, the increased trade links due to the signing of FTAs provide competition for domestic producers. This promotes greater efficiency of production and improved quality of the products produced domestically. This increases export non-price competitiveness which in turn increases their demand and hence export revenue.

Address <u>appropriateness</u> for Singapore and link to how benefits of globalisation are increased:
[Criterion: Nature of the economy] Given that Singapore is a small economy, we rely heavily on external demand for growth, and thus can benefit significantly from globalisation. **[Opinion]** It is therefore an appropriate policy for Singapore to sign FTAs with as many nations as possible to further reap these benefits. **[Reasoning]** As mentioned in part (a), globalisation brings about actual growth through an increase in trade volumes. With FTAs, Singapore will be able to gain access to even more markets, which thus further increases export revenue, thus promoting greater actual growth and employment. In addition, the specialisation of goods according to the theory of comparative advantage allows greater gains in consumption and thus increases standard of living for Singapore.

Establish link to how Singapore can also reduce the costs of globalisation with FTAs:
Reduced costs:
The signing of many FTAs not only allows for a larger market for Singapore's exports, but it also helps to reduce Singapore's susceptibility to external shocks. That is, it can also reduce the costs of globalisation. For instance, free trade increases Singapore's dependency on external trade and her trading partners, which could result in growth being more volatile. If her trading partners suffer from a recession, Singapore's export revenue would be impacted negatively. In addition, Singapore is also vulnerable to supply chain disruptions for example, which it experienced during and after the COVID-19 pandemic. With a larger quantity of FTAs, this diversifies Singapore's export market as well as sources of supply of imported inputs and thus, reduces her vulnerability to external shocks.

[Address the question] Thus, signing of FTAs is an appropriate policy to increases the benefits of globalisation, as when many FTAs are signed, this also helps to reduce the costs of globalisation such as its vulnerability to external shocks.

Development #2: **Explain how an appreciation of the Singapore dollar helps to achieve price stability thus reducing the costs of globalisation**

As mentioned in part (a), globalisation gives rise to a country being vulnerable to external shocks, which may cause a country to experience imported inflation or experience weaken demand for its exports. Therefore, one policy which Singapore could implement is that of exchange rate policy to achieve price stability, thus preventing imported inflation or ensuring exports remain price competitive in spite of external shocks.

Explain how appreciation of SGD can help to **reduce imported inflation**:
As Singapore imports a large amount of its raw materials (e.g. oil which is necessary for all production processes), an appreciation of the Singapore dollar would cause the prices of imported raw materials to be relatively cheaper in domestic currency. As such, it reduces the cost of production of goods and services that make use of imported factors of production. Hence, firms in the economy are willing and able to increase production at every price level, causing a rightward shift of the AS curve from AS1 to AS2 as seen in Figure 2 in part (a). GPL falls from P1 to P2, reducing cost-push inflation. At the same time, real output increases from Y1 to Y2.

Appreciation of SGD can help to **reduce demand-pull inflation**:
At the same time, the demand for exports will fall since price of exports (in foreign currency falls), and assuming the price elasticity of demand for exports is positive (PEDx>0), this will result in a fall in export revenue (in domestic currency) collected. With the fall in price of imports in domestic currency and given that the demand for imports is price inelastic (PEDm<1) in Singapore due to our heavy reliance on imported raw materials, there will be a less than proportionate increase in quantity demanded of imports, causing a fall in import expenditure.

Assuming that the Marshall-Lerner condition holds, where the sum of price elasticity of demand for exports and imports is greater than 1, an appreciation of Singapore dollar will then lead to a fall in the value of net exports. Lower import prices will also result in domestic consumers switching towards imported goods and services, away from domestic ones, thus reducing Cd. Thus, a stronger Singapore dollar can help to dampen the rise in AD in Singapore, hence also easing demand-pull inflationary pressure.

Establish link to how Singapore can also benefit from globalisation with lowered inflation:
Increased benefits:
A low and stable rate of inflation creates a more conducive environment for firms to invest. The confidence of firms is enhanced since they now have greater certainty over the expected returns of their investment. This will encourage firms to take on long term investments which benefits Singapore's productive capacity. In the long run, with greater capital accumulation, potential growth would thus be achieved. Since globalisation promotes capital flows, this policy thus allows for the benefits of globalisation to be harnessed.

Address appropriateness for Singapore:
[Criterion: Nature of the economy] Given that Singapore is a small and open economy, we are both import-reliant and export-driven and this makes us very vulnerable to external shocks (i.e. susceptible to both supply and demand shocks). **[Opinion]** Appreciating the SGD is thus appropriate to reduce inflationary pressure to increase the benefits and reduce the costs of globalisation. **[Reasoning]** Appreciating the SGD enables Singapore to enjoy lower priced imported raw materials, despite supply shocks. In addition, the lower price of imported raw materials also allows for exports to be produced at a lower cost, thus strengthening its price competitiveness and boost investment. Overall, appreciation of the SGD lowers inflation and thus, despite external shocks, Singapore's can minimise the rise in its cost of living arising from more expensive imports and allow its exports to remain competitive and we are thus able to reduce the costs and increase the benefits of globalisation through greater trade.

Conclusion
[Opinion] In conclusion, both policies suggested are appropriate for Singapore to increase the benefits and reduce the costs from globalisation. **[Reasoning and Criterion: Time period]** In particular, the signing of FTAs would be an appropriate measure in the long run to enable Singapore to have access to more markets to reap its benefits from trade, reduces its vulnerability to external shocks as it diversifies the markets to which Singapore's exports can be sold in as well as to increase access to more imports. In the short run, the ER policy such as appreciation of SGD can help to minimise the risks of high imported inflation.

However, to fully harness the benefits and minimise the costs of globalisation, there is a need to also implement supply-side policies in the long run such as subsidising or granting tax incentives to encourage R&D by firms to achieve process and product innovation. Process innovation would lead to improvements in an economy's comparative advantage when unit costs of production is lowered while product innovation allows newer and quality products to be produced. Both of which will lead to gains in the benefits from globalisation. Subsidies for training and education could also be implemented to lower the costs of globalisation so that locals will be able to ride on the wave of globalisation to take on newer jobs as the structure of our economy changes due to changes in comparative advantage.

Mark Scheme

Level	Knowledge, Application/Understanding and Analysis	Marks
L3	For a well-developed answer that explains how two policies work to increase the benefits and reduce the costs of globalisation in Singapore. Answer is analytical, utilises appropriate analysis, and is contextualised to Singapore.	8 – 10

L2	Answer that explains how **one** policy may be appropriate to allow Singapore to increase the benefits or reduce the costs of globalisation. OR Answer that explains two policies but is generally underdeveloped - lacking use of a clear analytical framework to explain how policies work and how they allow Singapore to increase the benefits and reduce the costs of globalisation.	5 – 7
L1	A smattering of valid points with no relevant framework applied / largely descriptive answer with very little or no economic framework applied. Glaring conceptual gaps in explanation whereby question requirements are not clearly addressed.	1 – 4
Level	**Evaluation/Synthesis**	**Marks**
E3	2 explained evaluative judgements plus a summative conclusion on the most appropriate policy.	5
E2	2 evaluative judgements, 1 of which is explained.	3-4
E1	Unsupported evaluative statements or 1 explained evaluative judgement.	1-2