2018 H2 Prelims P2

Q1

The use of drones for aerial photography and racing are growing in popularity among the wider public. In the next five years, consumer drone sales volume is expected to increase more than tenfold, while average selling price for drones will continue to decline.

Discuss the different demand and supply factors and their likely importance in determining the anticipated changes in sales volume and price of consumer drones. [25]

Suggested answer

Introduction	The anticipated changes in sales volume and price of consumer drones can be explained through the application of demand and supply analysis along with elasticity concepts of PED and PES. The projected increase in sales volume (or increase in equilibrium quantity) can be explained through anticipated increases in both demand and supply of consumer drones whilst elasticity concepts can be applied to explain the significant increase in the sales volume of consumer drones. The projected price of consumer drones could be explained through the simultaneous increases in both demand and supply, with analysis on the extent of shift in the curves.
<u>DD factors</u> DD factor #1 (change in taste and preferences)	The anticipated increase in sales volume for consumer drones could be explained by a rise in demand for consumer drones. The increase in demand could be due to a change in taste and preferences towards the use of consumer drones. As there is a trend towards the application of consumer drones in areas such as aerial photography or a hobby, this increases the desirability of consumer drones to consumers which increases their willingness to purchase consumer drones at the different price levels. This results in an increase in demand for consumer drones.
DD factor #2 (rise in income or expected rise in future income)	The increase in demand could be due to an improvement in household income. Given the positive economic sentiments in economy and the anticipated positive economic growth into the next 5 years, income of households is likely to rise thereby increasing the purchasing power of consumers. Given that drones are likely to be a normal good (or even luxury good), when the income levels of consumers rise, they are likely to increases the ability and willingness of consumers in purchasing drones at different price levels. This increases the demand for drones.
DD factor #3 (changes in technology)	The increase in demand could be due to an improvement in the technology of consumer drones (e.g. more power – faster, fly higher, carry heavier load, more lasting batteries). As one of the uses of the consumer drones is in racing, consumers could be always looking to upgrade to more powerful drones. This will create an increasing willingness of consumers in purchasing drones, causes the demand for drones to increase.

Relative importance of the DD factors (evaluation)	While all 3 factors are likely to cause increase in DD for consumer drones. The change in taste and preferences and rise in income could be more significant factors contributing to the increase in the next five years. This is because as flying consumer drones becomes more popular, it will generate a lot of interest in consumers to own one, especially as a hobby or toy. Improvement in technology of consumer drones would likely affect the commercial users and racers, these are users who require more powerful performances.
<u>SS factors</u> SS factor #1 (falling COP) SS factor #2 (increasing size of industry)	The anticipated increase in the sales volume consumer drones could be explained by the expected rise in supply for consumer drones. The anticipated increase in supply of drones could be due to falling cost of production. When there is a falling price of computer parts and inputs, the unit cost of production falls and more profits is made by the producers at every price level. For instance, there are improvements in manufacturing techniques of computer chips, economies of scale, and software advances which continues to drive down cost of drone sensors. This causes firms to have greater willingness and ability to increase production of consumer drones and the supply of drones is expected to increase. The anticipated increase in supply of drones could be due to the increasing size of the drone industry. Rising venture capital investment in the drone industry will drive growth in both number of and size of drone start-ups which results in increasing ability to produce drones at different price levels. As a result, there is anticipated increase in the market supply for drones.
Relative importance of the SS factors (evaluation)	Both supply factors are likely to work in tandem. This is because when the COP decreases, the production and sale of consumer drones becomes more profitable and more producers will enter the industry. Also, when there are more producers in the industry, this will drive competition amongst themselves to drive improvements in production technology which drives COP down.
Simultaneous shifts in DD and SS to explain extensive increase in quantity and fall in price	The anticipated increases in both supply and demand of drones will explain the anticipated increase in sales volume. Simultaneous shifts in DD and SS could be used to explain the anticipated fall in price, the anticipated increase in supply of drones has to be larger than the anticipated increase in demand for drones. The rapid increase in supply of drones is likely due to rapid technological advancements which is expected to continuously lower cost of production significantly. On the other hand, the increase in demand for drones might be relatively smaller than the increase in supply as the market may reach a point of saturation (i.e. consumers already own a drone and there is no real need for more drones except for the professional users) and the increase in demand may taper off.

	Since the increase in DD is less than the increase in SS, there will be surplus of drones which causes a downward pressure on the price of drones. Price will continue dropping until both quantity demand and quantity supplied of droids arrive at a new equilibrium price and quantity.
Application of PES to explain the sharp increase in output of drones	Furthermore, application of PED and PES can be used to explain the sharp increase in the equilibrium quantity of drones. As the PES for drone production is likely to be price elastic in supply as drones are manufactured, non-perishable products and there is likely to be availability of spare capacity in terms of a buffer stock of. As a result, firms are likely to be more responsive to changes in prices as the producers can draw down on the inventories to meet increases in demand, resulting in a relatively flat SS curve. Hence, increase in demand with a relatively flat SS curve will lead to a sharp rise in output of drones.
Application of PED to explain the sharp increase in output of drones	PED for drones is likely to be price elastic in demand since drones are less of a necessity for consumer users. There could also be different substitute toys or hobbies. Hence, consumers are likely to be price sensitive to changes in the price of drones leading to relatively flat DD curve. Hence, increases in supply is likely to lead to sharp increases in output.
Conclusion	Both demand and supply factors are important in determining the anticipated changes in sales volume and price of consumer drones however not all factors are of equal importance. The rise in supply is likely to exceed the rise in demand – and hence said to be more important than demand factors in determining the anticipated fall in price of consumer drones.

Mark scheme

Level	**Knowledge, Application, Understanding, Analysis**
L3 **(18-20)**	• Conceptually accurate and well-developed analysis of how demand and supply factors determine anticipated changes in sales volume and price of drones 1. Incorporating at least 2 +1 demand and supply factors 2. incorporating simultaneous shifts + extent of shifts 3. In-depth application and explanation of elasticity concepts 4. Well-illustrated with real-life examples related to drones. i.e. 1+2+3+4 ** Note: For elasticity concepts and simultaneous shifts, the recognition that there is a need to determine YED value, relative extent of shift, PED/PES are credited in L marks. Only the attempts to justify will be credited with evaluation.

Low L3 **(15-17)**	• Generally cohesive explanation, demonstrating good knowledge of both demand and supply factors determine anticipated changes in sales volume and price of drones 1. Incorporating at least 1+1 demand and supply factors 2. incorporating simultaneous shifts + extent of shifts 3. Some application and explanation of relevant elasticity concepts. + Well-illustrated with real-life examples related to drones. 4. Or in-depth application and explanation of elasticity explanations + inconsistent use of real-life examples to illustrate the explanation. i.e. only 3rd or 4th aspects can be slightly lacking, not both. If both 3rd and 4th aspects are slightly lacking, cap at 15.
L2 **(9-14)**	• Under-developed but conceptually sound explanation of demand and supply shifts 1. Could be lop-sided with focus mainly on demand or supply 2. Simultaneous shifts but did not consider extent of shifts 3. limited in applying or explaining the elasticity concepts. 4. Some use of real-life examples Cap at 11 marks if either elasticity concepts or simultaneous shifts of DD and SS are not brought up.
High L1 **(5-8)**	• Explanations have some incidental points made relevance to the context of the question. • Conceptually incompetent, but able to explain with limited scope and depth of factors affecting demand and supply shifts.
Low L1 **(1-4)**	• Answers that have little relevance to the question. • Major and glaring conceptual inaccuracies or no conceptual support.
E3 **(4-5)**	Well-supported evaluative judgement which uses economic analysis to support judgement on importance of demand &/or supply factors in determining anticipated changes in sales volume and price of consumer drones. Possible ways to be credited for evaluation: 1) Judgement on the likely PED/PES values 2) Judgement on the extent of shifts in DD and SS 3) Judgement on relative importance of individual DD and SS factors **Cap at E2-3 should a student make no explicit stand on the importance of DD and SS factors.**
E2 **(2-3)**	For an answer that makes an attempt at an evaluative judgment on the importance of demand &/or supply factors in determining anticipated changes in sales volume and price of consumer drones.
E1 **(1)**	Evaluative judgment provided but unelaborated on.

Q2

a) Explain the constraints faced by firms operating in a small economy. [10]
b) Discuss the extent to which firms facing the above constraints are more vulnerable to closure in a global recession. [15]

(a) Explain the constraints faced by firms operating in a small economy. [10]

Suggested answer

Introduction	Small economy can be characterised by - small physical size - small GDP level - small population - small domestic sector
Constraint #1 (lack of resources)	In a small economy, like Singapore, firms are likely to experience a lack of resources due to the small physical size and population size. Hence, they are likely to face higher fixed and variable costs. This may lead to firms to experience external diseconomies of scale very early as firms will compete for the limited resources including labour and land. The high competition for resources (e.g. labour) will lead to high average cost of production (e.g. wages for workers) which results in higher average variable costs of firms in the small economy. As a result, firms in a small economy experience higher MC and AC curves and thus end up making lower profits, assuming revenue is held constant. For example, firms in Singapore face high rental cost due to scarcity of land thereby giving rise to high fixed cost. Also, the tight labour market has also pushed up labour cost for firms in a small economy like Singapore. * we can also accept lack of capital and entrepreneurship as constraints
Constraint #2 (small domestic market)	The second constraint faced by firms operating in a small economy is that face a small market demand due to a small population forming a small consumer base. This will affect the revenue they can possibly earn. Since market size is a determinant of demand, a small market size leads to a relative low demand for the firm's goods and services thereby contributing to a low AR curve even for the monopolistic or oligopolistic firms. This means that each firm would have a relatively more price elastic demand curve (compared to firms in bigger economies). Hence, these firms would not be able to raise their price significantly to increase total revenue as it would lead to a more than proportionate decrease in quantity demanded, ceteris paribus.
Constraint #3 (lack of another FOP)	The 3rd constraint will be similar in explanation to Constraint #1. However, the choice of examples and the exact explanation should differ.

Mark scheme

L1 *1 – 4*	*For an answer that shows little understanding of the constraints faced by firms in a small economy.*
L2 *5 – 7*	*For an underdeveloped explanation on the constraints faced by face in a small economy. [at least one constraint]*
L3 *8 – 10*	*For a well-developed explanation on the constraints faced by face in a small economy. [at least two constraints]*

(b) Discuss the extent to which firms facing the above constraints are more vulnerable to closure in a global recession. [15]

Suggested answer

Introduction	When a global recession hits, household incomes fall thus leading to a fall in purchasing power and a fall in demand for all normal goods and services. This is usually reflected by a decrease in a firm's AR and MR.
Thesis #1 (firms facing the above constraints are more vulnerable to closure in a global recession)	Following part a), since such firms are likely to be faced with higher MC and AC. Given the fall in AR and MR due to the global recession, it is more likely that these firms will fall into a subnormal profits situation. (Use diagrams to illustrate, similar fall in AR and MR but different level of MC and AC initially).
Anti-thesis #1 (firms facing the above constraints are NOT more vulnerable to closure in a global recession)	Some of these firms facing the constraints may turn to or rely on imported raw materials for their FOPs. Therefore, there is a chance that their MC and AC will also fall during a global recession. This is because during a global recession, production will slow down and the demand for factor inputs will also fall, leading to a fall in prices of factor inputs. MC and AC may fall to cushion some of the fall in AR and MR.
Thesis #2 (firms facing the above constraints are more vulnerable to closure in a global recession)	Similarly, since such firms are likely to be faced with a lower AR and MR. Given the fall in AR and MR due to the global recession, it is more likely that the firms selling normal goods will fall into a subnormal profits situation (even more so for firms selling luxurious goods). (Use diagrams to illustrate, similar fall in AR and MR but different level of AR and MR initially). A similar analysis will apply even if these firms are able to export because a global recession affects both domestic and external demand.

	This will hurt firms whose operations and factor inputs are inflexible to be converted to other production.
Anti-thesis #2 (firms facing the above constraints are NOT more vulnerable to closure in a global recession)	While the Thesis #2 analysis will apply to firms in general, it also depends on the nature of products these firms are selling. If the firm sells an inferior good, the AR and MR will increase instead of falling. Also, firms who are more flexible in their operations and production could turn to producing other goods and services to cope with the fall in demand for their main products.
Synthesis	The extent to which firms facing the above constraints are vulnerable to closure in a global recession depends on - the nature of product (inferior vs necessity vs luxury) - utilisation of domestic factor inputs vs imported factor inputs - flexibility in the nature of production
Conclusion	Therefore, we cannot conclude that firms facing the above constraints are more vulnerable closure, we will need to examine the nature of the industry.

Mark scheme

Level	Descriptors
L3 8 – 10	For a well-balanced (at least 1+1) answer which provides a thorough analysis (includes diagrams or at least AR, MR, AC, MR analysis) on whether firms facing the above constraints would be more vulnerable to closure.
L2 5 – 7	For a balanced answer that provides an underdeveloped (some gaps, minor misconception or largely accurate) explanation on whether firms facing the above constraints would be more vulnerable to closure. Or For a one-sided answer that provides a thorough analysis on why firms facing the above constraints are more vulnerable to closure OR not more vulnerable to closure.
L1 1 – 4	For a skimpy and vague answer or an inaccurate interpretation of question
E3 4 – 5	Well explained points of evaluation.
E2 2 – 3	Somewhat explained points of evaluation.

E1 1	Stating points of evaluation, points not explained

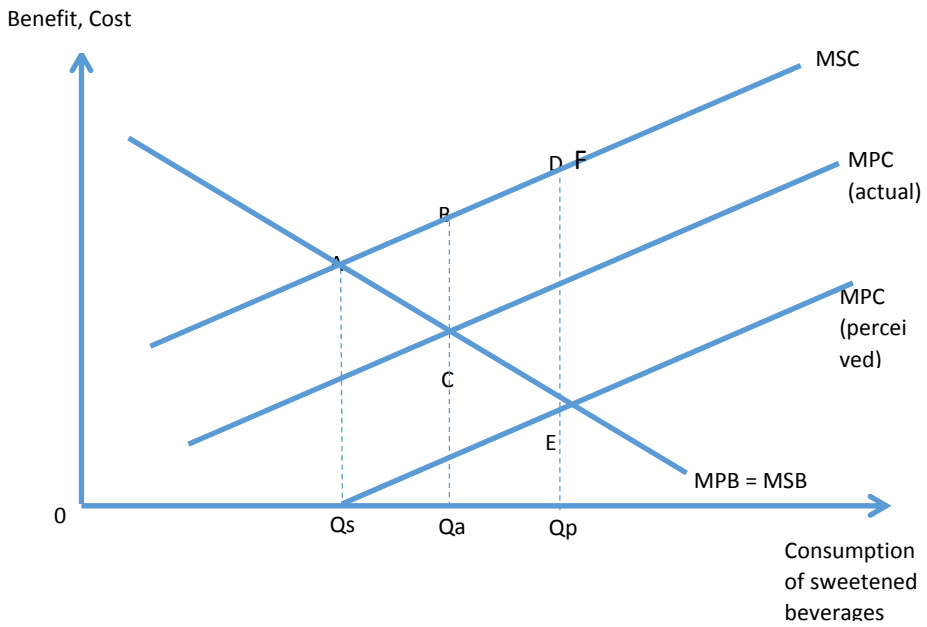
Q3

In the recent years, the Singapore government has been trying to encourage Singaporeans to reduce the consumption of sweetened beverages with high sugar content. This comes as data have shown that the consumption of such beverages comes at a cost to the society. Research lately has also shown that the consumption of such beverages is linked to poor dietary choices of Singaporeans.

a) Explain why the sweetened beverages market might fail. [10]
b) Assess the effectiveness of the policies available to the Singapore government in overcoming the above market failure. [15]

Suggested Answer for (a)

Part (a)	
Introduction Set out content and structure for essay	Sweetened beverages with high sugar content are considered a demerit goods whereby the government deems as undesirable but is over-consumed. Sweetened beverages are over-consumed due to imperfect information of the actual damaging effects to their health. In addition, the consumption of sweetened beverages give rise to negative externalities which imply that the private costs incurred by the individual consumer are less than the social costs experienced by society. Due to negative externalities and imperfect information, the unregulated market is unable to allocate resources efficiently to maximise society's welfare, hence the free market fails.
Body Explain why market failure that arises from imperfect information	Consumers of sweetened beverages tend to underestimate their private costs incurred from the consumption of sweetened drinks due to imperfect information. This can be in terms of understanding the full extent of damage that drinking of sweet drinks can bring to oneself, such as the increased possibility of contracting diabetes or becoming obese, or even to underestimating the likelihood of this happening to oneself. As such, their perceived marginal private cost ($MPC_{perceived}$) from drinking sweetened beverages is lower than the actual marginal private cost (MPC_{actual}). Rational consumers maximise their self-interest when they equate MPB with their perceived MPC and consume more sweetened beverages (Q_p) than they would, had information been perfect (Q_a). Also, the consumers' Marginal Private Benefit (MPB) reflects the additional benefits they derive from consuming an additional sweetened beverage. These private benefits can be in the form of satisfaction derived. On the other hand, the actual Marginal Private Cost (MPC) reflects the additional cost incur from consuming an additional bottle of drink. Such private costs include the price paid for the beverage, increased possibility of contracting health problems such long-term diabetes problem, and the possibility of becoming obese. Assuming rational decision making by the consumers,

	consumers will maximise their self-interest (i.e. net private benefits) when they consume at output Q_a where MPB equals $MPC_{(actual)}$, assuming perfect information.
<u>Body</u> Explain why market failure that arises from negative externalities	Negative externalities are however generated in the consumption of sweetened beverages. Negative externalities are external cost borne by third parties who are neither the producer nor the consumer of the good, without compensation. Consumption of sweetened beverages not only affects the consumer, but the health problems associated with drinking too much sweet drinks may affect the economy whereby there would be decreased in productivity limiting economic growth or increased amount of tax revenue going to healthcare subsidies instead of economic development. The presence of negative externalities, or marginal external costs [MEC], result in the divergence between $MPC_{(actual)}$ and Marginal Social Cost (MSC), i.e. opportunity cost to society incurred when an additional bottle of drink is consumed. 
<u>Explain how market fails</u>	Social welfare is maximised where the Marginal Social Benefit (MSB) is equal to the MSC. Assuming no positive externalities, i.e. MSB = MPB, the socially optimal consumption level is at Q_s where net social benefits are maximised. Where beverage consumption between Qs and Q_p, MSC is always greater than MSB. For every additional bottle of beverage consumed, the additional cost to society is greater than the additional benefit. Hence society desires less of sweetened beverage consumed. There is over-consumed by an amount of Q_sQ_p, overallocation of resources to the consumption of sweetened beverages. Summing up the excess of MSC over MSB between Qs and Qp, there is a welfare loss to society.

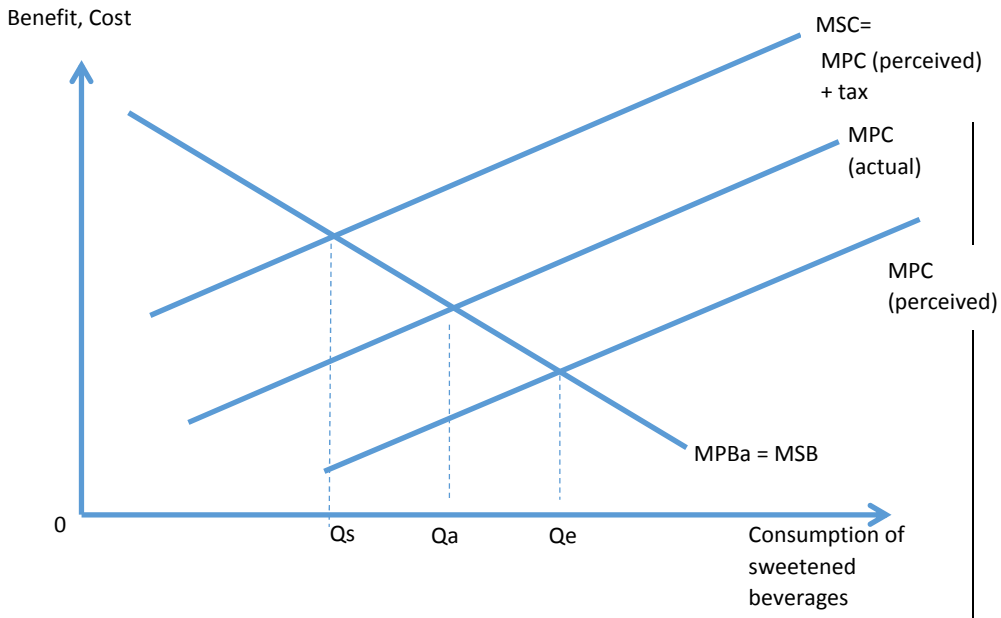
Conclusion	Due to the presence of negative externality and imperfect information, the consumption of sweetened beverage leads to market failure.

Marking Scheme

L3	For a thorough (both sources) and well-developed explanation (include diagram) of how negative externalities AND imperfect information may lead to market failure using accurate economic concepts, with appropriate examples provided and elaborated.	8 – 10
L2	For an under-developed explanation (some gaps, minor mistakes, generally accurate still) on how negative externalities AND imperfect information lead to market failure. May contain some conceptual errors but appropriate economic concepts and analysis used. Some examples provided but not well-explained. Or Well-developed (include diagram) explanation with the use of relevant examples on how EITHER negative externalities OR imperfect information (only 1 source covered) leads to market failure. Theoretical answer without the use of appropriate examples – Cap at L2 – 7m	5 – 7
L1	For an undeveloped answer that shows knowledge of the reasons for market failure but contains a few valid points or is mostly irrelevant or inaccurate.	1 – 4

Suggested Answer for (b)

Introduction Set out structure and content for essay	Left to the free market, demerit goods like sweetened beverages with high sugar content will be over-consumed resulting in welfare loss. Governments hence need to respond to achieve a better allocation of scare resources to maximise society's welfare. To overcome market failure, the government can put in place taxes, laws and regulations which **regulate consumer behaviour** as well as educating the public by providing more information on the costs of drinking sweetened beverages.
Body Explain how taxation works to correct market failure.	Taxes (Sugar tax) may be imposed on producers → increase in MPC that reflects the MEC at Q_s, as well as the perception gap between perceived and actual benefits. If the tax can be calculated to accurately reflect the difference between MSC and $MPC_{perceived)}$ at Q_s, consumers MPC(perceived) will shift left to coincide with MSC at Q_s. There will no longer be welfare loss from drinking sweetened beverages and market failure will be fully addressed.

	
Discuss the limitations of taxation	However, taxation suffers from the practical difficulty of determining the difference between MSC and MPC $_{(perceived)}$ at the socially optimal level of output, Q_s. An undervaluation of the tax would be insufficient to drinking of sweetened beverages down to the socially optimal level. On the other hand, an overvaluation of the tax will mean that consumption is reduced beyond Q_s. But then again, society's welfare is not maximised. Demand for sweetened beverages may be price inelastic (lack of substitutes) → increase in price may be ineffective to reduce quantity demanded of sweetened beverages → A huge amount of tax would then be needed to bring consumption down.
Explain how moral suasion / education and campaign works to correct market failure	Governments can also implement public education campaigns to increase the awareness of the ill effects of consuming sweetened beverages with high sugar content This can include national campaigns, school efforts and advertisements on television to encourage people to reduce consumption (provide relevant examples). By raising people's awareness, it may reduce the information gap between $MPC_{(perceived)}$ and $MPC_{(actual)}$ such that consumption can be nearer to Q_a.
Discuss the limitation of	Even though it tackles the root cause of market failure (imperfect information), this policy may take a long time before any significant

education and campaign	reduction in consumption of sweetened beverages. This could be due to the habitual consumption pattern of consumers. As a result, consumers' habits / mind-sets are hard to change, and they may not be receptive to public campaigns or moral suasion. Therefore, this policy may be ineffective in the short run.
Explain how regulation works to correct market failure (optional)	The health promotion board may put a restriction on the advertising of sweetened beverages containing sugar level over a certain amount → this prevents misinformation, reducing the gap between MPCactual and MPCperceived. The government may also restrict the amount of sweetened beverages sold in school or limit the sales of beverages to "healthier choice" beverages, which has lower sugar content. → this would directly reduce the consumption of sweetened beverages with high sugar content. Furthermore, school children are likely to be more susceptible to misinformation from advertisements or external media influences → hence by regulating the consumption in schools may be effective in reducing the consumption and reliance on sweetened beverages with high sugar content. The government may also regulate the production market, by tightening the criteria for drinks to be considered "healthier choice" (i.e. reducing the sugar content in drinks) → provide more substitutes for consumers, making demand for high sugar content drinks price more price elastic. EV: taxes will then be more effective as the increase in price will lead to a more than proportionate decrease in consumption.
Discuss the limitations of regulations	However, inspections must be sufficiently frequent and rigorous, and the communication of expected standards for compliance must be clearly communicated for the regulation to be effective. For example, canteen vendors may ignore and make sweetened beverages available to the school children. Regulations does not tackle the root cause of the problem → these school kids may resort to drinking of these drinks outside of school In addition, to reduce sugar content in sweetened beverages is entirely up to the firms' decision → if the firms are not aligned with the government's aims then tightening the "healthier choice" requirement may not be effective. EV: Nonetheless, regulations are the most effective if the government thinks the problem is grave and needs immediate addressing. However, the government need a more sustainable solution.
<u>Conclusion</u> Discuss which policy may be the most effective	The various policies available for Singapore government to overcome market failure due to the consumption of sweetened beverages with high sugar content are effective. Singapore government needs to implement a multitude of policies because of both the presence of negative externalities and imperfect information. While taxes may force consumers to internalise

	the negative externalities, public education and campaign enables consumers to make more accurate decisions. In addition, to effectively overcome market failure, the government may also want to implement regulations if the extent of overconsumption is severe. Furthermore, public campaigns are effective only in the long run and success is not guaranteed. Hence, the government may regulate the market to bring down the consumption in the meantime. Therefore, to effectively reduce consumption of sweetened beverages with high sugar content, Singapore government needs to implement a variety of policies. Also, the government may need to constantly review its policies as well as the nature of the problem may change over time. I.e. with the growth of mass media and advertising, information failure may be more persistent and pervasive. Government may thus step up its campaign or regulations to counter such misinformation and tie up with the private firms to create greater healthier choice options for the public.

Marking Scheme

Level	Descriptor	Marks
L3	For an answer that gives an accurate interpretation of question and application of economic concepts. Answers should also contain detailed economic analysis with appropriate use of the context given in the question and accurate interpretation of information in the preamble. To score [10m], the following must be satisfied: - At least 2 policies - Good explanation of how each of the policy works - Good explanation of the merits and limitations of each of the policy - Clear use of economic analysis / diagrams where applicable ** Policies such as quotas and subsidies can be accepted.	8 – 10
L2	For an under-developed answer that explained at least 2 policies (including merits and limitations) with accurate economic analysis with attempt to address the context of the question. [lacking depth] – max L2-7 For a developed answer that explained only 1 policy (including merits and limitations) with complete and accurate analysis and consistent reference to the context. [lacking scope] – Max L2-5m For an answer that explained only how at least 2 policies work without limitations of the policies, but with complete and accurate analysis and consistent reference to the context. [lacking scope] – Max L2-6 For an answer that only explained the merits **and** limitations of at least 2 policies, but with complete and accurate analysis and consistent reference to the context [Lacking scope] – Max L2-6	5 – 7

	** For an answer that explained more than 2 policies, if 1 policy is explained with complete and accurate analysis and consistent reference to the context with the other policies lacking some depth – can obtain **L3-8**	
L1	For an answer that gives an inaccurate interpretation of the question and application of economic concepts. Answer also contains inaccurate / no economic analysis with inappropriate / lack the use of the context given in the question. Information given in the preamble is inaccurately interpreted or not used. For answers in this range, we should expect: - Mostly descriptive statements with no attempt at explanation - Major content errors - Not answering the question at all	1 – 4
E3	Well-explained reasoning with relevant economic analysis and good use of context (sweetened beverages in Singapore market). Example, the policies mentioned above are implemented together to ensure efficiency in the long term → any reasonable attempt to justify this approach using economic analysis is acceptable.	4 – 5
E2	Attempted to explain the reason for the stand, with incomplete reasoning.	2 – 3
E1	State whether the policies available to the Singapore government are effective.	1

Q4

The cost of living in Singapore has climbed. Yet, living standards is considered high and there is strong economic growth.

c) Explain the link between the standard of living, the cost of living and the economic growth rate of a country. [10]
d) Discuss how far fiscal policy can be used to achieve an improvement in living standards in Singapore. [15]

Suggested approach for (a)

- Introduction:
  - Define SOL, COL and economic growth

- Body:
  - Explain links betw SOL and COL.
  - Explain links betw SOL and economic growth
  - Explain links between COL and economic growth

- Conclusion

Suggested Answer for (a)

Introduction Definition of SOL, COL and economic growth	SOL measures the level of wealth, comfort, material goods and necessities which individuals and households can enjoy. The qualitative or material aspects of SOL is affected by the quality and quantity of goods and services consumed while the quantitative or non-material aspects of SOL is affected by leisure, absence of pollution, life expectancy, standard of education and other social factors. COL is the cost of maintaining a certain level of SOL. COL is affected by the changes in the general price level in the economy, usually measured using consumer price index (CPI). Economic growth is the increase in production of goods and services in an economy and is usually measured by the changes in real GDP accompanies by income inequality and environmental sustainability indices (e.g. gini coefficient and pollution index).
Body Explanation of the link between SOL and COL	The level of SOL is affected by the COL in a country. - This is because the COL or general price level in an economy affects the real purchasing power of income which affects the level of material SOL. - Therefore, the higher the COL, the lower the SOL, ceteris paribus and vice-versa. - For example, if the COL is rising faster than the nominal income is rising, SOL fall as the real income level falls. Or if COL is rising, households will need a higher level of nominal income to maintain their current level of SOL.

Body Explanation of the link between SOL and economic growth	As the level of SOL in a country is affected by the income level and the price level (or real income), real economic growth directly affects the level of SOL. - If a country experiences positive economic growth (accompanied with falling unemployment), it means the real GDP or income level is rising and more households will have a higher purchasing power, contributing to higher consumption level and material SOL and vice-versa - A country experiencing positive economic growth is more likely to have more resources (higher income for households, higher profits for firms and higher tax revenue for government), this will allow for more efforts to be channelled to improving inclusive and sustainable growth. E.g. firms are able to invest in cleaner methods of production, governments are able to redistribute tax revenue to subsidise or provide social amenities.
Body Explanation of the link between COL and economic growth	As explained before, the COL in a country is dependent on how the GPL is changing. - Economic growth can be caused by either increase in AD or increase in AS or both. - If economic growth is due to increases in AD, there will be higher demand-pull inflation and COL will become higher than before. - However, if economic growth is due to increases in AS, GPL will actually fall and COL could become lower.

Mark Scheme

L3	For a well-developed explanation of the links between SOL+COL, SOL+EG and COL+EG using accurate economic concepts/models, with use of appropriate examples for illustrations.	8 – 10
L2	For an under-developed explanation (some gaps, minor mistakes, generally accurate still) of the links between SOL+COL, SOL+EG and COL+EG. May contain some conceptual errors but appropriate economic concepts/model are applied or some examples used are not well-explained. Or Well-developed explanation with the use of relevant examples on only 2 links.	5 – 7
L1	For an undeveloped answer that shows knowledge of the links but contains a few valid points or is mostly irrelevant or inaccurate.	1 – 4

b) Discuss how far fiscal policy can be used to achieve an improvement in living standards in Singapore. [15]

Suggested approach for (b)

- Introduction:
  - Briefly explain the tools of FP and the links to SOL

- Body:
  - Thesis: FP can be used to achieve improvement in SOL in S'pore to a large extent
  - Anti-thesis: FP can be used to achieve improvement in SOL in S'pore to a small extent or FP CANNOT be used to achieve improvement in SOL in S'pore

- Conclusion
  - Synthesis: arrive at a reasoned stand on how far FP can be used to achieve an improvement in SOL in S'pore

Suggested Answer for (b)

Introduction Briefly explain the tools of FP and the links to SOL	Discretionary FP can be implemented by the Singapore government in term of increases in government spending (G), e.g. developmental spending or re-current spending or reduction in direct tax rates (T), e.g. personal income tax or corporate tax. The changes in G and/or T will then affect the macroeconomy and the impact can be analysed using an AD-AS model.
Body Thesis: FP can be used to achieve improvement in SOL in S'pore to a large extent	**Argument #1** The increase in G → increase in AD The reduction in personal income tax rates → increase in disposable income → increase in purchasing power for households → increase in consumption → increase in AD. The reduction in corporate tax rates → increase in post-tax profits → increase in profitability for firms → increase in incentives to invest → increase in investment → increase in AD The increase in AD → unplanned running down of stocks → firms stepping up production → firms employing more FOPs, including labour → firms paying out more factor income → inducing households to further increase consumption → further unplanned running down of stocks → generating a multiplier effect → increase in employment and national income level → increase in material SOL. Evaluation: - The above effect is particularly important especially in times of poor economic climate when AD could be falling resulting in falling income for the households. Fiscal policy will be an appropriate short-term policy to stimulate the economy **Argument #2**

	The increase in G not only increases AD but have other effects as well. G can in spent on the development of amenities, e.g. parks, sanitation or provision of merit goods such as better healthcare services, better educational and training opportunities. If G is spent on amenities like parks (marina barrage, botanical gardens, east coast park), there will be more spaces for households to relax, unwind or have recreation with their families and friends. There will reduce the stress level and create opportunities for family bonding or friends to hang out. This will improve the non-material SOL. <u>Evaluation:</u> - The above effect is particularly important in small country like Singapore where land-spaces are limited and also that the population generally works very hard. Creating the spaces to relax and unwind will go a long way to improving the non-material SOL. If G is spent on education and skills training, the increase in skills level of the current and future work force will increase the employability of workers. This will allow them to enjoy higher income levels which will enhance their material SOL. <u>Evaluation:</u> - The above effect is particularly important in small and open country like Singapore where there is fierce competition with increasing globalisation. There are other economies competing with S'pore for FDI and export markets. Ensuring that the workforce stay competitive will go a long way to ensuring SOL will continue to improve over the long term. <u>Other possible arguments</u> - Redistributive effects on direct taxes → more inclusive EG → increase in SOL for the general population. Ev: especially important in S'pore where income inequality is widening.
<u>Body</u> Thesis: FP can be used to achieve improvement in SOL in S'pore but to a small extent Or FP CANNOT be used to achieve improvement	**<u>Counter - Argument #1</u>** While FP will create a multiplier effect on the S'pore economy which leads to higher income, employment and better SOL. This effect could be limited due to the small domestic sector in S'pore, i.e. C/GDP, G/GDP are relatively smaller compared to other countries. While the I/GDP proportion could still be relatively higher compared to other countries, domestic investment takes up only a small proportion of total investment. Therefore, the increase in AD created by EFP could be to a small extent. Together with the fact that S'pore also has a small multiplier size due to the high MPS – CPF and Asian thrift, high MPM – small economy dependent on imported raw materials and final goods and services. The increase in income due to the increase in AD could be limited to a small extent.

in SOL in S'pore	Therefore, while FP can lead to improvement in SOL, the extent could be limited. **<u>Counter - Argument #2</u>** While G spending on skills training could help increase the skills of the labour force and enhance employability and future SOL, the extent of effectiveness in improvement SOL still depends a lot on the mindset of firms and workers towards skills and re-training. If the firms and workers are resistant to the skills and re-training mindset, the extent to which G spending can improve SOL could be limited. This is especially the case with rapid changes in technology and globalisation where the job requirements are rapidly changing and if workers are not consistently upgrading themselves, they could be left behind soon.
<u>Conclusion</u> synthesis	FP remains one of the tools the S'pore government can use to improve SOL for Singaporeans. However, we have also seen from the analysis above that FP by itself could be limited in ensuring improvement in SOL. The S'pore government could also implement exchange rate policy to stimulate exports and FDI inflow which are also key drivers of EG and improvement in SOL. While subsidies for skills training are also crucial to ensure improvement in long-term SOL, the S'pore government should also invest resources to change the mindset of resistant workers or firms.

<u>Mark Scheme</u>

Level	Descriptor	Marks
L3	For an answer that gives an accurate interpretation of question (how far FP can be used) and application of economic concepts (AD-AS model, multiplier, mat and non-mat SOL). Answers should also contain detailed economic analysis with appropriate use of the context given in the question (Singapore). To score L3, the following must be satisfied: - At least 2 arguments (1+1) - Good explanation of FP and how FP works to improve SOL - Good explanation of the extent FP could be used, or extent FP leads to improvement in SOL - Clear use of S'pore context/examples to illustrate the main points	8 – 10
L2	For an under-developed answer (few gaps, few mistakes) that addressed the question (how far FP can be used, 2-sided) with accurate economic analysis with attempt to address the context of the question. [lacking depth]	5 – 7

	For a developed answer that explained only 1 side of the analysis with complete and accurate analysis and consistent reference to the context. [lacking scope]	
L1	For an answer that gives an inaccurate interpretation of the question and application of economic concepts. Answer also contains inaccurate / no economic analysis with inappropriate / lack the use of the context given in the question. Information given in the preamble is inaccurately interpreted or not used. For answers in this range, we should expect: - Mostly descriptive statements with no attempt at explanation - Major content errors - Not answering the question at all	1 – 4
E3	Well-explained reasoning with relevant economic analysis and good use of context (FP and SOL in S'pore). E.g. how FP must be complemented by other policies to ensure SOL improves.	4 – 5
E2	Attempted to explain the reason for the stand, with incomplete reasoning.	2 – 3
E1	State the extent FP can be used by the Singapore government to improve SOL.	1

Q5

e) Explain the internal and external factors that are likely to have contributed to rising inflation in Singapore. [10]
f) Discuss the economic policies that a government could adopt to tackle rising inflation. [15]

Suggested approach for (a)

- Introduction:
  - Define inflation
  - Identify the factors contributing to rising inflation (categorised into internal and external)

- Body:
  - Explain at least 1 internal factor contributing to rising inflation
  - Explain at least 1 external factor contributing to rising inflation
  - Explain a 3rd factor (either internal or external) contributing to rising inflation

- Conclusion

Suggested Answer for (a)

Introduction Define inflation ID the factors contributing to inflation	Inflation is defined as the sustained, inordinate increase in general price level. Rising inflation can be caused by demand-pull and/or cost-push reasons. Factors contributing to demand-pull inflation are: - Internal: strong domestic consumers and investors sentiments - External: export-driven DD-pull Factors contributing to cost-push inflation are: - Internal: tight labour market, rising land cost, rising transportation cost - External: imported inflation, depreciation of SGD
Body Explain 1 internal factor contributing to rising inflation	One of the internal factors contributing to cost-push inflation in Singapore is the rising transportation cost. The Singapore government has implemented several measures to tackle traffic congestion and as a result there had been increases in COE prices, ownership charges (e.g. road taxes) and user charges (e.g. ERP, carpark, fuel tax) over the years. This has resulted in higher transportation cost for all firms (some affected more than others) → increase in cost of production → upward sloping and horizontal segment of AS curve shifted left/up → higher GPL Or One of the internal factors contributing to demand-pull inflation in Singapore is the strong domestic consumers and investors sentiments. Such strong domestic consumers and investors sentiment could be due to the announcement of positive news by the government (during National Day Rally or Budget Speeches) → firms and households being encouraged to invest or consume more. E.g. the promise of some

	technology grant will incentivise firms to invest in R&D, the promise of some cash grants will incentivise households to increase their consumption → increase in AD → AD shift up/right → higher GPL
<u>Body</u> Explain 1 external factor contributing to rising inflation	One of the external factors contributing to cost-push inflation in Singapore is that of imported inflation. As the global economy becomes increasing connected and growing → need to increase production → increase in DD for raw materials (e.g. crude oil, metals) → increase in prices of raw materials. Since S'pore is a small economy which is reliant on imported raw materials, the increase in prices of raw materials → higher imported inflation → increase in COP → upward sloping and horizontal segment of AS curve shifted left/up → higher GPL Or One of the external factors contributing to demand-pull inflation in Singapore is the strong export performance. With global growth → increase in worldwide income levels → increase in purchasing power → increase in DD for goods and services (both domestic and imported) → increase in DD for Singapore's exports → increase in X → increase in AD → AD shift up/right → higher GPL
<u>Body</u> Explain 1 internal/external factor contributing to rising inflation	3rd factor can be 1 of the 4 factors above

<u>Marking Scheme</u>

L3	For a well-developed explanation of the external and internal factors causing rising inflation in Singapore, using accurate economic concepts/models, with use of appropriate examples for illustrations. At least 1 external and 1 internal factor must be covered for L3.	8 – 10
L2	For an under-developed explanation (some gaps, minor mistakes, generally accurate still) of the external and internal factors causing rising inflation in Singapore. May contain some conceptual errors but appropriate economic concepts/model are applied, or some examples used are not well-explained. Or Well-developed explanation of only 1 factor – capped at 5m	5 – 7

L1	For an undeveloped answer that shows knowledge of the links but contains a few valid points or is mostly irrelevant or inaccurate.	1 – 4

c) Discuss the economic policies that a government could adopt to tackle rising inflation. [15]

Suggested approach for (b)

- Introduction:
  - Briefly reiterate the causes or rising inflation
  - Identify the economic policies a government could consider to tackle rising inflation

- Body:
  - Policy A
    - Explain how policy A tackle rising inflation
    - Discuss the merits/strengths of policy A in tackling rising inflation
    - Discuss the demerits/limitations of policy A in tackling rising inflation
  - Policy B
    - Explain how policy B tackle rising inflation
    - Discuss the merits/strengths of policy B in tackling rising inflation
    - Discuss the demerits/limitations of policy B in tackling rising inflation

- Conclusion
  - Synthesis:
    - Extent of effectiveness or appropriateness of respective policies
    - Relative effectiveness or appropriateness of both policies

Suggested Answer for (b)

Introduction Reiterate causes of rising inflation ID economic policies and match them to the causes	Possible causes of rising inflation: - Demand-pull (could be due to C, I, G, X, M) - Cost-push (could be imported, rising domestic cost) Recognise that the policy recommendation should be able to tackle the root causes of the inflation or at least address the effects of inflation: - Exchange rate appreciation if inflation is due to imported inflation or net exports driven - Supply-side policies if inflation is due to AD increasing faster than AS. - CFP, CMP if the economy is overheating where AD is still increasing when it is already cutting AS at Yf.
Body Explain how exchange rate appreciation can be adopted to tackle rising inflation.	Explain how exchange rate appreciation can tackle inflation - Appreciation of e/r → price of imports to be relatively cheaper → able to import raw materials more cheaply → able to contain the imported inflation → fall in COP → upward sloping and horizontal segment of AS to shift right/down → reduce cost-push inflation due to imported inflation - Appreciation of e/r → rise in Px (in FC) + fall in Pm (in DC) → fall in qty DDx (in FC) + rise in qty DDm (in DC) → fall in X (in DC) + rise in M (in DC, assuming PEDm>1) → fall in (X-M) → fall in AD → reduce DD-pull inflation due to net exports

	Merits/strengths of e/r appreciation in tackling inflation - Appreciation of e/r will be highly effective in tackling inflation for a small and open economy which is very prone to net exports driven DD-pull inflation or imported inflation (e.g. Singapore). This is because of the lack of raw materials domestically and the small domestic market leading to high reliance on net exports as a driver of economic growth. - Will be effective especially in times of global economic boom where prices of raw materials will be high due to high DD and DD for imports will be high due to high income level. Demerits/limitations of e/r appreciation in tackling inflation - Effectiveness: the appreciation of e/r will reduce net exports if the sum of PEDx and PEDm > 1. In certain economies where the PED of the goods and services are < 1, appreciation of e/r could lead to higher AD and more DD-pull inflation. E.g. crude oil exporters - Unintended consequences: the appreciation of e/r is contractionary in nature and the fall in AD could lead to weaker economic growth and possibly higher unemployment.
<u>Body</u> Explain how SSP can be adopted to tackle rising inflation.	Explain how SSP can tackle inflation - SSP in increasing the QQT of FOPs → increase in the QQT of FOPs → increase in productive capacity of the economy / potential growth → rightward shift of the vertical portion of the AS curve → falling COP in general → upward sloping portion of AS to shift right/down → reduce inflationary pressures. E.g. R&D, skills training, building infrastructure - Other SSP affecting the COP → decrease in COP → upward sloping portion of AS to shift right/down → reduce inflationary pressures. E.g. production subsidies, reduction in production taxes Merits/strengths of SSP in tackling inflation - SSP in QQT will be a more sustained solution to tackling DD-pull inflation as compared to CMP or CFP. This is because inflation is being tackled without sacrificing EG or unemployment. Demerits/limitations of e/r appreciation in tackling inflation - Effectiveness: SSP in QQT may not be effective in addressing an over-heated economy. This is because SSP typically has a long gestation period and is sometimes uncertain, therefore, government should resort to CFP or CMP if they want to cool down the economy quickly. - Appropriateness: SSP may impose a burden on the government's budget as the government needs to finance the subsidies or spend on building infrastructure. Governments which are in debt situation may not be able to finance such expenditure without borrowing. - Unintended consequences: SSP in production subsidies or reduction in production taxes may sometimes be viewed as protectionistic measures that give the domestic producers an unfair advantage. This could lead to retaliation and hurt net export performances.
<u>Conclusion</u> synthesis	Whether the economic policies can effectively or appropriately tackle rising inflation depends on the:

	1) Root causes of inflation or state of economy (where AD cuts AS) 2) Nature of the economy (govt in debt, PEDx/PEDm, small/open economy etc)

Mark Scheme

Level	Descriptor	Marks
L3	For an answer that gives an accurate interpretation of question (how economic policies can be used to tackle rising inflation) and application of economic concepts (AD-AS model, policy mechanism). Answers should also contain detailed economic analysis with appropriate use of the real-world examples to illustrate the main points. To score L3, the following must be satisfied: - At least 2 policies - Good explanation how policies work - Good discussion of both the merits + demerits of the policies - Clear use of examples to illustrate the main points i.e. 2 policies, 2-sided, developed	8 – 10
L2	For an under-developed answer (few gaps, few mistakes) that addressed the question (how economic policies can be used to tackle rising inflation) with accurate economic analysis with attempt to address the context of the question. [lacking depth] i.e. 2 policies, 2-sided, lacking depth For a developed answer that explained only 1 side of the analysis (either (how well or how limited) with complete and accurate analysis and consistent reference to the context. [lacking scope] i.e. 2 policies, 1-sided, developed 1 policy, 2-sided, developed will cap at 6m.	5 – 7
L1	For an answer that gives an inaccurate interpretation of the question and application of economic concepts. Answer also contains inaccurate / no economic analysis with inappropriate / lack the use of the context given in the question. Information given in the preamble is inaccurately interpreted or not used. For answers in this range, we should expect: - Mostly descriptive statements with no attempt at explanation - Major content errors - Not answering the question at all	1 – 4
E3	Well-explained reasoning with relevant economic analysis and good use of real-world examples. E.g. how well certain policies can tackle rising inflation.	4 – 5

E2	Attempted to explain the reason for the stand, with incomplete reasoning.	2 – 3
E1	State the extent certain policies can tackle rising inflation.	1

Q6

US President Donald Trump won support by tapping into workers' anger over job losses linked to globalisation. He has since pulled US out of the Trans-Pacific Partnership (TPP), a free-trade pact signed by countries including Japan, Australia and Singapore.

Assess the likely impact of Donald Trump's decision, to pull the US out of the TPP, on the economic agents in US and the US economy. [25]

Suggested Answer

Introduction	**Introduction** The Trans-Pacific Partnership (TPP) is a form of free trade agreement (FTA), where member countries agree to reduce barriers to trade and investment, creating a freer flow of goods, services and people. Donald Trump's decision to pull the US out of the TPP means that existing forms of trade barriers in US which typically target either imports or directly help the domestic sectors will continue to be in place. Examples of trade barriers / protectionist measures include import tariffs, quotas and production subsidies. This decision will impact economic agents in US and the US economy in different ways.
Body: Impact on economic agents in US Impact on domestic firms, i.e. revenue, costs and profits	**Short-term** - Firms in sectors that compete with cheaper imports, will benefit from import tariffs/quotas and **would not suffer as much from a fall in revenue**, thus **maintaining profitability** and would not have to shut down or leave the industry. This is because the imports will become relatively more expensive given the import tariffs. - Similarly, firms in sectors that compete with cheaper exports from other countries may continue to enjoy production subsidies and hence maintain its price competitiveness against other countries exports. Hence, maintaining their revenue and profitability. **Long-term** - Continued protection of domestic firms producing raw materials or intermediate goods would mean that other domestic firms using these raw materials or intermediate goods lose access to cheaper raw materials or intermediates goods that could have been imported. As a result, such domestic firms pay a **higher cost of production, leading to higher prices, lower profits or even losses** → Shut down or leave the industry - Continued protection of domestic firms may breed complacency, resulting in x-inefficiency and productive inefficiency, which may lead to **higher costs, and lower profits.** Possible points for evaluation: - Firms in sectors competing with imports will benefit, while firms relying on imports as raw materials will suffer (depends on nature of product) - Extent of rise in cost of production, i.e. a large proportion of factor inputs or intermediate goods imported means a larger impact on profits, thus a larger impact on profits and higher chance of making losses and shutting down (depends on nature of industry)

	-

Body: Impact on economic agents in US
 	
Impact on domestic households, i.e. prices, quality and variety of goods and services; incomes, purchasing power and standard of living
	Short-term
	- Workers in sectors that compete with cheaper imports do not have to suffer from loss of wages / can maintain employment → **income and purchasing power retained** → ability to consume goods and services maintained → **material standard of living maintained**
	- Domestic firms facing higher costs of production may pass on higher costs to consumers by rising prices of goods and services → **Consumers pay higher prices**
	- Import expenditure curtailed → **Less variety** of goods or **higher prices paid** since the goods are now produced or obtained at a higher opportunity cost
	
	Long-term
	- Anti-competitive behaviour such as dumping may lead to foreign firms gaining greater market share in the long run. Thus, not having to remove trade barriers means domestic **households would not be exploited (in the form of higher prices and less variety) in the long run**
	- Continuing to allow inefficient domestic producers to produce goods in which they have no comparative advantage (CA) → **Consumers pay more** as these goods could have been imported at a lower price; **low / lower-quality and/or a limited variety of goods**
	
	Possible points for evaluation:
	- Workers in sectors that compete with imports will get to retain jobs and purchasing power; while workers employed in export sectors may be affected adversely (depends on nature of industry / jobs)
	- Whether domestic households are positively or negatively affected depends on:
	  - Less variety and higher prices?
	  - Less variety but lower prices?

Body: Impact on economic agents in US Impact on government, i.e. government spending, tax revenue, budget balance / position, national debt, microeconomic aims: efficiency and equity, etc.	**Short-term** - Prevents unemployment from arising → Less need to pay out unemployment benefits → **Improves budget balance** - Revenue collected from imports tariffs adds to revenue sources → **improves budget balance** **Long-term** - With trade barriers such as import tariffs still in place, government can continue to collect tax revenue → **Reduce budget deficit** and / or **reduce the amount of foreign debt** and **preserve living standards of households in future** - If initial assessment by the government is accurate, i.e. industries with potential are protected → Successful diversification and reduce vulnerability - Provision of subsidies to domestic producers not sustainable in the long run → **Worsen budget balance / rise in budget deficit → rise in national debt** - Continued protection of industries with no potential → **Allocative inefficiency / misallocation of resources** as gains from specialization are not reaped

Body: Impact on the US economy <u>Impact on the US economy, i.e. achieving macroeconomic goals</u>	**Body: Impact on the US economy** <u>Impact on the US economy, i.e. achieving macroeconomic goals</u> **Internal economy** **Short-term** - **Prevents unemployment from rising** as domestic firms would not have to shut down - Import tariffs → reduce import expenditures + export production subsidies → maintain export revenue = **Maintain or improve current account and BOP** - **Improve BOP** → help increase external value of USD (or at least stop it from falling too much) → Help keep prices of imported raw materials and goods in check – **either reduce imported prices, maintain imported prices or reduce rate of increase of prices of imports → Price stability** - **Actual growth; fall in unemployment** as domestic consumers switch to relatively cheaper domestic goods and services → C rises → AD rises - Rise in costs of production of domestic firms as they may be less efficient → **Cost-push inflation** **Long-term** - If infant industries that are protected can expand production sufficiently to reap internal economies of scale and reduce average costs to a level which allows it to compete effectively against its foreign rivals, **economic growth would be generated, reducing unemployment** - **Slower growth (or even negative growth); rise in unemployment; Worsening BOP** as direct adverse impact on US trading partners' economic growth will eventually result in lower X as foreign households experience a lower increase in income growth etc. - Rise in costs of production of less efficient domestic firms → **Cost-push inflation** → Make losses and close down → If workers do not have relevant skills to take up jobs in the other sectors of the economy → **Structural unemployment** - Domestic firms producing exports that lose access to cheaper raw materials or intermediate goods incur higher cost of production → exports become more expensive and lose export price competitiveness → Fall in X → Fall in (X – M) → **Slower growth (or even negative growth; rise in cyclical unemployment** <u>Possible points for evaluation:</u> - Impact on general price levels depend on whether exports have high import content (nature of economy) - Overall impact on unemployment and economic growth depends on extent of contribution of sectors to the economy, i.e. affected sectors contribute significantly to the economy → overall rise in unemployment (nature of economy) - Extent of rise in structural unemployment depends on the factor mobility, i.e. do the workers have relevant skills to take up jobs in the other sectors (nature of economy)

	External economy **Short-term** - **Improves current account and BOP** and **help increase / maintain external value of USD** **Long-term** - Domestic firms producing exports that lose access to cheaper raw materials or intermediate goods incur higher cost of production → exports become more expensive and lose export price competitiveness → Fall in X → **Worsens current account** - May invite retaliation from trading partners → Government's **aim (improvement in BOP account) may not be realised**
Overall conclusion	Donald Trump's decision to pull US out of the TPP does bring about benefits and costs to economic agents in the US and the US economy. However, this should only be used as a short-term solution as it could help alleviate some of the acute problems that the government is facing. This however, cannot be a long-term solution the costs of pulling out of the TPP outweigh the benefits.

Marking Scheme

	Knowledge, Application / Understanding and Analysis	
L3	For a thorough analysis (depth) of how Donald Trump's decision to pull the US out of the TPP will impact **all economic agents in US AND the US economy** (scope). The answer also explains the **short-term and long-term** impact (scope), coupled with the **positive and negative impact** (scope). Scope required: 1) Impact on firms (positive and negative, ST and LT) 2) Impact on consumers (positive and negative, ST and LT) 3) Impact on government (positive and negative, ST and LT) 4) Impact on internal economy – economic growth, unemployment and inflation (positive and negative, ST and LT) 5) Impact on external economy – BOP, exchange rates (positive and negative, ST and LT)	18 – 20
	For a thorough analysis (depth) of how Donald Trump's decision to pull the US out of the TPP will impact economic agents in US and the US economy (either ST / LT OR positive / negative impact) (missing some scope), i.e. 1 to 5 must still be covered, just inconsistent in covering the positive vs. negative or ST vs. LT) OR For a thorough analysis of how Donald Trump's decision to pull the US out of the TPP will impact some (not all) economic agents in US and the US economy (both ST / LT impact and positive / negative impact), i.e. missed out 1 part from 1 to 3 or missed out 4 or 5 If 2 significant scope are left out (1 about agents, 1 about economy) - Cap at L3 – 15m If 2 significant scope are left out (both about economy) - Cap at L2 – 14m	15 – 17
L2	For an answer that shows clear analysis with accurate use of economic concepts (accurate but contains a few gaps or minor mistakes) in explaining how Donald Trump's decision to pull the US out of the TPP will impact economic agents in US (both ST / LT and positive / negative impact) (half the scope) OR For an answer that shows clear analysis with accurate use of economic concepts (accurate but contains a few gaps or minor mistakes) in explaining how Donald Trump's decision to pull the US out of the TPP will impact the US economy (both ST / LT and positive / negative impact) (half the scope)	12 - 14
	For an answer that shows accurate use of economic concepts in some explanation. Explanation lacks rigour in analysis. (accurate but contains some gaps or minor mistakes) Or	9 – 11

	For an answer that shows analysis of how Donald Trump's decision to pull the US out of the TPP will impact either economic agents in US or the US economy, either only just ST / LT or positive / negative impact (about 1/3 of required scope)	
L1	For a relevant and correct but descriptive answer that merely state the impact of Donald Trump's decision to pull the US out of the TPP, with some linkages to how the economic agents and / or the US economy are affected. For a relevant but incorrect and descriptive answer that merely state the impact of Donald Trump's decision to pull the US out of the TPP, with some linkages to how the economic agents and / or the US economy are affected. For an irrelevant and / or incorrect answer of the impact of Donald Trump's decision to pull the US out of the TPP, with no explicit linkages to how the economic agents and / or the US economy are affected.	6 – 8 3 – 5 1 – 2

E3	For an answer that uses analysis to support an evaluative appraisal of the overall impact of Donald Trump's decision, to pull the US out of the TPP, on the economic agents in US and the US economy.	4 – 5
E2	For an answer that makes some attempt at an evaluative appraisal of the overall impact of Donald Trump's decision, to pull the US out of the TPP, on the economic agents in US and the US economy.	2 – 3
E1	For an answer that gives an unsupported concluding statement on the overall impact of Donald Trump's decision, to pull the US out of the TPP, on the economic agents in US and the US economy.	1