

# ST. ANDREW'S JUNIOR COLLEGE PRELIMINARY EXAMINATIONS – 2017 (JC2) General Certificate of Education Advanced Level Higher 2

ECONOMICS 9757/01

28 August 2017

Paper 1

2 hours 15 minutes

Additional Materials: Answer paper

# READ THESE INSTRUCTIONS FIRST

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

Answer all questions.

At the end of the examination, fasten your answers for each question separately. The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of 8 printed pages.

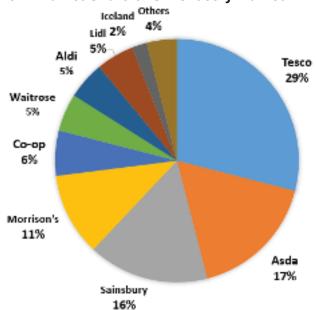
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### **Question 1**

# **Grocery Market**

Figure 1: Market Share of UK Grocery Market in 2014



Source: Kantar World Panel, 2014

# Extract 1: How Aldi's price plan shook up Tesco, Morrison's, Asda and Sainsbury's

The message that Aldi is getting cheaper and bigger will be welcomed by British shoppers battered by years of austerity and stagnant wages. Aldi has spurred the likes of Tesco, Morrison's, Asda and Sainsbury's into cutting prices this year but is determined to keep the big four at arm's length. Aldi will continue to cut prices to ensure it is cheaper than the traditional supermarkets, even if that means crashing into the red, its United Kingdom (UK) boss has pledged. Such drive has turned Aldi into a serious player in the cut-throat world of British retail, gobbling up market share to leave it a breath away from surpassing Waitrose as the UK's sixth largest grocer.

Buoyed by the success of its frugal business model, Aldi is not letting up on the pace of growth. It has less than 600 stores in the UK and is planning a £600m expansion spree with an aim for 1,000 outlets by 2021.

Competing on price is difficult for the large supermarket groups, which can stock more than 40,000 different products in their largest stores, but are up against the limited range of goods in discounters like Aldi. By sourcing large amounts of only 2,500 products, Aldi is able to keep costs low and pass on the benefit to shoppers. Efficiency, simplicity and cost-saving run right through the business. As more than 90% of its goods are own-label, packaging can be designed to fit the maximum amount onto shelves and pallets so no space in a store or lorry is wasted. While rivals might leave air at the top of a box of cereal to make you feel you are getting more for your money, Aldi keeps "ullage", as it's known in the business, to a minimum because it is focused on efficiency. All that helps deliver prices that are tempting a growing number of shoppers to buy their full weekly grocery shop at Aldi's stores.

Adapted from: The Guardian, 29 September 2014

# Extract 2: Turn on the "traffic lights" for healthier food choices

In the 15 seconds a consumer takes to decide on a supermarket purchase, the labelling is often the deciding factor. It means being able to know – at a glance – what goes in to what we eat. But for the food industry, it means being told what they must put on their packaging.

The "traffic lights" system, in which a postage-stamp sized sticker that uses a colour code to denote the percentage of a person's recommended daily allowance in each product – red for high, amber for medium and green for low, was introduced as a voluntary scheme in 2013 by the Department of Health in a bid to combat rising obesity levels.

Izzi Seccombe, chairwoman of the Local Government Association, argued that consumers would need a single, standard and consistent system in which they can read and understand quickly and easily. She felt that the information on the nutritional facts panel is usually devoid of any meaningful cognitive context for decision-making resulting in consumers who lack understanding of the nutritional information presented. Additionally, manufacturers may provide only "relative information" which while useful for deciding among competing brands of the same item, may not be sufficient for consumers in making their decisions.

It is thus hoped that the UK government would make the "traffic lights" system mandatory for all retailers and manufacturers to adopt so that consumers can make informed choices and lead a healthy lifestyle. A significant part of the food industry however, is against legislated labelling. They want the freedom to decide how best to disclose the levels of fat, salt and sugar in their food so that it does not damage their sales.

Adapted from: BBC, 17 September 2016

# **Extract 3: Surge pricing in supermarkets**

Recent reports have suggested that fixed prices in supermarkets will be gone within five years, to be replaced by ever changing prices dependent on the demand for those goods, just like share prices. This has become possible thanks to electronic shelf-edge labels which can change in real time.

"Peak time" pricing where the cost of items rises and falls according to demand is set to become commonplace in supermarkets, at petrol stations and on energy bills. Unlike paper price tags, so called "e-prices" are linked to shops' computer systems which can move them up or down by up to 90pc in a day. The technology lets shops react to events during which they can remove offers on sought-after items, for example ice creams and chilled drinks during heatwaves and sandwiches at lunchtime. According to Roy Horgon, director at Markethub, an electronic pricing firm, shops can improve their profit margins by up to 3 per cent by using technology, mainly as a result of reducing the amount of waste created by stock left at the end of the day.

Adapted from: The Independent, 14 July 2017

# **Extract 4: Supermarket price war**

For consumers struggling with food bills, last week seemed to bring a glimmer of hope, as bad news for retailers promised good news on prices. Once again, Tesco reported appalling sales figures, down 3.1% from a year earlier. One million fewer customers are visiting the stores each week. Meanwhile the discounters, chains such as Aldi and Lidl, are cleaning up, with sales increases of an astonishing 35.9% and 22.5% respectively.

Earlier this year, as profits slumped, Tesco chief executive Philip Clarke announced £200m worth of price cuts. Spurred by sales revenue that were down 7.1%, Morrison's has also been offering bargains. A supermarket price war is under way, with Asda and Sainsbury's piling in, which can only be good news for shoppers.

But is ever cheaper food really sustainable? Is fair wages for farmers and environmentally friendly agriculture genuinely possible at rock-bottom, Aldi-like prices? Tight margins will inevitably restrict food producers' ability to deal with diseases and the effects of climate change, which UK supermarket Asda says could impact 95% of its fresh produce range. Sustainable production methods can also be expected to give way to highly destructive, yet profitable monoculture farming. So consumers win, but at the cost of the planet.

In the long-run, however, the gains for consumers look dubious too. Yes their wallets might be lighter today, but their fridges could become a lot sparser and their health a lot worse as hyper-industrialised agriculture takes root. The reason it appears cheap is because no one is currently picking up the cost of water pollution, soil fertility loss and the other so-called "negative externalities" of modern intensive farming.

Adapted from: The Guardian, 8 June 2014

# **Extract 5: President Trump's America First Policy and its implications**

Amazon warned on Friday that government actions to bolster domestic companies against foreign competition could hurt its business. In a routine description of regulatory risks in its 2016 annual filing, the world's largest online retailer said "trade and protectionist measures" might hinder its ability to grow. This comes in light of Amazon's venture into the highly competitive UK grocery market.

The United States of America's (USA) trade deficit has encouraged President Trump to take a hard stance towards trade with countries such as China, Mexico and Germany. However, in an era of global supply chains, such a focus on bilateral trade deficits is meaningless.

US firms are highly dependent on imports of intermediate goods produced abroad and, vice versa, foreign firms exporting to the US use American manufactured intermediates in their final products. The larger the integration of US firm within global value chains, the more difficult it becomes to implement protectionist trade measures, as these measures would harm US firms directly as well.

There is also little evidence that tariffs and barriers on particular countries would lead to higher production in the US and lower imports. More likely, the gap would just be filled by imports from countries that produce similar goods.

President Trump has vigorously championed protectionism as a way of saving US manufacturing jobs and reducing income inequality. However, previous episodes of US protectionism have only caused net job losses in the economy. For example, in 2002, the US imposed tariffs on the imports of certain types of steel for a period of three years. This was supposed to protect jobs in the US steel industry, which employed 185,000 people in December 2002. However, jobs were lost in industries that used steel as an input in their production as a result of the tariffs.

One in five jobs in the US is linked to its imports and exports, so a tit-for-tat trade war with America's main trading partners threatens to weaken the US job market rather than bolster it. More protectionism could also worsen inequality within the US: Typically, the poorest are hit hardest, as prices go up and the choice of goods is reduced. Tariffs are particularly damaging to lower-income households, which tend to spend proportionately more on traded goods such as food and clothes. With supply chains being increasingly global, headwinds will be felt far beyond the countries targeted with tariffs.

Adapted from: Reuters, 11 February 2017

# **Questions**

- (a) (i) Using Figure 1, describe the type of market structure operating in the UK [2] grocery sector in 2014.
  - (ii) Explain one possible reason why new entrants into the UK grocery sector [2] such as Aldi and Lidl may not necessarily seek to maximise profits.
- (b) Explain the case for "traffic light" labelling in the food industry. [4]
- (c) Explain whether the proposed surge pricing strategy mentioned in Extract 3 [4] is a form of price discrimination.
- (d) Discuss the extent to which the price war undertaken by the UK [8] supermarkets is in the best interests of the UK consumers.
- (e) Amazon raised concerns that protectionist measures might hinder its ability to grow in Extract 5.

Assess whether the decision to introduce protectionist measures by the US government can ever be justified in today's globalised world. [10]

[Total: 30 marks]

### Question 2

# **United Kingdom and European Union**

# Extract 6: How worrying is Britain's large current account deficit?

Hear any UK politician talk of "the deficit", and he or she will now always be referring to the balance of budget. Britain has been facing a budget deficit from 2010. In the same period the current-account deficit, has also widened. Weak export performance is partly to blame for Britain's large current account deficit. Although disappointing net income from foreign investment is another cause of the deterioration in the current account, it is an extremely attractive investment destination for foreigners as they believe UK is a good bet given its credible governance amid trouble in emerging economies.

In one way, though, Britain looks less solid. Its appeal to investors might diminish markedly if it looked like leaving the European Union, in other words, if there were to be Brexit. Britain has been an attractive destination for FDI given its preferential trade access to the EU. European investors hold most of Britain's short-term liabilities; plugging the current-account gap might become harder without a big fall in sterling, if sentiment soured on Britain.

Goods and services, % of GDP 3% 296 Non-FU 196 0% -196-2% -3% 4% 2003 2005 2009 2011 2013 Source: ONS, House of Commons Library

Figure 2: UK's Balance of Trade with EU and non-EU countries

# Extract 7: Net immigration is up in UK

Net Immigration is on the up with 298,000 which is the highest since the record level of 320,000 in 2005. Research reveals there is a brain drain of thousands of talented workers leaving the UK for lucrative jobs abroad, while six times as many migrants with low numeracy skills are arriving. These migrants tend to depress wages in low wage sectors and at the same time are entitled to a range of benefits such as housing, healthcare and financial assistance.

Source: The Telegraph, 5 March 2015

Source: The Economist, 15 October 2015

Table 1: 2015 UK's Export and Import Data

Top Export Partners	Top Export Products	Top Import Partners	Top Import Products
USA Germany China France	Precious Metals  Mechanical Appliances  Motor Vehicles  Electronic Equipment  Pharmaceutical  Products	Germany China USA France	Mechanical Appliances  Motor vehicles  Electronic Equipment  Mineral Fuels  Pharmaceutical  Products  Precious Metals

Source: HM Revenue & Customs Overseas Trade Statistics

# Extract 8: What would happen if Britain left the EU?

The 'Brexit'- Britain leaving the European Union (EU) is a major concern and David Cameron, the prime minister of UK, has promised a 2017 referendum on whether Britain should leave the EU. Results of early surveys show while those wishing to leave the EU just outnumber those likely to vote to remain in the EU, there are still many UK citizens who are undecided.

The arguments for leaving the EU include Britain regaining control over migrants flows especially slamming doors on Eastern European migrants abusing UK's welfare system, stopping of annual contribution of small fortune to EU budget and to minimise the impact of the Eurozone crisis on UK. Factors such as remarkable growth of emerging markets outside Europe like China and the relative success of the United States when compared with Europe also support the leave decision as it opens up new avenues of global economic co-operation and integration with UK able to strike better deals on its own. It would also prevent proposed EU regulation such as tax on financial services from harming UK's key sectors one of which is financial services. It would also open up Britain's food market to the world.

On the other hand, those wishing to remain in the EU argue that deep integration of UK and the EU in terms of economic, military and culture could mean that Brexit would lead to a loss of market access to EU, plummeting stock markets, weakening the pound and the UK economy. Even, the argument about control over immigration has its flaws as research shows that over longer term immigration boosted wages and employment.

Brexit would also be a source of concern to EU citizens who are all absolutely terrified by the prospect of the referendum due to uncertainty arising from the potential Brexit, diminished image of the EU and possible rise in trade barriers. More than 50% of Britain's trade flows are with the EU and UK is the second largest economy in Europe. The restriction of labour flows to the UK from the EU into the UK could have negative impact on Eastern European countries but might benefit more affluent Western European countries such as Germany which could see higher inflows of EU migrants.

Source: The Guardian, 19 April 2015

# **Questions**

(a) (i)	Compare the trend in the balance of trade between UK and EU between 2012 and 2015 with that of UK and non-EU over the same period.	[2]
(ii)	Using economic analysis, explain one possible reason for the trend observed in balance of trade between UK and EU between 2012 and 2015.	[2]
(b)	Explain how a change in UK's trade balance could affect UK's budget balance.	[4]
(c)	Use the concept of opportunity cost to explain <b>one</b> effect on each of firms and government arising from the inflow of migrants in UK.	[4]
(d)	To what extent can theory of comparative advantage be used to explain UK's pattern of trade?	[8]
(e)	Discuss whether the potential problems faced by UK are likely to be more serious than problems faced by EU members' countries if Brexit were to take place.	[10]

[Total: 30 marks]

~ End of paper ~



# ST. ANDREW'S JUNIOR COLLEGE PRELIMINARY EXAMINATIONS – 2017 (JC2) General Certificate of Education Advanced Level Higher 2

ECONOMICS 9757/02

14 September 2017

Paper 2

2 hours 15 minutes

Additional Materials: Answer paper

# READ THESE INSTRUCTIONS FIRST

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

Answer **three** questions in total, of which **one** must be from Section A, **one** from Section B and **one** from either Section A or Section B.

At the end of the examination, fasten your answers for each question separately. The number of marks is given in brackets [ ] at the end of each question or part question.

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### Section A

# One or two of your chosen questions must be from this section.

# **Question 1**

Global sugar prices have rocketed 30% since April as supply lags further behind demand.

Rabobank Sugar Quarterly, 2016

Using demand-supply analysis, explain the possible factors that led to the above [25] outcome and evaluate the relative importance of those factors.

# Question 2

- (a) Explain how the presence of moral hazard and adverse selection in the market for healthcare insurance in Singapore can result in inefficient allocation of resources.
- (b) Discuss the appropriateness of Singapore government's approach in [15] addressing various types of market failure.

### **Question 3**

Singapore government has introduced TPG Telecom, which will be Singapore's fourth mobile operator, hoping that more competition will be beneficial. On the other hand, food stalls at most hawker centres continue to face high level of competition without the need for government to introduce more.

- (a) Explain why more competition might lead to lower but greater fluctuation in [10] prices.
- (b) Discuss whether government should intervene to prevent firms from gaining [15] larger market share in various markets.

# **Section B**

# One or two of your chosen questions must be from this section.

# **Question 4**

- (a) Explain the possible factors that might cause a negative rate of inflation in an [10] economy.
- (b) Discuss whether a negative inflation rate is more worrying than a positive [15] inflation rate for a government.

# **Question 5**

Different economists tend to recommend different macroeconomic policies to the government when tasked to address a balance of payments deficit.

Explain the possible causes of a balance of payments deficit and discuss the factors [25] an economist would consider when deciding on his recommendation.

# **Question 6**

China signalled its intention to replace US as champion of free trade if US were to build more trade barriers.

- (a) Explain how an economy can benefit from specialisation and trade. [10]
- (b) In the event that US builds more trade barriers, discuss whether other [15] governments should follow China's footsteps in adopting a policy of greater free trade.

~ End of paper ~



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ECONOMICS 9757/01

28 August 2017

Paper 1

2 hours 15 minutes

Additional Materials: Answer paper

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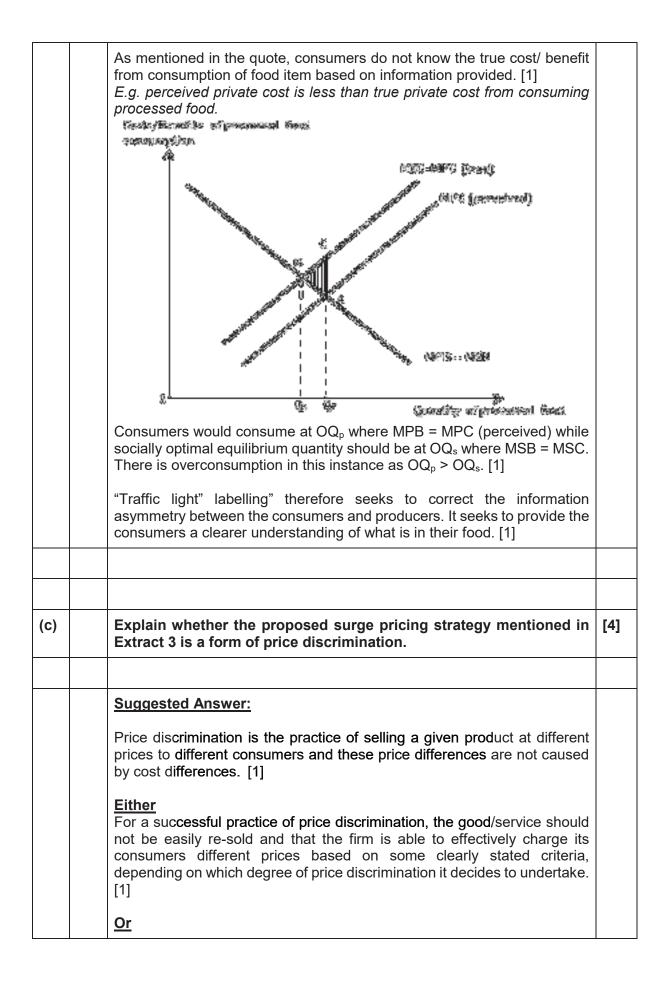
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# Suggested Answer for CSQ 1

(a)	(i)	Using Figure 1, describe the type of market structure operating in the UK grocery sector in 2014.	[2]
		Suggested Answer:	
		The type of market structure is that of an oligopoly. [1]	
		The 4 firm concentration ratio for the grocery sector is 73%- a case of an oligopoly. This means that the market is dominated by a few large firms, which are likely to be mutually-interdependent as well. [1]	
	(ii)	Explain one possible reason why new entrants into the UK grocery sector such as Aldi and Lidl may not necessarily seek to maximise profits.	[2]
		Suggested Answer:	
		As a new entrant into the UK grocery sector, Aldi may not necessarily seek to maximise profits as they seek to increase their market share given the competitive nature of the UK grocery sector. [1]	
		Thus Aldi and Lidl would be willing to make lower levels of profits in order to increase in size and gain more market share. [1]	
(h)		Explain the case for "traffic light" labelling in the food industry.	[4]
(b)		Explain the case for traine light labelling in the lood industry.	[4]
		Suggested Answer:	
		From Extract 2	
		"the information on the nutritional facts panel is usually devoid of any meaningful cognitive context for decision-making resulting in consumers who lack understanding of the nutritional information presented. Additionally, manufacturers may provide only "relative information" which while useful for deciding among competing brands of the same item, may not be sufficient for consumers in making their decisions."	
		The above quote suggests that there is asymmetric information/ imperfect information in the food industry. [1]	



	Surge pricing or "peak-time" pricing is when, assuming ceteris paribus, higher prices are charged at peak periods and this is done so, as demand tends to be relatively price inelastic during peak periods. [1]					
		As such, this is a form of price discrimination (3 <sup>rd</sup> degree) as it is the practice of charging different prices due to difference in price elasticity of demand (PED). [1]				
		d during peak period is due to higher riod, then it would not qualify as price				
(d)	Discuss the extent to which the supermarkets is in the best interes	price war undertaken by the UK sts of the UK consumers.	[8]			
	Question Analysis:					
	Command Word	Discuss				
	Content	price war				
		best Interests of UK consumers				
	Context	UK supermarkets				
	Schematic Plan:  Price War  Anti-Thesis:					
	Thesis: Price war is largely in the best interests of UK consumers  Price war may not be in the best interests of UK consumers  Price war may not be in the best interests of UK consumers					
	Suggested Answer:					
	<u>Introduction</u>	<u>Introduction</u>				
	A price war is characterized by the repeated cutting of prices below those of competitors as mentioned in Extract 4.					
	or competitors as mentioned in Extra	ICL 4.				

In addressing this question, we will look at the impacts of the price war on UK consumers.

# Thesis: The price war undertaken by the UK supermarkets is largely in the best interests of UK consumers

The lowering of prices amongst the UK supermarkets mentioned in Extract 4 would increases the affordability of groceries. This fall in prices will result in an increase in consumer surplus. Consumer surplus is the difference between what consumers are willing and able to pay for a good or service and the amount that they actually pay.

This is especially welcome news for UK consumers given that Extract 1 highlighted that they had been battered by years of austerity and stagnant wages.

As such, the price war undertaken by the UK supermarkets is in the best interest of UK consumers.

# Anti-Thesis: The price war undertaken by the UK supermarkets may not be in the best interests of UK consumers

The price war could eventually lead to predatory pricing in which could result in competitors being driven out of the industry. Predatory pricing is considered to be anti-competitive and this may limit the choices that UK consumers have in the grocery industry and this would cause a fall in consumer welfare. Therefore it may not in the best interests of UK consumers.

Additionally, as mentioned in Extract 4, there are concerns arising in terms of the long-term safety and sustainability of food due to the price war.

"Sustainable production methods can also be expected to give way to highly destructive, yet profitable monoculture farming." (Extract 4)

Due to the price war, there would be pressure on food producers to take short cuts and reduce the cost of production and thus leading to producers moving away from sustainable production methods, switching towards monoculture farming, as well as the use of pesticides and fertilisers, which would cause harm to the environment.

This would not be in the best interests of UK consumers as UK consumers would eventually bear the brunt of the environmental damage.

"Tight margins will inevitably restrict food producers' ability to deal with diseases and the effects of climate change, which UK supermarket Asda says could impact 95% of its fresh produce range." (Extract 4)

The impact of the price war can impact UK consumers as Asda, one of the UK supermarket estimated that 95% of their fresh produce range could be impacted due to the climate change threat.

The price squeeze would have an effect all the way down the supply chain, with persistent pressure on prices at the farm level.

Due to the price war, farmers would be limited in their ability to invest in their agricultural base to improve the sustainability and safety of food.

This suggests that UK consumers could end up with lower quantity and/ or quality of food as a result of the switch to non-sustainable way of production, raising questions about both the long term safety and sustainability of food.

"Yes their wallets might be lighter today, but their fridges could become a lot sparser and their health a lot worse as hyper-industrialised agriculture takes root." (Extract 4)

The above suggests that due to the price war, the unhealthy practice of hyper-industrialised agriculture could lead to the UK consumers' health to suffer as the safety of the food items that come out from this process is questionable. Thus, it would not be in the best interests of UK consumers.

# Synthesis:

To conclude, while the price war may seem to be in the best interests of UK consumers, however, if one were to delve deeper and analyse the effects of the price war on the production of food, it would be apparent that the price war compromises on the sustainability and safety of the food product.

This is especially so, due to the mounting pressure to reduce the cost of production, given how competitive the UK grocery market is.

Levels	Knowledge, Understanding, Application,	Marks
	Analysis	
L2	Answers provide a sound analysis of both positive and negative impacts of the price war undertaken on the interests of UK consumers.	4 – 6
L1	Answers provide a descriptive explanation that shows some basic but largely unexplained knowledge of the impacts of the price war on the interests of UK consumers.	1 - 3

E2	Well-reasoned overall assessment on the extent of the price war and its impacts on the interests of UK consumers.	2
E1	Some attempt at assessing the extent of the price war and its impacts on the interests of UK consumers.	1

(e)	Amazon raised concerns that protectionist measures might hinder			
	its ability to grow in Extract 5.			
	Assess whether the decision to introduce protectionist measures by the US government can ever be justified in today's globalised world.			
	Question Analysis:			
	Command Word Assess whether			
	Content protectionist measures globalized world			
	Context Today's globalised world			
	Schematic Plan:			
	Today's Globalised World			
	Protectionism can be justified  Protectionism cannot be justified			
	Synthesis & Conclusion			
	Suggested Answer:			
	Introduction			
	<b>Protectionism</b> is the setting up of trade barriers with the intention of protecting domestic firms from foreign competition.			
	Thesis: The decision to introduce protectionist measures can be justified in today's globalised world			
	Governments may resort to protectionist measures to address problems the economy may be facing.			
	In the context of US, some of these reasons are given in Extract 5, which include the following:			
	i. To correct a balance of trade deficit			
	"The United States of America's (USA) trade deficit has encouraged President Trump to take a hard stance towards trade with countries such as China, Mexico and Germany." (Extract 5)			
	A balance of trade deficits occur when a country's total expenditures exceeds its total earnings in its external trade.			
	This is undesirable as it may lead to a depletion in foreign currency reserves of a country.			

Thus, in this context, the US government may try to reduce import expenditure to correct the balance of trade deficit by practicing protectionism.

# ii. To protect jobs

"President Trump has vigorously championed protectionism as a way of saving US manufacturing jobs....." (Extract 5)

This is based on the notion that protectionism can result in higher employment in US.

Protectionism can be done in terms of restricting the quantity of imports, or imposing a tariff on cheaper imports, thus imports will become more expensive than locally-made goods.

This would induce domestic consumers to switch to locally-made goods, with the resultant increase in domestic demand for domestically produced goods generating demand for domestic factors of production, including labour. This will help to save jobs in the US.

# Anti-Thesis: The decision to introduce protectionist measures cannot be justified in today's globalised world

The argument for protectionist measure to correct a balance of trade deficit cannot be justified in today's globalised world as it does not adequately address the root problem of the matter. It may be used as a measure in the short-run, however, in the long-run, it would be imperative to examine the cause of the balance of trade deficit.

A more sustainable way of addressing the deficit would be to make locally-made goods more competitive in the international markets in order to boost export earnings. This can be done through supply-side policies where subsidies are given to encourage research and development to improve the quality of the exports.

Globalisation is the process that leads to a deeper integration of the world's economy into a single international market in terms of freer movement of goods and services, labour and capital across international borders.

Supporters of globalisation argue that greater economic integration can bring about positive effects on the balance of trade as it can help bring about an improvement in the balance of trade through an increase in export revenue assuming ceteris paribus.

Through embracing globalisation and free trade rather than protectionism, the market is expanded and this can help to bring about larger cost savings for firms in these countries as they increase their scale of production to meet the higher global demand.

Additionally, in today's globalised world, given how integrated US is with the global supply chains, it would be counterproductive to implement protectionist trade measures given how dependent US firms are on imports of intermediate goods produced abroad and vice versa.

"However, in an era of global supply chains, such a focus on bilateral trade deficits is meaningless." (Extract 5)

The protectionist measures adopted could come back to hurt US firms as it would lead to increase in cost of production, thereby hurting its competitiveness in the international markets.

Additionally, the argument for protectionism to protect jobs cannot be justified in today's globalised world as mentioned in Extract 5, "One in five jobs in the US is linked to its imports and exports, so a tit-for-tat trade war with America's main trading partners threatens to weaken the US job market rather than bolster it".

Given the nature of US's job market distribution, if US were to adopt protectionist measures and the affected trade partner do likewise, it would lead to unemployment increasing instead.

Additionally, in previous instances where US adopted protectionism in 2002 to protect jobs in the US steel industry, jobs were however lost in the related industries that used steel due to the tariff that were imposed on imports of steel.

Instead of adopting protectionism in this instance, US should seek to consider the use of supply-side policies to improve the competitiveness of its exports and look to compete as protectionism may end up encouraging inefficiency. In the long term, protectionism may weaken the industry as with little competition, firms in the industry may have little incentive to be efficient and innovate.

Subsidies can be provided instead for firms to undertake research and development purposes or for workers to go for re-training and upgrading which can help to improve the competitiveness of the locally-made goods.

# **Synthesis & Conclusion**

# Final Stand + any economic judgment relevant to case materials

In considering whether the decision to introduce protectionist measure can be justified in today's globalised world, we would need to consider the cost and benefits of doing so.

As discussed, even though there are justifications for protectionist measures by the US, these measures, if used, should be for a short period of time as the long term use of protectionist measures will lead to larger problems and thus not justifiable.

This is especially so, when we consider the context of today's world. Given how integrated the world supply chains are today, the decision to introduce protectionist measures may backfire and hurt US instead of benefiting it as explained earlier.

Rather, US should consider more open and well-governed markets coupled with policies that enable more room for adjustments to enable hem to better address the challenges faced.			
Levels	Knowledge, Understanding, Application, Analysis	Marks	
L2	Answers provide a sound analysis of the costs and benefits of protectionism in the context of US.	5 – 7	
L1	Answers provide a descriptive explanation that shows some basic but largely unexplained knowledge the costs and benefits of protectionism in the context of US.	1 - 4	
E2	Well-reasoned overall assessment about whether protectionist measures can be justified for US.	2-3	
E1	Some attempt at assessing about whether protectionist measures can be justified for US.	1	

[Total: 30 marks]

# Suggested Answer for CSQ 2

(a) (i)	Compare the trend in the balance of trade between UK and EU between 2012 and 2015 with that of UK and non-EU over the same period.	[2]
	Suggested Answer:	
	There was an increasing trade surplus between UK and non-EU [1] while an increasing trade deficit between UK and EU over the period of 2012 to 2015. [1]	
(ii)	Using economic analysis, explain one possible reason for the trend observed in balance of trade between UK and EU between 2012 and 2015.	[2]
	Suggested Answer:	
	Any demand or supply factors is acceptable: As observed in (a)(i), balance of trade between UK and EU has seen an increasing trade deficit.	
	One possible reason could be UK's export revenue to EU has fallen, assuming import expenditure remains constant. [1]	
	A <i>persistent fall</i> in the demand for UK's exports to EU could be due to a change in tastes and preferences towards UK's goods, contributing to an increasing fall in UK's export revenue between 2012 and 2015, assuming ceteris paribus, this would lead to a rising trade deficit between UK and EU. [1]	
	Or candidates can explain via UK's demand for EU's imports has risen between 2012 and 2015.	
(b)	Explain how a change in UK's trade balance could affect UK's budget balance.	[4]

	Suggested Answer:	
	As stated in <b>Extract 6</b> , UK has been facing a budget deficit from 2010 and current account deficit has widened.	
	A rising trade deficit meant that there was a fall in net exports $(X - M)$ which would continue to fall which would lead to a fall in AD, ceteris paribus, resulting in negative economic growth. <b>[1]</b>	
	This had also affected UK's budget balance, which was having a budget deficit. This implied that UK's government expenditure was greater than tax revenue. [1]	
	<ul> <li>Either ONE of the Answer Below: [1]</li> <li>UK's government tax revenue from personal and corporate income tax could decrease due to negative economic growth from a fall in net export and thus leading to a fall in wages and profits respectively.</li> <li>UK's government may also be required to distribute greater unemployment benefits as more people could be unemployed due to a fall in exports, hence increasing welfare spending.</li> </ul>	
	Thus, a change in UK's trade balance, in this case trade deficit, could also affect UK's budget balance negatively, resulting in large budget deficit. [1]	
(c)	Use the concept of opportunity cost to explain one effect on each of firms and government arising from the inflow of migrants in UK.	[4]
	Suggested Answer:	
	Opportunity cost means the next best alternative foregone when a choice / decision is made by the different economic agents.	
	Effect on Firms: With a rising inflow of migrants in UK, firms may employ cheaper migrants to produce goods and services which would allow the firms to drive down their cost of production, thus leading to higher profits, assuming ceteris paribus. This can be seen from Extract 7, as many migrants tend to depress wages in low wages sectors.	
	Thus, the opportunity cost of hiring migrant workers could be better quality goods and services being compromised as they could have been produced by hiring better skilled domestic workers. This could also lead to forgone profits that could have been generated from better quality products.	

	T =				
	Effect on Gove With a rising inf		s in EU, there would be an increase in government		
	spending to provide services such as healthcare and housing benefits to the migrants' workers. This can be seen from <b>Extract 7</b> as these migrants were entitled to a range of benefits such as housing, healthcare and financial assistance.				
	Thus, the opportunity cost of funds directed towards migrants to provide such benefits would be the forgone benefits such as higher productivity could have been achieved if the funds had been spent on training instead.				
	is accepted. He	owever, the c	ity cost example with sound economic analysis hoice being made and the next best alternative need to forego has to be clearly explained.		
(d)		To what extent can theory of comparative advantage be used to explain UK's pattern of trade?			
	Question Analy	<u>/sis</u> :			
	Com	mand Word	To what extent		
		Content	Theory of CA/ pattern of trade		
		Context	UK		
	Schematic Plan				
	Introduction:	Define patter			
	Thesis:		A can be used to explain UK's pattern of trade		
	Anti-thesis:				
	Evaluation:	trade instead  tion: Justified stand on the extent of whether theory of CA can be used to explain UK's pattern of trade.			

# Suggested Answer:

# Introduction:

- Pattern of trade refers to the volume and composition of trade between a country and the rest of the world.
- Determinants of pattern of trade are based on both demand and supply factors.
- Supply factors such as the differences in factor endowment, government policies, FTAs
- Demand factors such as tastes and preferences, rising affluence and changes in population sizes and demographics.

# Body 1: Theory of Comparative Advantage (CA) can be used to explain UK's Pattern of Trade

# <u> Differences in Factor endowment – Theory of Comparative Advantage</u>

- Theory of comparative advantage states that, under certain conditions, countries can benefit from specialisation of producing goods and services which they have comparative advantage in and trade for goods and services in which they do not have comparative advantage in.
- It is an important factor in determining the relative productivity of an economy in production of certain goods and services based on their factor endowments, which thus affect a country's CA.
- This means that countries with relatively lower opportunity cost of producing certain goods and services compared to other countries should specialise in the production of those goods and services they are more efficient in
- Countries should then import goods and services that they do not have comparative advantage in as opportunity cost of producing these goods within that country is higher.
  - → E.g. UK could have a lower opportunity cost in the production of more capital and skilled intensive products.
  - → As stated in **Extract 7**, UK experienced 'brain drain' due to thousands of talented workers leaving the country.
  - → With relatively abundant amounts of such capital / technology / skilled labours. UK could export capital / knowledge-intensive goods such as motor vehicles and pharmaceutical products as shown in **Table 1**.
  - → UK could also have a higher opportunity costs in the production of more labour-intensive products. UK should thus import more labour intensive and lower value-added electronic equipment and mechanical products.
  - → Also in **Table 1**, UK has imported precious metals and mineral fuels which could imply that they lack such natural resources.

All the above showed that due to theory of CA, it has affected UK's pattern of trade  $\rightarrow$  i.e. in term of the volume and composition of goods and services they export and import.

# Body 2: DD Factors could also be used to explain UK's Pattern of Trade

# Differences in Affluence (particularly in emerging economies)

- ❖ Emerging economies such as China has experienced relatively stronger rates of economic growth. This can be seen from **Extract 8**, **para 2** which stated that there is remarkable growth of emerging markets.
  - → This could lead to higher demand for goods and services produced overseas e.g. tourism-related services → resulted in greater export of such goods and services from UK to these emerging economies.
  - → This can be seen from **Table 1**, which showed that China is one of UK's top export partners.

# Differences in Tastes and Preferences

As seen in **Table 1**, although UK exports motor vehicles, mechanical appliances and pharmaceutical products, they also import them. This could be due to UK citizens' preference for foreign products in these categories, seeking greater choice and wider variety.

Other possible reasons could be due to globalisation which leads to greater FDI flows and outsourcing such that lower value-added products / processes are made in lower cost developing countries and then exported back to UK. These exports could be further processed into higher value-added products and exported from UK to trade partners such as Germany and France.

For example, electronic equipment parts can be made in other countries but the final processes could be assembled in UK and then exported from UK to its trade partners.

# **Evaluative Conclusion:**

From the data given, theory of comparative advantage can only be used to explain UK's pattern of trade to a small extent. As seen from **Table 1**, most of the UK's top export and imports products are largely similar. Thus, other factors such as tastes and preferences, coupled with increasing globalisation could have been a more plausible explanation that affect UK's pattern of trade more accurately.

Knowledge, Application, Understanding and Analysis			
L2	<ul> <li>Both theory of comparative advantage (CA) and other factors are well-explained, linking it to the pattern of trade in UK.</li> <li>Case materials / examples are well-utilised.</li> <li>Both theory of CA and other factors explained but no linking to UK's pattern of trade – Max 4m</li> </ul>	4 – 6	
L1	<ul> <li>Either theory of CA or other factors identified and explained.</li> <li>Both factors explained but not well-developed.</li> <li>Case materials / examples given or stated but are not well-explained.</li> </ul>	1 – 3	
Evaluation			
E2	A substantiated judgment given to justify whether theory of CA can be used to explain UK's pattern of trade to a larger or smaller extent.	2	
E1	A judgment without substantiation.	1	

)	Discuss whether the potential problems faced by UK are likely to be mo serious than problems faced by EU members' countries if Brexit were		
	take place.		
	Question Analysis:		
	Command word	Discuss	
	Content	Impact on the macroeconomic aims Brexit	
	Context	UK and EU member countries	
	and EU members' countries (A good approach is to look at the benefits enjoyed by UK as part of the EU. With Brexit, such benefits (eg preferential treatment) would be removed and hence the negative effects)		
	Thesis: Potential Problems faced by UK are likely to be more serious than problems faced by EU members' countries if Brexit were to take place  Explain the potential problems faced by UK in term of the negative impact on the macroeconomic aims		
	Anti-thesis: Potential Problems faced by EU members' countries are likely to be more serious than problems faced by UK if Brexit were to take place Explain the potential problems faced by EU members' countries in term of the negative impact on the macroeconomic aims.		
	Evaluat Conclude stand on whether UK or EU mem		

# **Suggested Answer:**

# Introduction:

Brexit refers to Britain leaving the European Union (EU).

The potential problems facing UK and EU member countries are likely to have negative impact on their macroeconomic aims.

# **Body**:

# Potential Problems faced by UK

As stated in Extract 8, para 3, UK could lose preferential trade access to EU.

- → If trade barriers are imposed on UK's exports to EU, it could lead to a fall in export revenue and assuming ceteris paribus, worsen net exports → ↓ AD → ↓ real national income → leading to negative economic growth. This is especially detrimental to UK's economy given the strong trade ties between UK and EU.
- → At the same time, a fall in export revenue would worsen current account position → ceteris paribus → leading to worsening of balance of trade → eventually affecting its balance of payments account.
- → Loss of preferential trade access to EU may also reduce UK's attractiveness as an investment destination as stated in both Extract 6 and 8 → Fall in foreign direct investment (FDI) would impact both actual and potential economic growth negatively since investment expenditure is a component of AD and a fall in FDI would also mean a fall in productive capacity or a smaller increase in productive capacity, leading to a fall in long run aggregate supply.
- → Plummeting stock markets might lead to an outflow of portfolio investment → worsening its capital and financial account (KFA) position → thus BOP, ceteris paribus.
- → Weakening pound might lead to imported price inflation. This is because weakening pound would cause imported goods and services to be relatively more expensive in domestic currency. Price of imports increases for both consumer and factors of production. The latter will lead to an increase in COP, leading to cost-push inflation. This would reduce UK's price stability.
- → Restriction in labour flow might lead to higher cost of production (COP) in UK → short run aggregate supply curve would shift to the left → this would further increase UK's general price level → leading to inflation. At the same time, result in a fall in real national income → worsen UK's economic growth and increase unemployment.

# Potential Problems faced by EU Members' Countries

As stated in **Extract 8**, para 4, UK is the second largest economy in the EU.

- → If UK leaves EU, EU members might suffer from a fall in export revenue due to the 'possible rise in trade barriers' by the UK on EU's goods and services. Data from **Table 1** also shows that EU members are enjoying trade surplus with UK and this might be reversed if UK were to exit from the EU.
- → Fall in net exports could similarly lead to negative economic growth or recession and higher unemployment in EU due to a fall in AD. The extent of the negative impact could be more strongly felt in EU members' countries with stronger trade links with the UK, such as Germany and France as shown in **Table 1**.
- → Uncertainty and diminished image of EU as stated in **Extract 8** could lead to a fall in FDI due to bleak economic outlook of the investors. This might further worsen recession and BOP [as explained above]
- → Restriction in labour into UK from the EU might worsen unemployment in EU especially in Eastern European economies shown in **Extract 8**.

# Thesis: Potential Problems faced by UK are likely to be more serious than problems faced by EU members' countries if Brexit were to take place:

As stated in **Extract 8**, **para 4**, more than 50% of Britain's trade flows with EU and in **Extract 8**, **para 2**, it also showed their deep integration in terms of economy, military and culture between UK and EU  $\rightarrow$  thus, leaving EU might lead to potential shrinking of market for UK.

As such, UK might not be able to exploit economies of scale significantly, leading to higher COP and could lead to a loss of export competitiveness.

On the other hand, EU members' countries belong to a single market and are able to trade freely among themselves, thus they might choose to import similar goods and services from within the EU rather than import from the UK.

Given UK's reliance on FDI especially to cover their current account deficit, it might be a more serious problem for the UK as loss of access to EU might lead to a fall in FDI in UK → instead there might be an increase of FDI in some EU members' countries such as Germany to gain access to EU markets.

Further, as stated in **Extract 6, para 2**, it stated that if there were to be Brexit, investors might diminish markedly as Britain would be a less attractive destination for FDI if the UK has loss their preferential trade access to the EU.

Not only FDI in UK would be negatively affected, 'European investors also hold most of Britain's short-term liabilities' → all these would worsen UK's KFA position.

Anti-thesis: Potential Problems faced by EU members' countries are likely to be more serious than problems faced by UK if Brexit were to take place

Weakening pound might lead to a fall in EU net exports to UK assuming PED of exports and imports are greater than one while it may lead to rise in UK net exports to EU, thus benefiting UK.

EU proposed regulation such as tax on financial services as stated in **Extract 8**, **para 2** might make UK financial services more attractive and lead to a fall in export competitiveness of EU financial services as compared to UK financial services.

By 'striking better deals' with emerging markets such as China and US, UK goods and services could be more export competitive than EU goods and services in these markets, thus worsening EU's net exports, ceteris paribus.

Redirection of Eastern European migrants from UK into EU member countries such as Germany as stated in **Extract 8**, **para 4** might depress wages and lead to structural unemployment in these countries.

# **Evaluation**:

In the short-term, both UK and EU members' countries are likely to face potential problems due to possible Brexit. However, the potential problems seem to be more serious for UK as it might see an immediate greater fall in FDI and net exports as compared to EU members' countries.

In the longer-term, problems faced by EU might be more serious as UK competes with EU for trade deals and might be able to negotiate better deals as compared to EU. EU regulations might harm key sectors such as financial services. Diminished EU image might eventually lead to a fall in FDI, worsening economic growth as well as BOP. Greater burden on EU budget due to a fall in contribution as well as increase in spending on benefits as EU migrants flow out of UK into EU might reduce its ability to manage Eurozone problems as well as policies to enhance competitiveness of EU.

	Knowledge, Application, Understanding and Analysis	
L2	<ul> <li>Potential problems faced by BOTH UK and EU members' countries if Brexit were to take place are well-elaborated with economic framework and analysis.</li> <li>Well-developed answers addressing the seriousness of the problems faced by BOTH UK and EU members' countries – without this explanation, max 5m.</li> <li>Analysis supported with strong evidence from the case materials.</li> </ul>	5 – 7
L1	<ul> <li>Potential problems of UK and EU are stated and explained.</li> <li>Case materials / examples may or may not be given.</li> </ul>	1 – 4
Evaluation		
E2	A substantiated judgment which considers whether UK or EU members' countries would face a greater problem if Brexit were to take place.	2 – 3
E1	A judgment without substantiation.	1

[Total: 30 marks]



# ST. ANDREW'S JUNIOR COLLEGE PRELIMINARY EXAMINATIONS – 2017 (JC2) General Certificate of Education Advanced Level Higher 2

ECONOMICS 9757/02

14 September 2017

Paper 2

**Suggested Answers** 

2 hours 15 minutes

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[Turn Over]

### Section A

# One or two of your chosen questions must be from this section.

# **Question 1**

Global sugar prices have rocketed 30% since April as supply lags further behind demand.

Source: Rabobank Sugar Quarterly, 2016

Using demand-supply analysis, explain the possible factors that led to the above [25] outcome and evaluate the relative importance of those factors.

# **Question Analysis**

Command words	Explain; Evaluate
Content words	Demand & Supply factors
Context	Sugar Market

# Schematic Plan

Students need to address the 2 parts of the question:

- 1. Explain the possible factors and using the price mechanism to show the change in price
- 2. Evaluate their relative importance

# **Suggested Answer**

### Intro

- Point out that market price is determined by the interaction of demand and supply forces in a market and the dramatic rise in price mentioned in the question can be explained by increase in demand and fall in supply as well as the concepts of elasticities.

# **Body 1: Explaining the factors**

Students can use a range of possible factors, not necessarily limited to the ones suggested in the answer

# **Demand factors:**

- 1. Increase in demand for sugar as a factor of production
- Sugar is used in the production of ethanol, a form of bio-fuel.
- With the global push towards a sustainable economy and use of green technology, the demand for bio-fuels will increase. As the derived demand for sugar also increases.
- This in turn will increase the price of sugar, ceteris paribus.
- 2. Change in income and income elasticity
- With incomes rising in 2016, there would be an increase in the purchasing power of households. As such, there will be an increase in demand for sugar, assuming it is a normal good. The increase in income would also increase the demand for other normal goods that require sugar as a factor of production e.g. confectionary products and sweet drinks. This will increase the derived demand for sugar.
- This in turn will increase the price of sugar, ceteris paribus.
- The magnitude of increase in demand for sugar will be less than proportionate to the increase in income (0<YED<1) as sugar is a necessity.

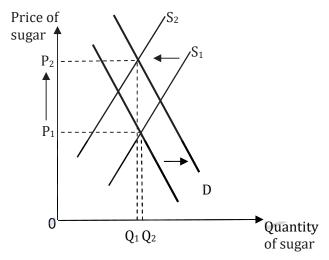
- 3. Price elasticity of demand
- Demand for sugar is likely to be price inelastic (PED<1) as sugar is a necessity for households, as well as there are few viable alternatives to sugar. Aspartame is one sugar-alternative but there are increasing reports about the dangers of consuming aspartame and thus it becomes less of a substitute to sugar. PED helps to account for the sharp rise in sugar price for a change in supply of sugar.

# **Supply factors:**

- 1. Weather
- As sugar is an agricultural good, it is very susceptible to changes in weather
- Drought and flood can destroy the crops such as sugar cane and sugar beets which are used to make sugar.
- As such this would lead to a fall in supply, ceteris paribus
- 2. Price of related goods
- The price of goods in competitive supply (such as coffee or corn) with sugar cane/beets will affect the supply of sugar cane/beets and thus the supply of sugar
- An increase in the price of those goods will cause farmers to dedicate more resources to the production of those goods and fewer resources to produce sugar cane/beets.
- A fall in the supply of sugar cane/beets will result in an increase in the price of sugar, c.p.
- 3. Price elasticity of supply
- Supply of sugar is likely to be price inelastic (PES<1) as it has a fairly long gestation period. PES helps to account for the sharp rise in sugar price for a change in demand of sugar.

# Use price mechanism to show the change in price

With the increase in the demand and the fall in supply of sugar, coupled with the respective PED and PES values, will lead to a sharp increase in the price of sugar, as seen from the diagram below.



# **Body 2: Evaluate the relative importance of the factors**

# Demand factors could be more important than supply factors

Sugar has many uses such as confectionary products and sweet drinks, as well as in the production of biofuels. Therefore with an increase in income, it would lead to an increase in both the direct and derived demand for sugar. Thus making demand factors more important in determining the price of sugar.

# Supply factors could be more important than demand factors

As an agricultural product, sugar supply is very susceptible to changes in the weather. Furthermore, given the fairly long gestation period, it would cause the supply of sugar to be very price inelastic and thus makes PES very important in determining the magnitude of the change in price.

# **Conclusion:**

- While there are many factors that can affect the price of sugar, it is likely that supply factors are more important than demand factors especially since sugar is a necessity and thus the increase in demand due to an increase in income would be less than proportionate to the change in income. Furthermore, changes in weather can have a large impact on the supply of sugar as sugar cane/beets rely heavily on suitable weather conditions for its growth.
- However, demand factors are increasing in its importance in determining the price of sugar as more governments are raising public awareness of the detriments of consuming sugar and thus are bringing about a change in the taste and preferences of consumers for goods that require sugar as a factor of production.

Level	Knowledge, Application, Understanding, Analysis	
L3 (18-20)	<ul> <li>Conceptually accurate and well-developed analysis of how demand and supply factors cause the dramatic rise in price of sugar, incorporating simultaneous shifts and elasticity explanations.</li> <li>Referring to the nuance of 'dramatic rise' in question.</li> <li>Well-substantiated with real-life examples related to sugar.</li> </ul>	
Low L3 (15-17)	<ul> <li>Generally cohesive explanation, demonstrating good knowledge of both demand and supply factors that would affect the price of sugar.</li> <li>Some explanation of relevant elasticity concepts.</li> <li>Substantiation with real-life examples to aid explanation is limited.</li> </ul>	
L2 (9-14)	<ul> <li>Good development and conceptually sound explanation of demand and supply shifts but limited in explaining the significance of elasticity measures.</li> <li>Lack of real-life examples related to sugar.</li> </ul>	
High L1 (5-8)	<ul> <li>Explanations have some incidental points made relevance to the context of the question.</li> <li>Conceptually incompetent, but able to explain with limited scope and depth of factors affecting demand and supply shifts.</li> </ul>	
Low L1	Answers that have little relevance to the question.	
(1-4)	Major and glaring conceptual inaccuracies or no conceptual support.	
E3	Well-supported evaluative judgement on the relative importance of demand &/or supply	
(4-5)	factors that lead to a dramatic rise in sugar prices.	
E2	Mainly unexplained evaluative judgment on the relative importance of demand &/or supply	
(2-3)	factors that lead to a dramatic rise in sugar prices.	
E1	Evaluative judgment provided but unelaborated	
(1)		

### Question 2

- (a) Explain how the presence of moral hazard and adverse selection in the market [10] for healthcare insurance in Singapore can result in inefficient allocation of resources.
- (b) Discuss the appropriateness of Singapore government's approach in [15] addressing various types of market failure.

# Part (a)

# **Question Analysis**

Command word	Explain, give reasons for	
Content	Market failure – Moral hazard, adverse selection	
Context	Market for healthcare insurance	
	Singapore	

# **Schematic Plan**

<u>Intro</u>			
Define market failure			
Briefly describe the market for healthcare insurance in Singapore			
Body			
Moral hazard	Adverse selection		
Define	Define		
<ul> <li>Explain using example of the behaviour</li> </ul>	<ul> <li>Explain using example of the decisions</li> </ul>		
of a consumer of healthcare insurance of a healthcare insurance provi			
<ul> <li>Link to welfare loss for society</li> </ul>	Link to welfare loss for society		
Conclusion/Evaluation			
Brief summary and/or outline possible government intervention to correct the inefficient			

# **Suggested Answer**

resource allocation

Market failure is a situation in which the market does not provide the right mix of goods or optimal amount of a particular good. As a result, the market is not allocating resources efficiently and society's welfare is not maximised. In the absence of government intervention, the market for healthcare insurance in Singapore would fail to achieve an efficient allocation of resources, due to the presence of moral hazard and adverse selection. Thus, the government has intervened in various ways to correct the resource allocation in this market.

MediShield Life is a national health insurance scheme that provides lifelong protection for all Singapore Citizens and Permanent Residents against large hospital bills. The scheme was implemented with effect from 1 November 2015. This is a basic health insurance plan, administered by the Central Provident Fund (CPF) Board, which helps to pay for large hospital bills and selected costly outpatient treatments. Patients will co-pay a portion of their medical bills. Generous subsidies are provided to ensure the affordability of the premiums. Beyond this scheme implemented by the government, various private insurance companies (such as Great Eastern, AIA, etc.) also offer various types of healthcare insurance policies to meet differing needs and budgets.

Moral hazard is the situation in which the economic agents take greater risks than they normally would because the costs that would result would not be borne by the economic

agents themselves. Moral hazard occurs under a type of information asymmetry where the risk-taking party to a transaction knows more about its intentions than the party paying the consequences of the risk. More broadly, moral hazard occurs when the party with more information about its actions or intentions has a tendency or incentive to behave inappropriately from the perspective of the party with less information.

In the market for personal healthcare insurance, consumers who have bought the insurance may subsequently feel falsely protected by it and act in a way that is dangerous in general. Insurance reduces the price of care substantially. Hence, a consumer might not be as careful in watching out for his health as he was prior to obtaining insurance. There is moral hazard involved because the consumer's knowledge that he will receive a pay-out to protect against healthcare costs arising from ill health, may actually encourage risk-taking behaviours.

With the reduced price of care, consumers purchase more health care than they would have purchased at the normal market prices. This results in more claims of insurance. The value of this care to consumers is less than the market price, even though the additional care is still costly to produce. The difference between the high cost of the resources devoted to producing this care (reflected in the high market price) and its low apparent value to insured consumers (reflected in the low insurance price) represents inefficiency.

Thus, the additional health care spending generated by insurance represents a welfare loss to society. In Singapore, the extent of moral hazard could to some extent be mitigated by the co-payment required by the MediShield Life scheme.

Adverse Selection occurs when a product or service is predominantly demanded by a certain group of economic agents who could offer the lowest level of return for other economic agents. Adverse selection occurs in markets for healthcare insurance, thus the price mechanism fails to achieve an efficient allocation of resources.

Consumers of health insurance might not divulge sufficient and accurate information about their health condition to insurance companies. Insurance companies are often unable to adequately monitor the behaviour of those who seek insurance coverage, and thus risk providing insurance coverage to those with higher health risks.

In the absence of limiting conditions (commonly based on age and pre-existing medical conditions), consumers with higher risks are more likely to buy health insurance and opt for higher levels of coverage. Adverse selection thus forces insurance companies to raise their premiums, which makes buying insurance less attractive to low risk individuals.

As health insurance is beneficial to every individual, allocative efficiency is only achieved when individuals, whether high risk or low risk, are insured.

However, without government intervention, there would be under-consumption in the market for health insurance as only those individuals faced with higher risks are willing to be insured. The market experiences a deadweight loss in efficiency and thus market fails. The inclusive nature of the MediShield Life scheme could to some extent mitigate the extent of deadweight loss, in the market for healthcare insurance in Singapore.

Concluding, the presence of moral hazard and adverse selections prevents an efficient allocation of resources in the market for healthcare insurance in Singapore. There is thus reason for government to intervene to correct market failure.

Level	Knowledge, Understanding, Application, Analysis	
L3 (8 – 10)	Answer demonstrates thorough knowledge of and an analytic explanation of moral hazard and adverse selection, with good application to the context of healthcare insurance in Singapore. Reasoned structure to the whole answer.	
L2 (5 – 7)	Answer contains an incomplete/ undeveloped explanation of the concepts of moral hazard and adverse selection, with some attempt to apply the explanation to the context of healthcare insurance in Singapore.	
L1 (1 – 4)	For a weak answer that shows limited knowledge of moral hazard and adverse selection, or is inadequately explained. The answer contains basic errors of theory, or is mostly irrelevant or inaccurate.	

#### Part (b)

## **Question Analysis**

Command word	Discuss
	Appropriateness of approach
Content	Government intervention to correct market failure
	<ul> <li>Approaches taken to address various types of market failure</li> <li>Pros and cons of the respective approaches</li> </ul>
	· · · · · ·
	Possible alternatives
Context	Singapore
	Various types of market failure in Singapore

## **Schematic Plan**

<u>Intro</u>	
Identify approaches taken by the government and state relevant examples of n	narkets
Body	

## Approach 1: E.g. A combination of market based and non-market based policies

- Identify a relevant market
- Briefly explain the cause of market failure
- Explain the policy/policies used as a part of the approach
- Discuss the pros and cons of the approach

## Approach 2: E.g. Market based policies

- Identify a relevant market
- Briefly explain the cause of market failure
- Explain the policy/policies used as a part of the approach
- Discuss the pros and cons of the approach

## **Conclusion/Evaluation**

Make a stand – apply criteria to determine appropriateness of the approach Make recommendations for possible adjustments to approaches

#### **Suggested Answer**

The presence of market failure in various markets necessitates government intervention to correct the inefficient resource allocation so as to improve market outcomes. In Singapore, the government intervenes in the markets for narcotics, preschool education, healthcare, national defence, etc., to improve market outcomes. Different approaches are taken in intervening in these markets.

In the market for narcotics, the government utilizes a combination of market based and non-market based policies to deal with market failure. Narcotics are considered demerit goods. These are goods and services that are deemed to be socially undesirable by the government and which the government feels that will be over-consumed if left to the free market due to consumers' failure to recognize the full costs resulting from the consumption of the good.

Consumers underestimate the full costs of consuming narcotics thus their perceived marginal private cost (MPC) is lower than the true MPC. Furthermore, consumption of narcotics also

generates significant negative externalities, resulting in a divergence between true MPC and marginal social cost (MSC). For instance, family and friends of drug users may suffer from physical or emotion abuse, and they may incur high monetary and psychological costs as they attempt to rehabilitate the drug user. Society may also be implicated by higher crime rates, should drug users resort to petty crime to feed their addictions. Left to the free market, narcotics would be overconsumed and significant deadweight loss would be generated. Society's welfare is thus compromised.

In light of the substantial deadweight loss generated, the Singapore government takes a firm and authoritarian approach in addressing this market failure with a mix of policies. The government legislated that the sale and consumption of narcotics are entirely banned; offenders face stiff penalties. For instance, drug trafficking incurs the death penalty in Singapore. These penalties also serve as a deterrence to potential offenders. The Central Narcotics Bureau was formed to enforce these legislations. To educate the public on the full cost of consuming narcotics, the CNB focuses on "Preventive Drug Education" and works closely with government schools to educate youths and to build their resilience to stay drug free

This firm and authoritarian approach has been largely successful in making Singapore a drug-free society. Strict enforcement of laws and the intensive rehabilitation programmes for offenders have reduced the deadweight loss in this market. The approach also targets the root cause of the issue – ignorance of full costs of narcotics consumption.

However, this approach is not without its limitations. It utilizes a large amount of government's resources, given the manpower required for enforcement and its outreach efforts. In theory, successful public education efforts could, in the long run, reduce the need for government expenditure in addressing issues of narcotics consumption. However, the need for public education is ongoing, to ensure that each generation of youths choose to remain drug free. Methods of outreach needs to continually be refreshed to ensure relevance to and acceptance by the target audience. This incurs high opportunity cost, as these resources could have been allocated to areas of need – such as to national defence or healthcare.

Furthermore, neither public education nor legislation can ensure the achievement of the socially optimal outcome in the market. Although a complete ban is legislated, the socially efficient outcome could in fact be a positive but low level of consumption. The results of public education can be variable; the large amount of resources committed may not yield the desired outcome.

In the market for preschool education, the government uses market-based policies in dealing with market failure arising from information failure on the part of consumers. It encourages competition amongst private service providers, aims to level up the quality in the industry, and has also entered the industry by directly providing the service.

In considering whether to send their children for preschool education, parents consider only their private costs and benefits. Costs may include fees, transport costs, and travelling time. Perceived benefits may include acquisition of basic literacy and numeracy skills. Consumers underestimate the full benefits of consuming preschool education, which could include acquisition of social skills and readiness for formal Primary education. Thus, their perceived marginal private benefit (MPB) is lower than the true MPB. Left to the free market, preschool education would be under-consumed and deadweight loss would be generated. Society's welfare is thus compromised.

The government uses a lighter touch in dealing with market failure here, and aims to improve accessibility, affordability and quality of preschool education. Private service providers

continue to operate in this industry, and now has greater incentive to improve service standards.

To boost accessibility, the government has entered the industry to directly provide preschool education service. The Ministry of Education has built many MOE Kindergartens (MK) in neighbourhoods with young families. Subsidies and financial assistance are given to parents of Singaporean children, to offset the costs of preschool education offered by Anchor Operators (private service providers registered with MOE) and MKs. Through setting up new government bodies – Early Childhood Development Agency and the National Institute of Early Childhood Development – the government aims to audit and raise the quality of preschool centres and to provide training to equip the industry with qualified staff.

The lighter touch approach consisting a combination of policies, coupled with public education to inform citizens of its policies and efforts, has increased the consumption of preschool education in Singapore. Furthermore, the approach allows the price mechanism to still function to allocate resources in this market. A variety of preschool services, catering to different needs and budgets are available in the market. This allows consumers choice and variety, while government subsidies help ensure affordability.

However, this approach is not without its limitations. This also utilizes a large amount of government's resources, given the manpower required for the different areas of work. Similarly, opportunity cost will be incurred. It is difficult to establish, with accuracy, the socially desired level of consumption of preschool education. Information failure on the part of the government may hence result in over or under provision of resources to the market, and hence over or under consumption.

In conclusion, the appropriateness of the government's approach would depend on, amongst other things, the severity of market failure; the ability to address the root cause of market failure; and effectiveness in achieving an efficient allocation of resources.

The government needs to regularly assess the effects of its intervention on market outcomes, and review its policies to ensure relevance and suitability. For instance, the CNB needs to keep abreast with new trends in the sale or and consumption of narcotics, such that its outreach and enforcement methods can be modified.

Appropriateness of the approach also depends on the availability of government resources and the competing needs for these scarce resources. The government needs to balance the usage of resources well, to ensure that both micro and macroeconomic objectives can be attained.

#### Note:

The answer should discuss different approaches (at least two) that the government has taken – e.g. firm and authoritarian VS a lighter touch.

Students can draw from a range of relevant contexts of different markets, to illustrate and substantiate their analysis. Reference to the market for healthcare insurance is not mandatory.

Level	Knowledge, Understanding, Application, Analysis	
L3 (8 – 10)	The answer demonstrates thorough knowledge of the Singapore government's approaches to addressing different types of market failure. Good application to Singapore context in providing balanced analysis of the pros and cons of the government's approaches.	
L2 (5 – 7)	Accurate but undeveloped explanation of types of market failure in Singapore, with some ability to distinguish between approaches taken by the government. Limited analysis of the pros and cons of the government's approaches. Weak or limited application to Singapore context.	
L1 (1 – 4)	Answer shows some knowledge of the types of market failure present in Singapore, but had not addressed question requirement. Inadequate explanation and analysis the government's approaches to addressing market failure.	
E3 (4 – 5)	J J J J J J J J J J J J J J J J J J J	
E2 (2 – 3)	Judgment with inadequate justification.	
E1 (1)	Unsupported judgement without any substantiation.	

#### Question 3

Singapore government has introduced TPG Telecom, which will be Singapore's fourth mobile operator, hoping that more competition will be beneficial. On the other hand, food stalls at most hawker centres continue to face high level of competition without the need for government to introduce more.

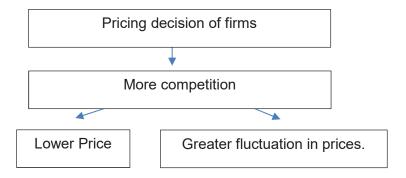
- (a) Explain why more competition might lead to lower but greater fluctuation in [10] prices.
- (b) Discuss whether government should intervene to prevent firms from gaining [15] larger market share in various markets.

## Part (a)

## **Question Analysis**

<b>Command Word</b>	Explain why
Content	Market structure, competition, pricing decision
Context	NA

#### **Schematic Plan**



### <u>Intro:</u>

- Linking the concept of 'more competition' to the various market structure.
- Monopolistic competition has more competition than Oligopoly. Oligopoly has more competition than Monopoly.
- Among monopolistic competition, oligopoly and monopoly, monopolistic competition
  has the most competition and monopoly has the least competition. (Oligopoly inferred
  to be in between)
- Assumption that firms are profit driven and aims to maximise profits.
- Note: Perfect competition does not exist in real life and has no fluctuation in price.

## **Body 1**: Explain why more competition might lead to lower prices.

Assumption that firms are profit driven and aims to maximise profits, firms will
determine its profit maximising output where MC=MR and determines price using the
AR which is also the demand curve.

- More competition → larger number of firms → lower demand for each firm and demand will be more price elastic
  - o lower demand for each firm → lower price
  - o demand will be more price elastic → less price setting ability P>MC at a lesser amount → lower price

## **Body 2**: Explain why more competition might lead to greater fluctuation in prices.

- Greater competition would mean that the market structure would have lower BTE →
  number of firms in the market structure are more likely to change → whenever
  number of firms changes, the demand or AR for each firm will change → prices will
  fluctuate more.
- Greater competition when market structure changes from oligopoly to monopolistic competition → no more price rigidity → prices will fluctuate more.
- Greater competition when market structure changes from Monopoly to Oligopoly →
  increase in number of rival firms → increase likelihood of price competition between
  firms → prices will fluctuate more.

## Conclusion

## **Mark Scheme**

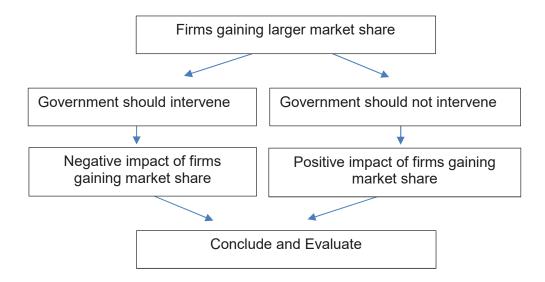
Level	Knowledge, Understanding, Application and Analysis	
L3	Good explanation with clear use of economic analysis of why more competition	
(8-10)	might lead to lower AND greater fluctuation in prices	
	Basic explanation of why more competition might lead to lower AND greater	
L2	L2 fluctuation in prices	
(5-7)		
	Good explanation with clear use of economic analysis of why more competition	
	might lead to lower OR greater fluctuation in prices	
L1	Basic explanation of why more competition might lead to lower OR greater	
(1-4)	fluctuation in prices	

#### Part (b)

## **Question Analysis**

<b>Command Word</b>	Discuss whether
Content	Market Structure, performance of firms
Context	Various markets

### **Schematic Plan**



## <u>Intro</u>

- Firms gaining larger market share would means that the number of firms in the market is reducing and the market structure is evolving from monopolistic competition towards oligopoly or oligopoly towards monopoly.
- Each firm gaining more market power and market dominance.
- Government intervention would aim at increasing competition in the market with more firms.

# Thesis: Government should intervene to prevent firms from gaining larger market share in various markets.

- Allocative Inefficiency: firms gaining larger market share would lead to more market power and demand becoming more price inelastic → P > MC at a larger extent.
- Choices and Varieties: firms gaining larger market share would lead to lesser number of firms → decrease in the choices and varieties of goods and services available
- Productive inefficiency (society): firms gaining larger market share would cause demand to be more price inelastic → firms will produce at a point further away from MES assuming earning normal profits
- Monopoly: X-inefficiency due to the lack of competition
- Higher chances of firms colluding which can lead to exploitation of consumers
- Firms gaining larger market share would lead to more market power and demand becoming more price inelastic → higher price would mean lower consumer surpluses
- Equity: firms gaining larger market share would lead to more market power and demand becoming more price inelastic → higher chance of firms earning

supernormal profits → income distribution will shift from the poor towards rich (land owners, capital owners and entrepreneur)

# <u>Anti-Thesis: Government should NOT intervene to prevent firms from gaining larger market share in various markets.</u>

- Dynamic Inefficiency: firms gaining larger market share → higher chances of earning supernormal profits → firms will be more willing and able to innovate
- Natural Monopoly: market might have characteristic of natural monopoly therefore firms need larger (full) market share to survive and exist
- Productive efficiency (firms)
- Choices and Varieties: firms (oligopoly) would have more willingness and ability to improve quality of goods and services which increase the availability of quality goods and services. Lesser market shares (monopolistic competition) can only have superficial production differentiation.

## **Conclusion and Justification**

**Final stand:** Government **should / should not** intervene to prevent firms from gaining larger market share in various markets.

#### Evaluation:

- Depending on the nature of the market or industry and types of goods
- Long term or short term
- Depending on how the government intervene

Laval	Knowledge Understanding Application and Applicate
Level	Knowledge, Understanding, Application and Analysis
L3 (8-10)	Good explanation with clear use of economic analysis on whether government should intervene to prevent firms from gaining larger market share with clear use of examples wrt to various types of market structure. Perfect completion is not required.
L2	Good explanation with clear use of economic analysis on whether government should intervene to prevent firms from gaining larger market share without any use of examples wrt to various types of market structure.  Basic explanation with clear use of economic analysis on whether government
(5-7)	should intervene to prevent firms from gaining larger market share with some use of examples wrt to various types of market structure.
	Basic explanation with clear use of economic analysis on whether government should intervene to prevent firms from gaining larger market share <b>without</b> any use of examples wrt to various types of market structure. (max at 5)
L1 (1-4)	One sided answer on whether government should intervene to prevent firms from gaining larger market share.
E3 (4-5)	For an evaluation with justification using economic analysis
E2 (2-3)	For an evaluation with basic justification
E1 (1)	For an unexplained evaluation

#### **Section B**

## One or two of your chosen questions must be from this section.

#### **Question 4**

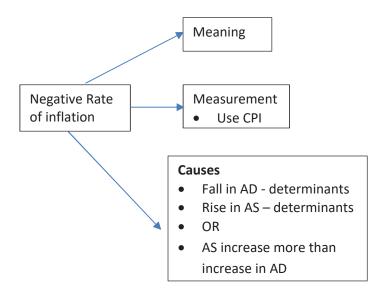
- (a) Explain the possible factors that might cause a negative rate of inflation in an [10] economy.
- (b) Discuss whether a negative inflation rate is more worrying than a positive [15] inflation rate for a government.

## Part (a)

## **Question Analysis**

Command Word	Explain
Content	Negative rate of inflation; AD/AS framework
Context	Use own examples for real world context

## **Schematic Plan**



**Note:** It is important that students need to explain the meaning of negative inflation rate, ie falling general price level which can be measured using CPI. It is an indicator of changes in general price level. If it is sustained (persistent) over a period of time, it shows that the country is experiencing deflation.

#### **Suggested Answer**

#### Introduction:

- Explain negative inflation rate
  - An indicator of a fall in the general price level (GPL) of goods and services of an economy in a given period of time.
  - It shows that deflation has occurred if negative rate ie fall in GPL is persistent over a period of time.

Measure of negative inflation rate
 The CPI is used to measure the change in price of a fixed basket of goods and services
 commonly purchased by households over a specified time period.
 Inflation rate is usually measured using the Consumer Price Index (CPI) as shown in the
 formula below.

$$Inflation \ rate_t = \frac{\text{CPI}_t - \text{CPI}_{t-1}}{\text{CPI}_{t-1}} \times 100\% \ \text{(where t denotes the time period)}$$

• The fall in the general price level can be due to a fall in aggregate demand (AD), a rise in short-run aggregate supply (SRAS) or the long-run aggregated supply.

## Body:

With reference to Figure 1, the initial GPL is at  $0P_1$ . A decrease in AD from  $AD_1$  to  $AD_2$  can be caused by a decrease in any of the components of AD – consumption expenditure (C), investment expenditure (I), government expenditure (G) and/or net exports (X-M), resulting in a fall in GPL to  $0P_2$ . This was seen during the global financial crisis where there was a fall in Singapore's exports due to weak external demand, causing a fall in Singapore's aggregate demand. This led to Singapore experiencing deflation for a period of time till AD started to grow again.

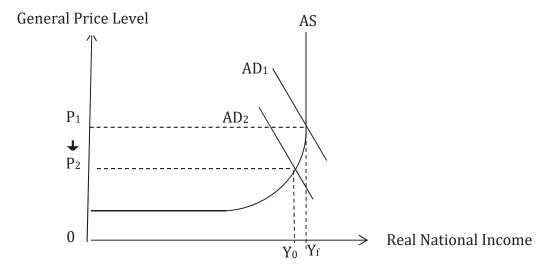


Figure 1: Negative Inflation caused by a fall in AD

With reference to Figure 2, an increase in SRAS is shown by a shift of SRAS<sub>1</sub> to SRAS<sub>2</sub> causing the GPL to fall from  $0P_1$  to  $0P_2$ . Increase in SRAS can be caused by a fall in cost of production. This could come in the form of technological advancement or a fall in the price of factors of production. In 2014, with the increase in oil production from the US and a falling demand for oil globally, this cause oil prices to fall. Since oil is a major factor of production, this resulted in a fall in cost of production and thus an increase in the SRAS. This led to a fall in Singapore's CPI for many months, which shows that Singapore experienced deflation.

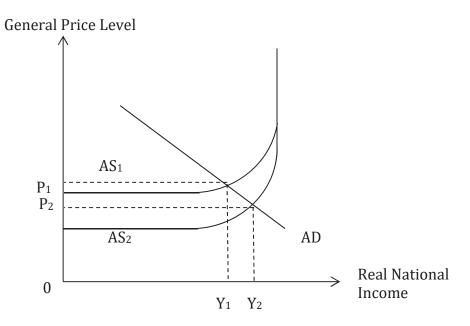


Figure 2: Negative Inflation caused by an increase in SRAS

An increase in LRAS can be caused by an increase in the quantity and/or quality of factors of production. This is exactly what happened in the late 1990s due to the opening up of China which increased the supply of low-wage workers to other countries such as Singapore. This led to falling global commodity prices in the period that followed due to lower costs as well as increased productive capacity of economies.

## Conclusion

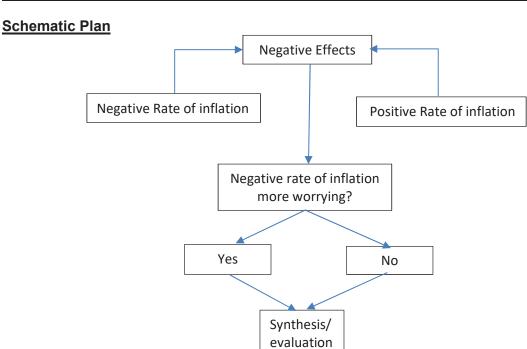
A negative inflation can be caused by a fall in AD due to a fall in its components or a rise in the SRAS or LRAS.

Level	Knowledge, Understanding, Application, Analysis	
L3	Thorough knowledge and excellent ability to explain AD and AS factors leading to  pagetive inflation rate.	
(8-10)	negative inflation rate	
(0-10)	AD/AS framework was used to show how a fall in GPL (deflation) occurs	
	Link was made between negative inflation rate to deflation	
L2	Factors given are relevant but inadequately explained	
(5-7)	No real world application	
	Did not show a clear link between negative inflation rate to deflation	
L1	Shows some knowledge of factors leading to negative inflation rate	
(1-4)	Factors given are brief or inaccurate.	

## Part (b)

## **Question Analysis**

Command Word	Discuss whether
Content	Effects of a negative inflation rate vs positive inflation rate
Context	Use own example for real world context



## Approach:

This question is to be discussed from the perspective of a government. Students need to give the basis for government to worry. Basis would be whether the macro and micro economics problems are worsened or goals that were unable to be achieved.

## Introduction

- Briefly define the meaning of positive inflation rate. Factors are similar as negative rate but in the opposite direction.
- Both would result in negative effects that can worsen macro and micro economics problems or unable to achieve them.
- Whether a negative inflation rate is more worrying than a positive inflation rate will depend on their causes of the negative effect, duration and size of the rates.

#### **Body**

### Thesis (1)

Negative inflation rate that has been persistent—ie deflation, is more worrying because of the negative effects due to

#### Causes:

- Deflation caused by falling AD
  - ✓ This will lead to negative economic growth and increased unemployment.
    This can give rise to a negative economic outlook would result in lower consumer and investor confidence.
  - ✓ Due to the fears of loss of employment and income, apart from postponing their decision to consume durable goods, consumers would increase their savings. This will increase the amount of loanable funds in the banks, which should result in higher levels of investment due to lower interest rates. However, this might not take place due to the poor economic outlook.
  - ✓ Firms will be reluctant to invest. This can bring about lower local and foreign investments as the expected returns may be lower.
  - ✓ This will lead to a further reduction in AD. Over the long run, if the level of
    investment does not result in a net capital formation, the capital stock in
    the economy will decrease and will cause the productive capacity of the
    economy to be reduced.
  - ✓ Hence, can worsen the situation of negative growth and unemployment. Moreover, any expansionary policies to stimulate the economy may render them ineffective
  - ✓ This can cause a reduction in the BOP surplus, or worsening of a BOP deficit, via the Capital and Financial Accounts, ceteris paribus

#### Anti-thesis (1)

- o If deflation is due to an increase in AS, this will bring about an increase in the real GDP and also lower unemployment. This improvement in the economic outlook may lead to greater foreign investments since there is higher expected profits with the lower costs and/or higher productivity of factors of production. Moreover, it will increase the BOP surplus or a reduction in the BOP deficit, ceteris paribus.
- With falling price levels, it could lead to a decrease in unemployment as the country's exports become more price competitive and thus there would be an increase in the quantity demanded for exports. An increase in demand for exports will lead to a fall in unemployment as more units of labour is required
- Regardless of the cause of the deflation, a fall in prices would increase the price competitiveness of the country's exports and thus could increase the export revenue, assuming PEDx > 1.

## Anti-thesis (2)

Positive inflation rate that has been persistent is more worrying:

#### Causes

- Falling SRAS due to increase in the cost of production (eg price of oil) would result in a fall in real NY.
  - ✓ In particular, if it would result in lower consumer and investor confidence
  - ✓ Use the same argument for the case where deflation has caused a fall in consumer and investor confidence.
  - ✓ Inflation affects the value of money assuming that the nominal income did not keep pace with the inflation rate. Cost of living would rise and the poor or fixed income earners would face with a lower material standard of living. This can lead to inequity and government may have to redistribute income by subsidizing the lower income group to maintain a reasonable standard of living. This would burden the government financially in its budget.

- Increase in AD without increasing the capacity to produce ie no change in LRAS. However, this may be short term and given government SS-side policies to increase LRAS, persistent positive inflation rate may be less worrying.
- If the rate of inflation has accelerated to a hyperinflation situation, in the case of Zimbawe where inflation was 79,600,000,000% in mid-2008 where the confidence was so low that the real value of currency was eroded and the negative effects was worrying.

#### Overall evaluation:

Which is more worrying for a government will depend on the causes, duration, value of both negative and positive inflation rate and the effectiveness of implemented policies to manage the two directions of inflation. A negative inflation rate or deflation is not necessarily more worrying if it is caused by a rise in AS that results in falling prices of goods due to lower costs of production or an increase in the productive capacity of the economy. A positive inflation rate would not be worrying as most economies would be targeting approximately positive 2% of inflation rate with economic growth to indicate that the economy is healthy.

In the case of Japan, however, it has been experiencing many years of stop-start economic growth, years of falling wages and deflation. While it would seem that consumers should welcome deflation, because it increases their purchasing power, Japan faces a different situation.

Japanese household have been experiencing a fall in their real household income. This is because their average earnings in Japan have fallen since the 1997 fiscal year, while a core measure of consumer prices – excluding food and energy – has fallen as well. In addition, consumers have spent so many earlier years worrying about incomes and job security that finding ways to spend less has become a habit. Consequently the AD did not rise enough to lift Japan out of recession or stimulate higher economic growth. The lower consumer confidence has dampening effect on the expansionary fiscal policy which encouraged spending

Levels	Knowledge, Understanding, Application, Analysis
	Thorough knowledge and excellent ability to explain at least 3 negative
L3	effects well of negative and positive effects (combination) of inflation
(8-10)	<ul> <li>There must be a comparison made between the effects of negative and positive inflation rates</li> </ul>
	<ul> <li>Given the time constraint, the answers demonstration of knowledge,</li> </ul>
	understanding, application and analysis could not be improved significantly
	Negative effects given are relevant but inadequately explained
L2	No real world application
(5-7)	<ul> <li>Did not provide sufficient comparison between the level of worrying by</li> </ul>
	government of the respective inflation rates
	Shows some knowledge negative effects of either positive or negative
L1	inflation rates
(1-4)	Answers given are brief or inaccurate.
	No comparison made

E3 (4-5)	•	Synthesises economic arguments to arrive at well-reasoned judgements and decisions such as in a good summative conclusion that it depends on the causes of deflation and the potential damaging negative effects of both positive and negative inflation
E2 (2-3)	•	Relevant to the question but does not explain the judgement or base it on relevant analysis
E1	•	Make an unexplained judgement.
(1)	•	One that lacks judgment

#### Question 5

Different economists tend to recommend different macroeconomic policies to the government when tasked to address a balance of payments deficit.

Explain the possible causes of a balance of payments deficit and discuss the factors [25] an economist would consider when deciding on his recommendation.

## **Question Analysis (Explain portion)**

Command	Explain – use economic analysis to make clear the outcome expected.
Content	BOP deficit
Context	Nil

## **Question Analysis (Discuss portion)**

Command	Discuss – present two sides, evaluate
Content	Factors affecting policy-making when addressing BOP deficit
Context	Nil

Schematic Plan (Explain portion)

What is BOP? What is BOP deficit?



3 Causes of BOP deficitAt least one each from CA and KFA



Combined effect of CA and KFA that leads to BOP deficit

## Schematic Plan (Discuss portion)

Macroeconomic policies available to address BOP deficit



## Factors affecting:

- Fiscal policy
- Monetary policy
- Exchange rate policy
- Supply-side policies



Evaluation/Stand

#### **Suggested Answer**

#### <u>Intro</u>

- There are <u>various causes</u> of BOP deficit, some affecting <u>via current account</u> and others affecting <u>via capital and financial account</u>.
- When recommending policies to address the BOP deficit, an economist will need to consider various factors, such as <u>availability of budget</u>, <u>reliance on imports</u>, <u>likelihood of negating factors</u>, <u>root cause of deficit</u>, etc.
- <u>Not all factors weigh equally</u> in influencing the ultimate policy-making decision due to the nature and circumstances faced by each economy.

#### Body - Part #1

- Explain what is meant by BOP
  - o inflow and outflow of funds due to international transactions
  - o CA + KFA
- Explain what is meant by BOP deficit (total inflow < total outflow)
- Causes of CA deficit (need to specify categories of causes e.g. one internal; one external OR one for exports and one for imports)
  - Appreciation of domestic currency
  - Economic downturn experienced by trading partners (export destination economies)
  - Loss of comparative advantage due to higher COP
- Causes of KFA deficit (need to specify categories of causes e.g. one internal; one external **OR** one for hot money and one for FDI)
  - o Fall in interest rates due to expansionary monetary policy
  - o Income tax hike due to austerity measures → deterring FDI inflows
  - Stronger competitor for FDI inflow (e.g. China's opening up of its doors, tax competition among competing economies)

#### **IMPORTANT:**

Student needs to recognise it is the COMBINED balance of CA and KFA that should produce a deficit; BOP deficit does not require both CA and KFA to be in deficit.

#### Body - Part #2 - Discuss Factors

State at least three policies which could address BOP deficit (combination of those that address CA and KFA).

## Factor #1 - Availability of budget

- Govt attempts to use SS-side policy (subsidise R&D or retraining of workers) to improve quality of exports or to attract more FDI.
- Govt needs funds.
- Limited by availability of budget.
- Example: Greece

### Factor #2 - Reliance on imports

- Govt attempts to reduce import expenditure through tariff or quota
- If economy relies heavily on imports for goods and services or factors of production, then such a policy may not be feasible → will significantly affect material SOL if imports are severely restricted due to high tariff of low quota set.
- Example: Singapore

## Factor #3 – Likelihood of negating factors

- Govt attempts to depreciate domestic currency to boost X and reduce M → BOT improves → BOP improves.
- If competitors are likely to also depreciate their currency, intended effect will be very limited.
- Example: economies around the world during global financial crisis

#### Factor #4 - Root cause of deficit

- Govt needs to have data on the source of deficit, i.e. CA or KFA. Specifically, which components of CA and which components of KFA.
- Govt ought not to implement 'generic' policies which will expand the CA surplus so as to compensate for KFA deficit, at least not to do so in the long run.
- Such inherent extended imbalance will create unintended consequences in the long run. For example, KFA deficit widens → hollowing out of an entire industry, leading to severe loss in jobs and comparative advantage.

#### **Evaluation/Conclusion**

- Multiple factors need to be taken into consideration simultaneously the more comprehensive set of factors considered, the less unintended consequence or the more effective the set of policies will be.
  - E.g. if only look at availability of budget but not the root cause of deficit → may not be effective in addressing BOP deficit
- Timely and constant review of policies may be needed as such weights of factors in influencing effectiveness of policies may also change.

 E.g. previously reduced reliance on imports → now, heavier reliance on imports. Hence, import-restricting policies may become more effective in reducing BOP deficit.

Level	Knowledge, Application/understanding and Analysis			
	- Strong economic analysis employed throughout (e.g. use of appropriate terminology; proper cause-effect explanation)			
L3 (15 – 20)	- Breadth/Scope provided demonstrated mastery of content			
	<ul> <li>Good use of examples, where relevant, to illustrate real-world applications.</li> </ul>			
L2	<ul> <li>Answer written in a sufficiently economics fashion though minor gaps/errors may exist sporadically throughout.</li> </ul>			
(9 – 14)	<ul> <li>Narrow scope of answers which reveal passable content/knowledge in response to the question posed.</li> </ul>			
	- Answer does not convey sufficient grasp of question requirement.			
L1 (1 – 8)	<ul> <li>Descriptive answers (lack of technical terms used) with major errors (e.g. confused BOP with budget deficit) ought to be given lowest marks.</li> </ul>			
E3 (4 – 5)	<ul> <li>Stand provided together with strong evaluative comments such as to question assumptions, status quo of circumstances faced by economies in making policy decisions.</li> </ul>			
(4 – 3)	<ul> <li>Evaluation clearly weighed/questioned the validity of different factors brought up in the essay.</li> </ul>			
E2 (2 – 3)	- Stand provided together with substantiation using weak/erroneous elaboration. Substantiation reads more like a summary of essay.			
E1 (1)	- Mere stand provided without any substantiation.			

#### Question 6

China signalled its intention to replace US as champion of free trade if US were to build more trade barriers.

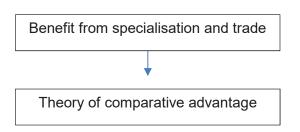
- (a) Explain how an economy can benefit from specialisation and trade. [10]
- (b) In the event that US builds more trade barriers, discuss whether other [15] governments should follow China's footsteps in adopting a policy of greater free trade.

## Part (a)

#### **Question Analysis**

<b>Command Word</b>	Explain how	
Content	Theory of comparative advantage	
Context	NA	

### **Schematic Plan**



#### Note:

- Demand factors for patterns of trade will be ignored.
- Table is not compulsory, PPC graphs are acceptable as well

## Intro:

Economy can benefit from specialisation and trade based on the Theory of Comparative Advantage

The Theory of Comparative Advantage states that, under certain conditions, countries can benefit from specialisation in the production of goods and services which they have comparative advantage in and trade them for goods and services in which they do not have comparative advantage in. Countries can benefit from specialising and exporting products in which they have a comparative advantage and importing products in which they do not have a comparative advantage.

## **Body 1: Assumptions**

- Trade is carried out between two countries, example: China and Japan.
- Only 2 commodities are produced and traded, example: food and clothing.
- No transport cost is involved in moving goods from one country to the other.
- Constant opportunity cost in the production of both goods in both countries.

- Perfect mobility of factors of production within each country but not between countries.
- Resources of each country are fully and efficiently employed.
- No trade barriers imposed by the governments (Free Trade).

## Body 2: Before specialisation and trade

In our example, assuming that before specialisation and trade, both China and Japan devoted half of its resources to the production of two goods, Clothing and Food. Table 1 will show the amount of Clothing and Food both countries can produce when resources are fully and efficiently utilised.

Table 1: Production possibilities of China and Japan before specialisation and trade

	Clothing	Food
China	100	200
Japan	200	80
Total Output	300	280

#### From Table 1:

- China's opportunity cost of producing 1 unit of clothing is 2 units of food.
- Japan's opportunity cost of producing 1 unit of clothing is 0.4 unit of food.
- China's opportunity cost of producing 1 unit of food is 0.5 unit of clothing.
- Japan's opportunity cost of producing 1 unit of food is 2.5 units of clothing.

We can determine that China has a lower opportunity cost in the production of food and Japan has a lower opportunity cost in the production of clothing. Therefore, China has the comparative advantage in the production of food and Japan has the comparative advantage in the production of clothing.

#### **Body 3: Gains from specialisation**

Based on the theory of comparative advantage, Japan should specialise in the production of clothing and China should specialise in the production of food production. Table 3 shows the output of the clothing and food when both countries specialised in the production of the goods they have comparative advantage in.

The immediate gains from specialisation is that total output of both clothing and food rises. Comparing to Table 1, total clothing production increased from 300 to 400 and total food production increased from 280 to 400.

## **Body 4: Terms of trade (exchange ratio)**

For specialisation and trade to be mutually beneficial for both countries, the theory of comparative advantage states the terms of trade (exchange ratio) should be between both countries' opportunity cost to produce both goods. The terms of trade is the rate at which two goods are exchanged (how much of one good is exchanged in terms of another good).

A beneficial term of trade for 1 unit of food must be between 0.5 and 2.5 units of clothing which is the opportunity cost of producing 1 unit of food in the two countries.

On the other hand, a beneficial term of trade for 1 unit of clothing must be between 0.4 and 2 units of clothing which is the opportunity cost of producing 1 unit of food in the two countries.

## **Body 5: Gains from specialisation and trade**

If the term of trade is 1 unit of food in exchange for 1 unit of clothing and China exchange 120 units of food for 120 units of clothing with Japan, the amount of clothing and food both countries have can be seen in Table 2.

Table 2: Consumption of China and Japan after specialisation and trade

	Clothing	Food
China	0 (+120) = 120	400 (-120) =280
Japan	400 (-120) = 280	0 (+120) = 120
Total Output	400	400

Comparing Tables 1 and 2, through specialisation and trade, China stands to gain 20 units of clothing and 80 units of food while Japan stands to gains 80 units of clothing and 40 units of food through specialisation and trade assuming free trade and beneficial terms of trade (exchange ratio) between countries.

Therefore, countries could benefit from specialisation and free trade due to differences in their opportunity costs.

#### Conclusion

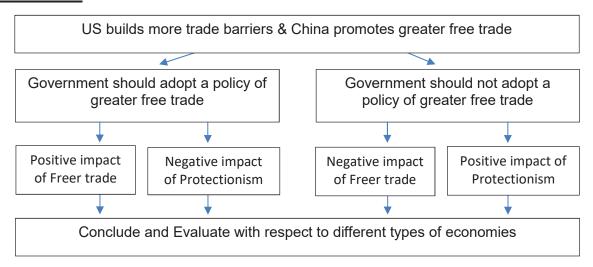
Level	Knowledge, Understanding, Application and Analysis
L3	Clear explanation of how an economy can benefit from specialisation and trade using theory of comparative advantage and correct numbers used.
(8-10)	Answers with most of the assumptions listed and terms of trade mentioned.  Detailed explanation of terms of trade not required.
L2 (5-7)	Basic explanation of how an economy can benefit from specialisation and trade using theory of comparative advantage with numerical errors
L1 (1-4)	Incorrect or poor explanation of how an economy can benefit from specialisation and trade using theory of comparative advantage.

## Part (b)

## **Question Analysis**

<b>Command Word</b>	Discuss whether
Content	Free Trade and Protectionism
Context	Any governments other than China and US

## **Schematic Plan**



## **Intro**

• Policy of greater free trade = remove trade barriers, may or may not be due to the signing of free trade

# Thesis: Government should adopt a policy of greater free trade because of the positive impact of it

- Cheaper exports for foreign economies
  - Firms can compete better in foreign economies → exports increase → AD increase → RNY increase, improve BOP, reduce unemployment
- Cheaper imports for domestic economy
  - SRAS increases
    - → reduce inflationary pressure (especially imported inflation) → improve standard of living
    - → promote actual growth

## Increased World Output

Some countries are more efficient than others in the production of certain goods and services because of different factor endowments and the use of different methods of production. Total world output is increased when countries specialise in the production of goods and services that they are most efficient in producing. For example, labour-abundant countries like China and India are likely to contribute a larger amount of labour-intensive products to the world compared to countries where labour is less abundant.

#### Stimulates Economic Growth

- o If the domestic market is small, the economy may not be able to sustain its growth. With international trade, the market is expanded globally. This can bring about larger cost savings (economies of scale) for firms in these countries as they increase their scale of production to meet the higher global demand. The higher demand for their products can also generate higher export revenue. Hence, there is an incentive for firms to invest in the country.
- Therefore, international trade stimulates actual economic growth as exports and investments generate income and employment. Ceteris paribus, increased output and employment will lead to an increase in the standard of living as the consumption of goods and services increase.

## Increased Competition in World Market

Competition from foreign rivals forces domestic firms to be more efficient and competitive in order to survive. As a result, domestic firms will have greater incentive to innovate and to produce goods of a higher quality or at a lower unit cost. Furthermore, competition from foreign producers can prevent domestic monopolies from charging high prices as imports can weaken the power of the monopoly. Consumers can enjoy goods at lower prices or with better quality. These result in higher consumer welfare.

## Wider Variety of Goods and Services

A country may not be able to produce certain goods and services domestically due to a lack of factors of production that are essential in the production of these goods. However, with international trade, the country is able to buy these goods from other countries by selling what it has an abundance of. In the process, its people are able to consume a greater variety of goods. The result is greater consumer choice and higher satisfaction levels.

#### Facilitate transfer of technology and ideas

Trade brings with it an exchange of ideas and techniques that increase the efficiency of production and hence stimulates economic growth. The transfer of technology and ideas from more advanced countries can help developing countries speed up their economic development as the latter can avoid the mistakes made by developed countries.

# <u>Thesis: Government should adopt a policy of greater free trade because of the negative impact of Protectionism</u>

## • Costs of Protectionism for the Consumers

- Lower consumption of goods and services.
- Higher price for goods and services.
- Lower consumer surplus.
- Complacency for firms → decrease competition → lower quality goods and services and higher prices

#### Costs of Protectionism for the Domestic Producers

- Potential complacency.
- Higher cost of imported factors of production.

## • Costs of Protectionism for the Government

- Might lead to macroeconomic problem of inflation.
- Might lead to trade disputes with other countries.

#### Costs of Protectionism for the Society as a Whole

 Deadweight loss incurred by society as societal welfare would be higher without trade barriers.

# Anti-Thesis: Government should NOT adopt a policy of greater free trade because of the negative impact of it

- Cheaper imports for domestic economy
  - Imports increases (more than exports increase)
  - Worsening of Balance of trade (or balance of payment) deficit
  - Might lead to fall in AD and negative economic growth and higher unemployment
- Higher chances of dumping
- Faster decline for Sunset Industry

# Anti-Thesis: Government should NOT adopt a policy of greater free trade because of the positive impact of Protectionism

#### Benefits of Protectionism for the Consumers

o Indirect impact on employment and national income

#### • Benefits of Protectionism for the Domestic Producers

- o Increase in demand for domestically produced goods and services.
- Higher price for goods and services.
- o Higher quantity of goods and services produced and sold.
- o Higher total revenue for domestic producers
- Higher producer surplus for domestic producers

#### • Benefits of Protectionism for the Government

- The government receives as tariff revenue the amount paid by the consumers for the imported quantity.
- Achieve macroeconomic goals of more favourable BOP, economic growth, reduction in unemployment

## **Conclusion and Justification**

<u>Final stand:</u> Government **should / should not** follow China's footsteps in adopting a policy of greater free trade

## **Evaluation:**

- Depending on the nature economy
  - Current state
  - o Aims
  - Relationship to China and US
- Long term or short term impact of decision
- Impact on various stakeholders
- Trend of globalisation

Level	Knowledge, Understanding, Application and Analysis				
L3	Good two-sided explanation with clear use of economic analysis on whether				
(8-10)	other governments should follow China's footsteps in adopting a policy of				
	greater free trade with focus on at least 3 of the various government aims				
	Good two-sided explanation with clear use of economic analysis on whether				
	other governments should follow China's footsteps in adopting a policy of				
1.0	greater free trade with focus on only 2 of the various government aims				
L2	Pagin two gided explanation with alcor upo of economic analysis on whether				
(5-7)	Basic two-sided explanation with clear use of economic analysis on whether other governments should follow China's footsteps in adopting a policy of				
	greater free trade.				
	greater free trade.				
	Good one-sided explanation with clear use of economic analysis on whether				
	other governments should follow China's footsteps in adopting a policy of				
	greater free trade on at least 2 of the various government aims (max 5)				
L1	One sided engages				
(1-4)	One sided answers.				
(1-4)					
E3					
(4-5)	For an evaluation with justification using economic analysis				
E2					
(2-3)	For an evaluation with basic justification				
E1	Fan an unavalained avaluation				
(1)	For an unexplained evaluation				