ST ANDREW'S JUNIOR COLLEGE
PRELIMINARY EXAMINATIONS – 2013
General Certificate of Education Advanced Level
Higher 1

Suggested Answers and Mark Schemes

ECONOMICS

8819/01

Paper 1

29 August 2013

3 hours

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.

Section A
Answer **all** questions.

Section B
Answer **one** question.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **30** printed pages.

Section A

Answer **all** questions in this section.

Question 1 Chocolate and Soda – Love them, Hate them

Extract 1: Higher Chocolate Prices May Follow Africa's Cocoa Shortfall

Villagers in West Africa, which produces 70 percent of the world's cocoa, are abandoning the crop because its price is volatile, farms are too small to be economical, yields haven't risen for decades, and alternative crops such as rubber are more lucrative. "They produce half a ton per hectare of cocoa, and it has been that way forever. All major agricultural products have improved their yields by a factor of 5 to 10 in the last 50 years, and cocoa hasn't," says Barry Parkin, the head of global procurement and sustainability at Mars, whose products include M&M's, the best-selling chocolate candy in the U.S. He reckons that demand will outpace production by 1 million tons by the end of the decade.

To deal with more frequent cocoa shortages, confectioners have been shrinking the size of chocolate bars, adding more air bubbles to chocolate, or simply substituting more vegetable oil for cocoa butter. They also can pull from global stockpiles, which stood at 1.8 million metric tons as of Sept. 30, according to the International Cocoa Organization. But experts say it will be tougher to cope beyond 2020 without improved production.

Source: Bloomberg Business Week, 7 February, 2013

Extract 2: **Tax chocolate to beat obesity, say doctors**

Chocoholics face a fight with doctors who want to slam heavy taxes on their favourite treat. Doctors say too much chocolate makes them fat and it should be priced up – like alcohol and tobacco – so they buy less.

Nutritionist Dr David Walker yesterday claimed chocolate is a big factor in the obesity epidemic and the explosion of conditions such as Type 2 diabetes. "I see chocolate as a major player in this and the related medical conditions and I think a tax on products containing chocolate could make a real difference."

But the sweet-toothed masses and industry chiefs branded the idea unfair and stupid. Julian Hunt, of the Food and Drink Federation, declared: "Taxes on foods that consumers love would result only in lighter wallets, not smaller waists. We already have to pay VAT on all our chocolates. While good for grabbing headlines, there is no evidence to suggest such 'fat taxes' would work in reality. Such a tax won't make people lose weight, it will just make them spend more money."

"Education and information are needed to help make the right food choices and people should be encouraged to increase physical activity."

Source: Mirror News, Mar 13, 2009

Extract 3: Chocolate bars to be made smaller in Government anti-obesity drive

The Government is set to order manufacturers to shrink the size of chocolate bars and fizzy drinks. The Health Secretary will tell firms such as Mars, Coca-Cola and Nestlé that smaller versions of their products should be available in all garages and corner shops to help stop people piling on weight. He will also say small packs of dried fruit, nuts and fresh fruit should be widely available at places where people buy on impulse and warn that sugar levels must be cut in all products.

The obesity drive is part of the Change4 Life campaign and could lead to tougher regulation if the warnings go unheeded. The Government believes businesses can create a new world leading 'healthy market' to help drive down obesity.

Source: The Daily Mail, 5 February 2009

Extract 4: Chocolate price hikes won't put off consumers, predict analysts

Confectioners will probably get away with increasing prices on chocolate bars without significantly denting demand because they are generally low ticket items bought as treats in an area with high brand loyalty, analysts have predicted.

Everybody is raising prices in this industry right now; the million dollar question is to what extent retailers will absorb rises or pass them on to the consumer. The consumer will ultimately decide whether he will pay. But while 10 percent is a pretty hefty and aggressive increase, they will probably get away with it.

Source: http://www.foodnavigator-usa.com, 4 Apr 2011

Extract 5: The Battle Over Taxing Soda

This soda debate is probably going to be around for some time. Cities and counties, desperate to find money to pay for schools and roads, are starting to see a soda tax as a way to raise revenue. The tax also appears to be one of the most promising ways to attack obesity, given the huge role sugary drinks play in the epidemic.

The argument for a soda tax is the same as the argument for a tax on tobacco or pollution. When an activity imposes costs on society, economists have long said that the activity should be taxed. Doing so accomplishes two goals: it discourages the activity, and it raises money to help pay society’s costs.

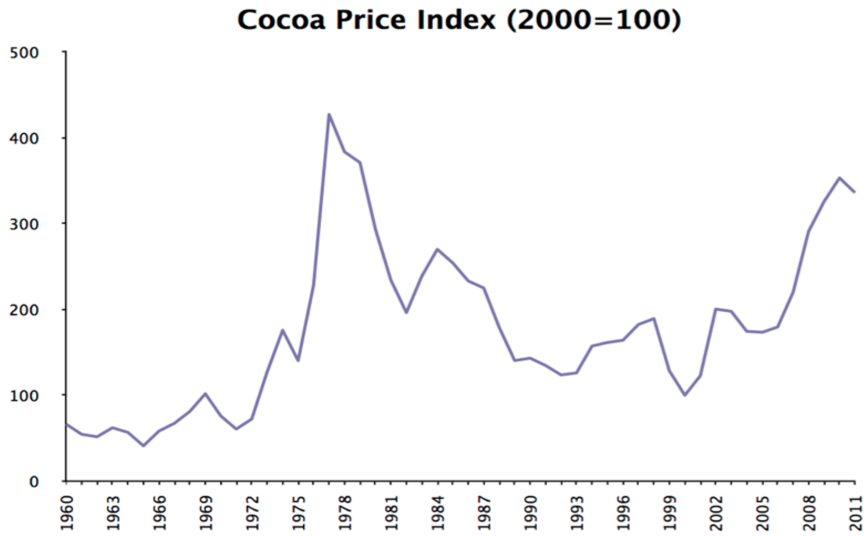
In the case of soda, those costs come in the form of medical bills for diabetes, heart disease and other side effects of obesity. We’re all paying these bills, via Medicare, Medicaid and private insurance premiums. Obesity has become a significant cause of our swelling long-term budget deficit.

However, small tax changes don’t always change behavior, as a recent study by the RAND Corporation found. So a small soda tax could actually have a worse impact on some families’ budgets than a substantial one — by raising the price of soda without affecting consumption.

Such a tax would certainly raise the cost of living for some heavy soda drinkers, just as cigarette taxes have stretched the budgets of some smokers and mandatory seat belts have added costs to car production. But consider the benefits from those other public health initiatives. They have vastly outweighed the costs.

Source: The New York Times, 19 May 2010

Figure 1: Cocoa Prices (1960 – 2011)



Source: UNCTAD

Questions

(a) **(i)** Describe the trend in the price of cocoa from 1990 onwards. [2]

(ii) Explain how the above trend can affect the market for chocolate candy bars. [2]

(b) Explain the impact of the following on the market for cocoa:

(i) a more lucrative rubber production; [1]

(ii) the greater availability of "small packs of dried fruit, nuts and fresh fruit". [3]

(c) Is the information in Extract 1 sufficient to suggest that West African countries have a comparative advantage in the production of cocoa? Explain your answer. [4]

(d) **(i)** Do you agree that government should intervene in the market for chocolate and soda? Justify your answer. [6]

(ii) With reference to relevant case material, discuss the factors that the government needs to take into consideration when intervening in the market for goods like chocolate and soda. [12]

[Total: 30]

Question 2 Eurozone Crisis – Within and Beyond

Table 1: Budget Position as a percentage of GDP

	2010	2011	2012
India	-7.3	-7.8	-8.4
Spain	-9.7	-9.4	-10.6
Germany	-4.2	-0.8	0.2
Greece	-10.8	-9.6	-6.9
UK	-10.0	-7.9	-6.5
Singapore	7.7	9.5	2.0
China	-0.7	0.1	-2.0

Adapted from OECD Economic Outlook No. 92 as of December 2012

Table 2: GDP figures (US$ billions)

	2010	2011	2012
India	1,710	1,842	1,872
Spain	1,380	1,476	1,349
Germany	3,284	3,600	3,400
Greece	292	289	245
UK	2,256	2,444	2,435
Singapore	217	245	254
China	5,930	7,321	8,227

Source: data.worldbank.org

Table 3: Human Development Index

	2010	2011	2012
India	0.547	0.551	0.554
Spain	0.884	0.885	0.885
Germany	0.916	0.919	0.920
Greece	0.866	0.862	0.860
UK	0.874	0.875	0.875
Singapore	0.892	0.894	0.895
China	0.689	0.695	0.699

Source: hdr.undp.org

Extract 6: Eurozone's Second Crisis: Inflation At Six Month High

As if the recession is not bad enough, the Eurozone is hit with another crisis.

According to Eurostat, prices in the Eurozone were 2.7 per cent higher in September 2012 compared with the year before, and up from the previous month's 2.6 per cent rate. Eurostat did not provide any reasons for the increase as the figure was only a preliminary estimate, although higher energy costs are likely to blame. Economists believe that a sales tax in Spain could have also contributed to the increase.

The increase will likely prove to be another headache for European Central Bank (ECB) rate setters in the run up to their next policy meeting. The ECB has had to contend with a faltering eurozone economy and turbulent financial markets in trying to stick to its mandate of keeping inflation just below two per cent.

Six Eurozone economies[1] are in recession and more are expected to follow in coming months. The Eurozone economy has struggled recently as the region's debt crisis has knocked investor and consumer confidence and caused governments to introduce tough austerity measures.

[1] France, Italy, Spain, Finland, Portugal, Cyprus

Many believe that quantitative easing measures would help the Eurozone economy pick up. Usually, central banks try to raise the amount of lending and activity in the economy indirectly, by cutting interest rates. But when interest rates can go no lower, a central bank's only option is to pump money into the economy directly. The central bank does this is by buying assets - usually government bonds. The institutions selling those bonds will then have "new" money in their accounts, which then boosts the money supply.

A number of economists forecast another interest rate cut this year from the current record low of 0.75 per cent. “We continue to see the ECB leaving policy rates unchanged at next week’s meeting – a view that is (at the margin) reinforced by this latest increase in inflation,” said James Ashley, an economist at RBC Capital Markets.

Adapted from European Business News Portal, 2012

Extract 7: Living beyond our means

The UK and US’s governments face a conundrum. To achieve economic recovery, aggregate demand needs to expand. But the government is introducing tough austerity measures to reduce the size of the public-sector deficit and debt; exports are being held back by the slow recovery, or even return to recession, in the Eurozone and the USA; and investment is being dampened by business pessimism. For recovery, High Street spending needs to rise.

But herein lies the dilemma. For consumer spending to rise, people need to save less and/or borrow more. But UK and US saving rates are already much lower than in many other countries. Also, household debt is much higher in the UK and USA. This has been largely the result of the ready availability of credit through credit cards and other means. The government is keen to encourage people to save more and to reduce their reliance on debt – in other words, to start paying off their credit-card and other debt. But this will hardly help recovery.

Adapted from John Sloman, Economics

Extract 8: Going beyond the Eurozone

The outcome has been as expected: Two years into the crisis, at the mid-year mark in 2012, Europe is indeed in deep denial and recession, and uncertainty looms large in both its policy spheres and decision-making ability.

In Asia, especially China has been impacted only modestly by the slowdown, and is now positioned to begin a consolidated phase of growth leadership in Asia. Singapore, Hong Kong and Taiwan – the region’s most open or export-dependent economies – are likely to take the biggest economic hit and India's foreign trade account is hovering around a negative $10 billion per month. Foreign indirect investment flows do appear to have come down near term, due to the widely predicted monetary tightening performance during this period has been mixed.

Adapted from The Wall Street Journal, 2012

Extract 9: How can the world move forward?

The European Central Bank is banking on the lowering of interest rates and introduces a programme of quantitative easing.

This plan may help some states but will, of course, be terrible for Germany. Unlike the rest, Germany’s economy has resurged thanks to its incredible competitiveness – Germany now runs a bigger external surplus than China. The loose monetary policy would save Italy, but the bulk of the inflation would be in Germany, where there is no spare capacity. German exports would decline and the businesses that produce them would lose out and have to sack workers.

But for Europe overall, that is ideal. Indebted countries like Greece, Italy and Spain and even the UK, need to export their way back to prosperity. For this to happen, Germany needs to start importing. The easiest way to achieve that is to make German goods more expensive – exactly what a big dose of inflation would do.

The Asian countries have their own battle at home to fight with in light of the rampant food and energy shortages. Central banks of these market countries need to determine how fast they will tighten monetary policy. In Asia, authorities have lifted interest rates to slow double-digit inflation, reduce credit growth and narrow the trade deficit. On top of that, this crisis has amplified the need for Asia countries to look beyond reliance on the Western markets for trade.

Adapted from Telegraph.co.uk, 2012

Questions

(a) **(i)** Compare the budget position as a percentage of GDP of India with that of Greece from 2010 to 2012. [2]

(ii) With reference to Table 2, how might the observation in **(a) (i)** explain the changes in national income in India and Greece? [3]

(b) Using AD-AS analysis, explain how the Eurozone can suffer from a recession and yet still face inflation as seen in Extract 6. [3]

(c) With reference to Extract 7, explain the possible factors that may hinder economic recovery in the UK and the US. [4]

(d) Discuss how the living standards in Asian economies could be affected by the Eurozone Crisis. [8]

(e) Assess the appropriateness of the policy options adopted by the European Central Bank and the Asian economies in solving the macroeconomic problems they are facing. [10]

[Total: 30]

Section B

Answer **one** question from this section.

3 The use of e-cigarettes, a battery-powered device that provides inhaled doses of nicotine vapour and flavorings, has been growing rapidly. This comes at a time where the Australian government announced a 60 per cent increase in tobacco taxes over the next four years, dealing another blow to cigarette manufacturers.

Adapted from *Yahoo News*, 1 August 2013

(a) Explain how the increasing use of e-cigarettes and a rise in tobacco tax affect the market for cigarettes. [10]

(b) Assess the degree to which the above measures are able to improve welfare of a society. [15]

4 **(a)** Explain the possible causes of unemployment in an economy. [10]

(b) Comment on the view that globalisation has increased employment opportunities in developing countries more than in developed countries. [15]

~ End ~

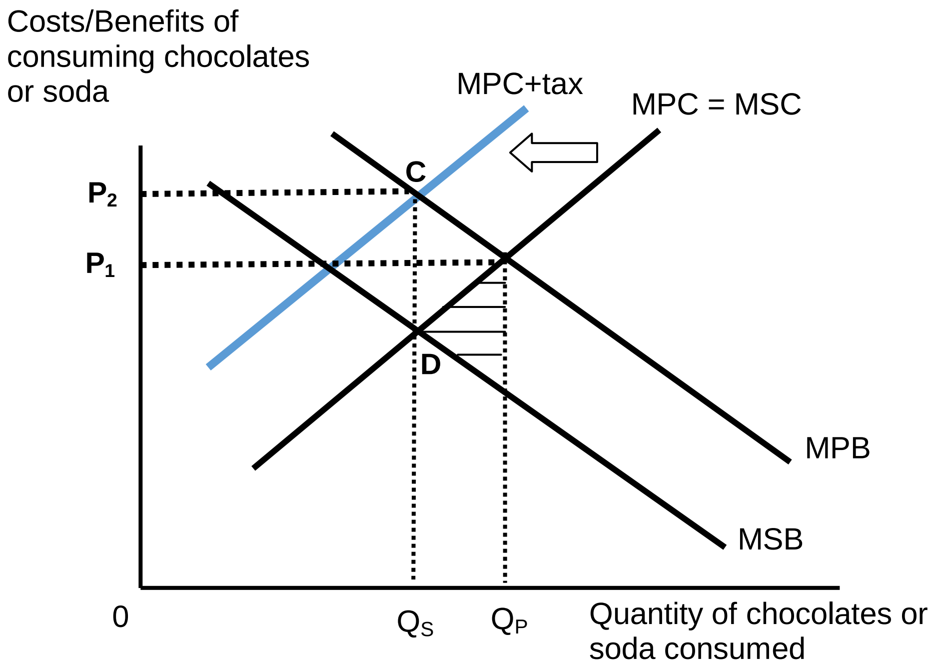
Suggested Answers

Question 1: Chocolate and Soda – Love them, Hate them

(a)	**(i)**	**Describe the trend in the price of cocoa from 1990 onwards.**	**[2]**
		There was an increasing trend in the price of cocoa from 1990 onwards. [1] The rate of increase was increasing **<u>or</u>** the largest/sharpest increase was from 2005 to 2011 **<u>or</u>** there was a sudden dip in prices in 2000. [1]	
	(ii)	**Explain how the above trend can affect the market for chocolate candy bars.**	**[2]**
		Chocolate candy bars require cocoa as a factor of production, hence when the price of cocoa increases, the cost of producing chocolate candy bars increases. - 1 mark for "cost of production increases". This will decrease the supply of chocolate candy bars and result in an increase in the price and a decrease in the equilibrium quantity of chocolate candy bars. - 1 mark for "decrease in supply" **<u>and</u>** "increase in the equilibrium price" **<u>and</u>** "decrease in the equilibrium quantity".	
(b)	**Explain the impact of the following on the market for cocoa:**		
	(i)	**a more lucrative rubber production;**	**[1]**
		A more lucrative rubber production will mean that producers will substitute rubber for cocoa and this results in a decrease in the supply of cocoa and an increase in price of cocoa (1 mark for "competitive supply" **<u>and</u>** "fall in supply" **<u>and</u>** "an increase in the equilibrium price" **<u>and</u>** "a decrease in the equilibrium quantity").	
	(ii)	**the greater availability of "small packs of dried fruit, nuts and fresh fruit".**	**[3]**
		Small packs of dried fruit, nuts and fresh fruit are seen as substitutes of chocolate and hence, the demand for chocolate candy bars will decrease (1 mark for "substitute"). Since cocoa is a factor of production of chocolate candy bars, a decrease in the demand for chocolate will decrease the demand for cocoa (1 mark for "factor of production" **<u>or</u>** "derived demand"). As the demand for cocoa falls, price and quantity of cocoa decreases (1 mark for "equilibrium price decrease" **<u>and</u>** "equilibrium quantity decrease").	

(c)	**Is the information in Extract 1 sufficient to suggest that West African countries have a comparative advantage in the production of cocoa? Explain your answer.**		**[4]**
		Theory of comparative advantage states that of two countries, specialisation and trade can benefit both countries if each country has a comparative advantage or a lower opportunity cost in producing one good over the other country. Lower opportunity costs can be due to availability of factor endowments (1 mark for definition). Extract 1 seems to suggest that cocoa is an agriculture product that is produced by West African countries as 70% of the world's cocoa is produced there. In this case, agriculture can be produced at a lower opportunity cost by West African countries if the factor endowment, such as availability of farmland or large amount of low skilled workers, is widely available (70% of the world's cocoa suggests that West Africa has comparative advantage - 1 mark). However, to explain why West African countries have a comparative advantage, there is a need for more information about their factor endowment (e.g. large acres of farmland to produce cocoa or low cost / unskilled labour). The large quantity of exports could also be due to other reasons such as government intervention by giving out subsidies to boost production, which in this case is not given in the extract (2 marks for lack of information and government intervention).	
(d)	**(i)**	**Do you agree that government should intervene in the market for chocolate and soda? Justify your answer.**	**[6]**
		<u>Introduction</u> Market failure is defined as the misallocation of resources in the free market without government intervention such that maximum social welfare is not attained. Demerit goods are goods deemed undesirable by the government and over-consumed. It will also result in external cost incurred by third parties not involved in consumption of the good. Hence government intervention in this case would be to reduce the consumption of chocolate or soda to increase society's welfare. Doctors claim that chocolate is a big factor in the obesity epidemic and the explosion of conditions such as Type 2 diabetes (Extract 2 paragraph 2). This may also increase the medical cost incurred by society as patients and their families' outlay on medical bills rise to treat such illnesses. Such medical condition that harms individuals suggests that chocolates or soda are considered demerit goods that generate negative externalities (e.g. medical cost that have to be paid for by other family members or society). If individuals only consider their net private benefit, they would consume chocolates or soda at Qp in the diagram below, where MPB=MPC. However, this level of consumption exceeds the socially optimal level at Qs, where	

society's welfare is maximised. Hence the government should intervene to bring about a more socially optimal level of consumption at Qs.



However, government intervention may not be justifiable if it results in a loss of welfare to the society. If the policies implemented results in lower welfare to the in terms of lower net benefits (benefit – cost), then society is better off without government intervention.

Level (Marks)	Knowledge, Application, Understanding and Analysis
L3 (5 – 6)	Developed explanation and evaluation of how government intervention is justified or not justified. Both sides of the argument are sufficiently presented. Evaluation clearly show the understanding that whether justifiable or not depends on various factors.
L2 (3 – 4)	Developed explanation of how government intervention is justified or not justified. Both sides of the argument are sufficiently presented. Definitions or concepts are incomplete or lacking although the general understanding that chocolates are deemed to be demerit goods is clearly stated. Answers focused on negative externalities without mentioning demerit goods (max 4 marks)
L1 (1 – 2)	Smattering of valid points without a clear structure. I.e. undeveloped explanation of how government intervention is justified or answers are one-sided or lack economic analysis.

	(ii)	**With reference to relevant case material, discuss the factors that the government needs to take into consideration when intervening in the market for goods like chocolate and soda.**	**[12]**

Introduction

The government needs to reduce the consumption of chocolate and soda due to these goods being deemed as demerit goods that generate negative externalities so as to maximise social welfare. Government intervention can take the form of taxes and education (Extract 2) or reducing the size of chocolate bars (Extract 3).

However, whether or not the intervention should be undertaken depends on the consideration of various factors.

Body

① Government budget

The government may not have sufficient budget to increase spending on educating the public on the ills of consuming chocolate or soda. Hence a tax is used instead as it also raises tax revenue for the government. Such revenue can also be used to pay for the cost of the medical bills of diabetes patients in the lower income groups. As mentioned, obesity has become a significant cause of the swelling long-term budget deficit, hence, the choice of the policy could hinge upon whether the policy worsens the budget balance or not.

② Elasticity

As mentioned in Extract 2, taxes on food that consumers love 'would result only in lighter wallets, not smaller waists'. The impact of a small tax increase will have a minimal impact on consumption. This is because the demand for chocolates and soda is price inelastic where a price increase would cause a less than proportionate decrease in the quantity demanded. Hence, such a policy would have limited effect on the reduction of consumption of chocolate and soda. As mentioned in Extract 2, education and information are needed so as to enable consumers to make the right decisions. Therefore, information of how chocolates and soda can cause diabetes or obesity would be better suited to reducing consumption than a tax.

③ Effects on cost of living

An increase in tax may cause an increase in the cost of living for heavy soda drinkers due to the elasticity reason above. Hence, it may add to the cost of living of consumers in the country where the tax is implemented. As such a measure would reduce quantity consumed proportionately less than the increase in price, it adds to the cost of living of families. Examples of such goods are tax on cigarettes and mandatory seat belts where it adds to the cost of consuming such goods. Hence it adds to the expenditure and stretches the budgets of these families.

Conclusion/Evaluation

Whether or not the government chooses to implement a particular policy should depend on whether the society's welfare will increase after its implementation. If the policy adds more cost to society than benefits, then it should not be implemented. For instance, when a tax is implemented, the cost of implementing the policy could be rather large (e.g. tax that results in higher prices and higher cost of living) while the benefits (e.g. reduction in consumption of demerit goods), are small. Hence policies should be considered based on their net benefits (benefit minus cost) to society instead of only benefits (of reducing quantity of demerit goods).

Similarly, whether or not the policies are implemented could be dependent on the accuracy of the data collected. For instance, if the data collected for a particular policy is more accurate than another policy, then the policy should be implemented as the government is more assured of the benefits due to the accuracy of the information.

Level (Marks)	Knowledge, Application, Understanding and Analysis
L3 (6 – 8)	Well-developed explanation and discussion of the factors that the government needs to take into consideration before deciding which policy to take. Justification could take into account the context of the country involved, the government's budget conditions, the well-being of the people of the country, etc.
L2 (4 – 5)	Developed explanation of the factors that the government needs to take into consideration. But such explanation may lack substantial economic analysis or substantial development.
L1 (1 – 3)	Smattering of valid points without a clear justification based on the factors that affect government's decision. Mainly explained the different types of government intervention without focus on the factors. Only consider the effects of policies. A maximum of 1 factor.
E2 (3 – 4)	Able to give a well justified opinion on the factors that affect government's decision on the appropriate measures used.
E1 (1 – 2)	Assessment given but not substantiated.

Question 2 Eurozone Crisis – Within and Beyond

(a) (i) Compare the budget position as a percentage of GDP of India with that of Greece from 2010 to 2012. **[2]**

	2010	**2011**	**2012**
India	-7.3	-7.8	-8.4
Greece	-10.8	-9.6	-6.9

Similarity: from 2010 – 2012, both India and Greece suffered from a budget deficit. [1]

Difference: Greece had a falling budget deficit as a percentage of GDP while India suffered from a rising budget deficit. [1]

(ii) With reference to Table 2, how might the observation in (a) (i) explain the changes in national income in India and Greece? **[3]**

Pointing out the changes in NY in both India & Greece [1]
India enjoyed a rise in NY while Greece suffered from a fall in NY.

Linking the observation in ***(a) (i)*** *to the change in NY for both India and Greece:*
Greece's falling budget deficit could possibly imply that the government may have been adopting a contractionary fiscal policy or austerity measures. The fall in government expenditure and/or a rise in tax revenue would thus result in a fall in NY, hence accounting for the falling NY. [1]

On the other hand, India's rising budget deficit could possibly imply that Indian government may have been adopting an expansionary fiscal policy, to raise government expenditure or reduce taxes, hence accounting for the rising NY. [1]

(b) Using AD-AS analysis, explain how the Eurozone can suffer from a recession and yet still face inflation as seen in Extract 6. **[3]**

Inflation – GPL is still rising.

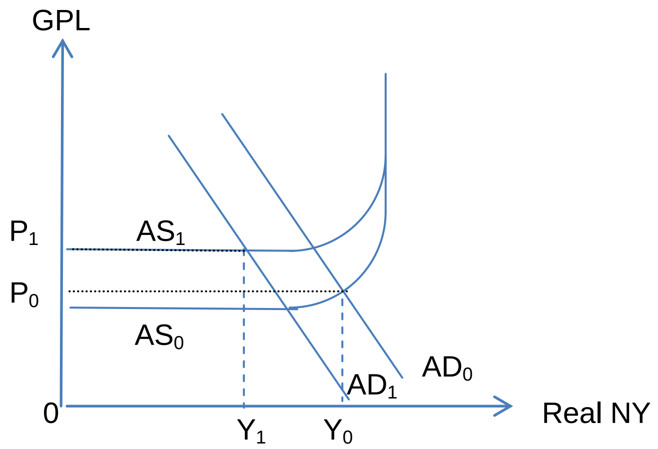
↓C and ↓I in Eurozone due to pessimism → ↓AD
It is also coupled with ↑ in higher energy costs → ↑COP → ↓ in SRAS

OR

Sales tax (e.g. on intermediate goods and services) will also ↑ COP → cause a further ↓ in SRAS.

Students need to point out both changes in AD & AS to show resultant rise in price level, hence Eurozone can suffer from a recession and still face the problem of inflation.

DD reason, SS reason & reflecting rise in price level and fall in output on diagram. If no diagram is drawn, clear explanation on why there is a rise in price and fall in output is expected.

	 [**Note**: AD/AS diagram is not required.]	
(c)	**With reference to Extract 7, explain the possible factors that may hinder economic recovery in UK and US.** Any 2 factors. 2m to be awarded for clear explanation for each factor. In order to achieve economic recovery, AD needs to ↑ (as stated in Extract 7) • However tough austerity measures to reduce budget deficit by ↓G and/or ↑T → would instead result in a fall in AD instead, hence hindering economic recovery. • High existing household debts – C cannot increase significantly especially when the UK and the US rely on domestic markets to stimulate growth. Income earned could have been used to repay debts, hence hindering economic recovery. • Business pessimism → expectation of rate of return is low → MEI shifts to the left → at every interest rate, firms choose to ↓ I, minimal rise in AD, assuming ceteris paribus, hence hinder economic recovery.	**[4]**

(d)	**Discuss how the living standards in Asian economies could be affected by the Eurozone Crisis.**	**[8]**

SOL – students need to explain impact on material and non-material SOL & positive and negative impact on **ASIAN** countries and making reference to CS evidence/data.

<u>Impact may be negative:</u>
Explain why the impact may be negative: Eurozone Crisis could have caused a fall in material SOL in Asian countries.

<u>Students should make reference to data in Extract 8:</u>
Eurozone Crisis:
→ countries like Spain, Greece, UK all suffered negative growth rates. Fall in GDP would reduce countries' ability to purchase from Asian countries.

→ Countries like India, Hong Kong, Taiwan and Singapore will suffer a fall in X revenue, fall in AD, assuming ceteris paribus, fall in countries' NY.

→ fall in ability of residents in Asian countries to purchase more goods and services → fall in material SOL.

<u>Impact may not be negative:</u>
Not all countries are negatively hit by the fall in national income (for material SOL).

Some countries like China, as Extract 8 points out, may only have been modestly affected by the Eurozone Crisis. This could be due to China's ability to rely on her domestic sources of growth instead of exports to EU. Hence the fall in NY may only be very small and temporal. Overall material SOL may not have fallen.

Non-material SOL
Based on HDI statistics (which measure life expectancy, education and income indices) → the Asian countries reflect rising figures.

	2010	2011	2012
India	0.547	0.551	0.554
Singapore	0.892	0.894	0.895
China	0.689	0.695	0.699

Explain how life expectancy and education indicates the non-material SOL of Asian countries.

<u>Evaluation:</u>
Make a stand about overall impact on SOL. Overall SOL is still rising for both material & non-material. Evidence from case: Table 2 shows that Asian countries may not be as negatively affected as explained, as NY figures are still rising & HDI statistics also reflect a rise.

Hence how negative the impact of the Eurozone on Asia's countries' SOL depends on how reliant the country may be on exports to Eurozone and if the country has alternative sources of growth it can turn to (diversification of other trading partners).

	OR Point out what other pieces of data would be needed in order to more holistically deduce about SOL in Asian countries.	

Level (Marks)	Knowledge, Application, Understanding and Analysis
L3 (5 – 6)	For a well-elaborated answer using information from the case study. Answer elaborates on how Eurozone Crisis may have a positive and negative impact on both material and non-material SOL for Asian countries.
L2 (3 – 4)	For one-sided answer (positive or negative, material or non-material SOL) on how the Eurozone Crisis could have an impact on material and non-material SOL. Undeveloped answer with gaps in economic analysis.
L1 (1 – 2)	Serious conceptual errors evident or answer is irrelevant and does not answer the question. Answer is a smattering of points without any obvious or strong attempt in referring to the extracts.
E1 (1 – 2)	Making a judgement – the severity of the impact depends on how close the trading relationship is between Eurozone countries and specific Asian countries.

(e) Assess the appropriateness of the policy options adopted by the European Central Bank and the Asian economies in solving the macroeconomic problems they are facing. **[10]**

<u>Macroeconomic Problems identified</u>:

(1) Persistent budget deficit though it is decreasing.
(2) Recession
(3) Inflation (Eurozone – cost-push inflation; Asia – demand-pull inflation & cost-push inflation)
(4) Current Account deficit (in Greece, Italy and Spain)

Students can bring in any 2 PROBLEMS & 2 policies (for ECB & Asia) to address. Students can combine similar problems between the countries e.g.: Inflation & recession

<u>European Central Bank</u>

Policies adopted: ↓ i/r + quantitative easing

- ➔ ↓i/r ➔ COB↓ ➔ ↑C & ↑I ➔ ↑AD ➔ ↑NY ➔ achieving actual economic growth
- ➔ Quantitative easing [Extract 6] ➔ ↑Ms ➔ ↑C & ↑I ➔ ↑AD ➔ ↑NY

<u>Policy has been appropriate given the current situation</u>:

- ➔ Explain how the policy can work to solve the problem, hence the policy is appropriate given the current situation.
- ➔ Evidence from case: 'The loose monetary policy would save Italy' [Extract 8], hence justifying that the policy has been appropriate since it is anticipated to effectively solve the problem in Europe.

- ➔ Moreover, when Germany started importing as given in Extract 9 → assuming Germany imported more goods and services from other states in Eurozone → X revenue rose in Greece, Spain, Italy, assuming ceteris paribus → ↑AD → ↑NY

- ➔ Alternatively, fall in interest rates → capital flight of hot money → depreciation of currency → exports become more competitive in foreign markets and imports become less competitive domestically → ↑AD → ↑NY

<u>Policy may not be appropriate</u>:

- ➔ If more money in circulation but no ↑in output → might result in worsening of inflation and Europe is suffering from cost-push inflation.

- ➔ Conflict of policies – Quantitative easing supposedly to ↑ NY but due to business pessimism, I will not rise sufficiently to solve the problem (I is interest inelastic). Policy is inappropriate to solve the problem.

- ➔ Eurozone faced different economic problems as evidence from Extract 9 when Germany experienced BOP surplus while other states of Europe needed to "export its way back to success" → however ECB adopted the same policy, which may not have been appropriate to all states.

<u>Asian Economies</u>

Problems Identified: Cost-push inflation due to food and energy shortages (Extract 9) + trade deficit due to their trading partners in the West suffering (Extract 7).

Policies adopted:

1) Tighten monetary policy (↓Ms or ↓credit)
2) Trade policies

- ➔ ↓Ms → ↑i/r → ↑COB → ↓C & ↓I → ↓AD → ↓DD-pull inflation
- ➔ ↓credit growth → ↓M / ↓C → ↓trade deficit /↓C → ↓DD-pull inflation
- ➔ Signing of more FTAs beyond Western markets → tap on the growth of other countries & reduce reliant on Western markets for growth & diversify risk.

<u>Policy has been appropriate given the current situation</u>:

- ➔ *In Asia, the economy has been impacted only modestly by the slowdown, and is now positioned to begin a consolidated phase of growth leadership in Asia [Extract 8].* Reiterates that policy has been appropriate and effective to address the problems, as the economy has only been impacted modestly.

<u>Policy may not be appropriate</u>:

- ➔ 'Singapore, Hong Kong and Taiwan – the region's most open or export-dependent economies – are likely to take the biggest economic hit and India's foreign trade account is hovering around a negative $10 billion per month' [Extract 8]. Despite the use of policies, given the severity of the impact and how reliant these countries are on exports, the policy may not solve the problem.

- ➔ 'Foreign indirect investment flows do appear to have come down near term, due to the widely predicted monetary tightening performance during this period has been mixed' [Extract 8]. Due to pessimism/poor investor confidence, policy will not be appropriate to revive the situation in Asia.

Evaluation:
Whether the policies adopted by ECB and Asian government are appropriate depend on the root cause of the problems as well as the country implementing it. Due to the limitations of the Eurozone needing to adopt a common policy, they are unable to tackle different economic problems faced by the respective countries. Blanket measures might not be suitable or could possibly even worsen the problem of another country.

In Asia, if rampant food and energy prices are mainly due to imported cost-push inflation, the policies of tightening money supply would serve to reduce demand-pull inflation but limited in its appropriateness in tackling the root cause of the problem. In that case, an appreciation of her exchange rate might be more appropriate in reducing the inflation instead.

Level (Marks)	Knowledge, Application, Understanding and Analysis
L3 (7 – 8)	Thorough analysis using appropriate economic analysis (AD/AS framework) is evident throughout the answer. Clear scoping of answer to identify the problems in the countries before moving on to examine the policies. Clear link between problems and policies. Well-elaborated answer on how the policies suggested by ECB and the Asian economies could be adopted or are relevant in solving the identified problems. (1 problem & 1 measure to be discussed and analysed – for ECB & Asian govt)
L2 (4 – 6)	Attempt to respond to the question is evident though not consistently done. Undeveloped answer and lack economic analysis (AD/AS framework) on how the policies suggested by ECB and the Asian economies could be adopted or are relevant in solving the identified problems.
L1 (1 – 3)	Smattering of points. For an answer that shows very weak understanding of the policies and how these policies can affect the problems mentioned. No reference to CSQ evidence.
E2 (2)	Evaluation is thorough and based on economic analysis. Ability to recognise that there is a need to consider the cause of the problem and country's unique characteristics before deducing its appropriateness.
E1 (1)	For unexplained evaluative comments. Mere listing of stand / weak evaluative comments.

[Total: 30]

3(a) Explain how the increasing use of e-cigarettes and a rise in tobacco tax affects the market for cigarettes. [10]

<u>Introduction</u>

- The interactions of demand and supply determine the equilibrium price and quantity in a market.
- Hence, a given change in demand and/or supply of cigarettes would affect the equilibrium price and quantity of cigarettes bought and sold in the market.

<u>Body</u>

1. Increasing use of e-cigarettes

- E-cigarettes are substitutes for cigarettes as the consumption of either fulfills the same need/want.
- Assuming that consumer consume either traditional cigarettes or e-cigarettes, the increasing use of e-cigarettes could imply that demand for e-cigarettes has increased and may mean a fall in demand for cigarettes.

2. Rise in tobacco tax

- A rise in tobacco tax would cause an increase in cost of production for cigarette manufacturers, as tobacco, being a factor of production for cigarettes, costs more than before.
- An increase in cost of production would cause a fall in the supply of cigarettes.

Combining the two factors:

- With a fall in demand for cigarettes and a lower quantity of cigarettes being supplied at each price, equilibrium quantity of cigarettes transacted will fall.
- The outcome on equilibrium price of cigarettes can be determined by the magnitude of the fall in demand for and supply of cigarettes.
    - Case #1:
      If the fall in demand were greater than the fall in supply, there would be a fall in the equilibrium price of cigarettes.
    - Case #2:
      If the fall in demand were less than the fall in supply, there would be a rise in the equilibrium price of cigarettes.
    - Case #3:
      If the fall in demand were the same as the fall in supply, there would be no change in the equilibrium price of cigarettes.

<u>Note</u>: Candidates should explain at least <u>one</u> of the three cases, with the relevant justification of the <u>extent</u> of the fall in demand and supply of cigarettes. Workings of price mechanism to reach new equilibrium quantity and price are required.

<u>Conclusion</u>

Hence, the increasing use of e-cigarettes and a rise in tobacco tax would cause a fall in the equilibrium quantity and an indeterminate change in the equilibrium price of cigarettes.

Level (Marks)	Knowledge, Application, Understanding and Analysis
L3 (7 – 10)	A detailed and well-analysed answer which demonstrated good use of demand-supply analysis, justified considerations of the relative magnitude of demand and supply changes, and a clear explanation of the price mechanism in determining the outcome on equilibrium price and quantity in the market.
L2 (5 – 6)	An under-developed answer which shows some use of demand-supply analysis, with a fundamental understanding of the workings of the price mechanism in determining equilibrium price and/or quantity in the market. Responses are likely to consider the extent of change in demand and supply, but without justification.
L1 (1 – 4)	A largely descriptive response, with little use of demand-supply analysis and a weak explanation of the working of the price mechanism. Answer tends to contain conceptual errors and may not address the impact on both equilibrium price and quantity in the market.

3(b) Assess the degree to which the above measures are able to improve welfare of a society. [15]

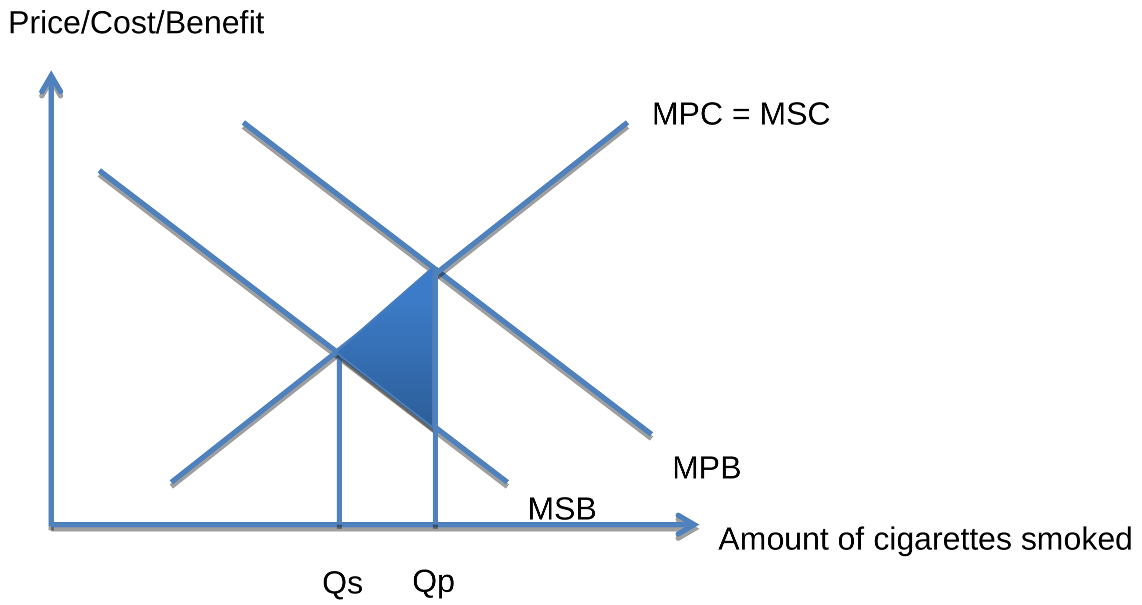
Introduction

- The market for cigarettes, deemed to be a demerit good, provides a case of market failure.
- Thus, with the existence of market failure, welfare of a society is not maximised.
- The degree of success of the above measures depends on certain factors such as degree of substitutability between e-cigarettes and conventional cigarettes and PED of cigarettes and availability/accuracy of information.

Body

Demerit goods as a source of market failure (briefly):

- The act of smoking results in a third party who is not involved in the economic transaction bearing an external cost. Such costs would not be taken into consideration by smokers in their decision on how many sticks of cigarettes to smoke per day. As the marginal social benefit is less than the marginal private benefit for each stick of cigarettes smoked, privately optimal (Qd = Qs, at market equilibrium output) amount of cigarettes smoked will be higher than that of the society (MSB = MSC). This thus leads to market failure – too much resources have been devoted to the production and hence consumption of cigarettes in the market.



The impact of e-cigarettes in improving welfare of a society:

- E-cigarettes do not burn and produce smoke. Hence, the external cost to third parties falls, causing a smaller divergence between MPB and MSB.
- Hence, this will bring Qp closer to Qs, thus reducing deadweight loss and improving welfare to society.

To assess the degree to which welfare of a society has been improved, we need to consider the degree of substitutability of e-cigarettes for traditional cigarettes.

- This will determine the extent to which the demand for cigarettes falls and therefore, the extent to which Qp moves closer to Qs.
- However, while there has been a rise in the use of e-cigarettes, the uptake of e-cigarettes may still be small as it is likely that they are not close substitutes to traditional cigarettes and smokers may still have a preference for traditional cigarettes instead, hence limiting the improvement in social welfare.

<u>The impact of a rise in tobacco tax in improving welfare of a society</u>:

- A rise in tobacco tax would cause an increase in cost of production for cigarette producers, thus shifting the MPC (supply) curve to the left.
- The new equilibrium (Qp_2) will now be nearer to Qs, hence decreasing the deadweight loss and improving welfare to society.

To assess the degree to which welfare of a society has been improved, we need to consider the price elasticity of demand (PED) of cigarettes.

- The rise in tobacco tax will only prove effective in improving society's welfare if demand for cigarettes is more price elastic.
- The resulting increase in price of cigarettes would cause a more than proportionate fall in quantity demanded for cigarettes. With a substantial fall in the sticks of cigarettes smoked, the external costs will also fall significantly, thereby reducing the deadweight loss incurred by the society.
- However, even with a rise in tobacco tax, given that smoking is a habitual good, demand for cigarettes is likely to be highly price inelastic. As such, given an increase in price of cigarettes, there would be a less than proportionate fall in quantity demanded for cigarettes. This would limit the effectiveness of the tax as it may only result in a slight improvement in welfare of society.

<u>Evaluation/Conclusion</u>

Combining the effects of the two measures,

SR: Unlikely to improve welfare of a society by much. While there has been increasing use of e-cigarettes in recent years, given that it is still a relatively new product in the market, it would take more time before we see a large uptake of e-cigarettes over the conventional cigarettes. Furthermore, in view of tobacco tax as a pre-existing policy and a highly price inelastic demand for cigarettes, a rise in tobacco tax may not be very effective in further reducing consumption of cigarettes.

LR: Given that the price elasticity of demand for cigarettes is not likely to change in the long term, e-cigarettes can be considered to be a more sustainable solution to improving society's welfare than tobacco taxes. Over time, smokers find e-cigarettes more acceptable (perhaps due to improvement in the design and quality of e-cigarettes, or receptiveness and attitude towards e-cigarettes), more smokers may switch to e-cigarettes and social welfare will improve more significantly.

All things being considered, the combined effect of two measures is a step in the right direction in improving welfare of a society. However, given that the market failure attached to smoking is likely to continue to exist, the government should continue to be open to different measures that can be implemented to continue improving welfare to society.

Level (Marks)	Knowledge, Application, Understanding and Analysis
L3 (9 – 11)	A thoroughly-analysed response which considered workings of each measure and the extent to which each is able to improve society's welfare through the use of cost-benefit analysis and other relevant economic concepts.
L2 (6 – 8)	An under-developed argument which showed a rudimentary understanding of the relevance of cost-benefit analysis in determining the degree to which welfare of a society can be improved. Answer tended to touch on some limitations of each measure, but with insufficient depth.
L1 (1 – 5)	A largely theoretical answer which appeared largely descriptive and demonstrates little understanding of the use of cost-benefit analysis and/or consideration of the strengths and weakness of the two measures can improve welfare to a society.
E2 (3 – 4)	For a critically analysed judgement with the relevant economic substantiation of the degree to which welfare of a society can be improved.
E1 (1 – 2)	For unexplained judgement, mere stating of stand or weak evaluative comments without economic justification of the degree to which welfare of a society can be improved.

4(a) Explain the possible causes of unemployment in an economy. [10]

Introduction

- Unemployment refers to a situation in which a person who is actively seeking employment, and is willing and able to work is unable to find a job.
- There are four main types of unemployment an economy can experience:
    1. Structural unemployment
    2. Cyclical unemployment
    3. Seasonal unemployment
    4. Frictional unemployment

Note: Candidates are required to discuss at least three of the four types of unemployment, with the use of relevant examples to support.

Body

1. Structural unemployment:
- Is a result of a mismatch of skills of workers to the needs of the economy.
- Is usually due to changes in the structure of an economy.

  Possible causes of structural unemployment:
    - A likely cause of structural unemployment in an economy is due to capital-labour substitution in industries such as heavy manufacturing.
    - Due to the occupational immobility of workers, these unemployed workers tend to find it difficult to gain re-employment without retraining.
    - For instance, in the late 1990s, there was a technology bubble that created high demand for computer specialists. However, when this bubble burst in the year 2000, the structural unemployment faced by many of these computer specialists resulted in them having to be retrained to find suitable employment opportunities again.

2. Cyclical unemployment:
- Cyclical unemployment is a result from a fall in demand by either of or combination of 4 sectors in the economy, causing a fall in aggregate demand (AD).
- As labour is a derived demand, this fall in AD would result in a fall in the demand for labour, giving rise to cyclical unemployment.

  Possible causes of cyclical unemployment:
    - The involuntary unemployment that arises from cyclical unemployment is largely due a recession, usually caused by a fall in AD for goods and services. As such, many who were gainfully employed would likely be retrenched due to possible cost-cutting measures employed by firms to stay afloat during crisis.
    - The recent U.S. subprime crisis was an example of a recession that resulted in the collapse of many large financial institutions as well as the bailout of banks by national governments.
    - The recession caused declines in consumer and investor confidence, which further attributed to a downturn in economic activities, thus aggravating the level of cyclical unemployment.

3. Seasonal unemployment:

- Seasonal unemployment occurs when people become unemployed at certain times of the year, because they work in industries where they are not needed all year round.

  Possible causes of seasonal unemployment:
  - Seasonal unemployment is relatively regular and predictable, where the declines in particular industries or occupations over the course of a year often correspond with the climatic seasons.
  - For example, construction workers can expect unemployment during the winter months or periods of inclement weather. The employment of farm workers varies in a predictable manner with the end of seasonal planting and harvesting activities.

4. Frictional unemployment:

- Frictional unemployment is a type of transitional unemployment due to people moving between jobs.

  Possible causes of frictional unemployment:
  - Some possible causes of frictional unemployment are the transitional period in which university graduates may take to find appropriate jobs at wage rates they are prepared to accept.
  - This transitional phase of temporary unemployment can also be observed with experienced labour due to the time involved in job search. Imperfect information in the labour market may make frictional unemployment worse if the jobless are unaware of the available employment opportunities.

<u>Conclusion</u>

While there are four main categories of unemployment that an economy may experience, each type of unemployment tend to stem from different causes. Arguably, different economies will find different causes to be the chief culprit of the unemployment, depending on the structure of the economies. Certain countries (e.g. Singapore) would even be unlikely to face seasonal unemployment due to non-varying seasonal climate all year round.

Level (Marks)	**Knowledge, Application, Understanding and Analysis**
L3 (7 – 10)	A well-analysed response which examined possible reasons that could lead to the different types of unemployment in an economy. Answer contained good use of real-life examples to illustrate points.
L2 (5 – 6)	An answer that attempted to explain possible causes for the different types of unemployment in an economy, but tended to be under-developed. Responses incorporated some use of examples, although mainly hypothetical.
L1 (1 – 4)	A largely theoretical answer which merely identified the different types of unemployment in an economy, with little/no explanation of the possible underlying reason for the various types of unemployment.

4(b) Comment on the view that globalisation has increased employment opportunities more in developing countries than developed countries. [15]

Introduction

- Globalisation refers to the growing interdependence of countries worldwide through increasingly volume and variety of cross-border transactions, largely in goods and services and greater flows of international capital, labour and technology.
- There is much controversy surrounding the impact that globalisation has had on an economy in term of creating employment.
- In order to assess the outcome of increasing employment in developed and developing countries, we need to consider the characteristics of these economies as well as the extent to which employment has increased.

Body

Thesis: Globalisation has increased employment opportunities more in developing countries than developed countries.

1. Outsourcing
    - It refers to firms contracting out part of a business/production process to another a third party.
    - The advent of globalisation has made it a common occurrence for outsourcing to take place between developed countries and developing countries.
    - Many developed countries tend to face higher cost of production due to high labour or factor cost and as such, they tend to outsource part of their production process to a developing country to enjoy a lower cost of production.
    - For example, in the US, Apple outsources the assembly of iPhones, iPads, etc. to China.
    - In this case, globalisation has resulted in the loss of job opportunities in the developed countries and created job opportunities in developing countries.

2. Changes in comparative advantage
    - The idea of comparative advantage builds on the idea of the relative opportunity cost that an economy incurs in the production of goods and services.
    - With a progressively interconnected global economy, globalisation has caused shifts and losses in comparative advantage of some economies relative to others.
    - Given that the manufacturing sector tends to be fairly labour-intensive, in comparison to developed countries, developing countries stand to be more competitive given the lower wage costs.
    - As such, developing countries such as Vietnam is likely to incur a relatively lower cost in the production of manufactured goods and services than a developed country such as the U.S. This may then translate into lower prices, leading to relatively more price competitive exports produced in Vietnam than U.S.
    - Hence, this loss in comparative advantage of developed countries may have caused an increase in structural unemployment, especially in export-oriented industries in the U.S. and increased job opportunities in developing countries instead.

Anti-thesis: Globalisation has not increased employment opportunities more in developing countries than developed countries.

While it would seem that developing countries might be experiencing more advantages in the area of employment than developed countries, this may not always be the case.

1. More established firms in developed countries
   - It is noteworthy that not all industries in developing countries are benefitting in the form of increased employment.
   - This is because developed countries tend to have more established firms that are more renown in the global market and this may cause issues for competing firms in developing countries.
   - For instance, in the air travel market, the top airline carriers tend to come from developed countries, with a good reputation and a large consumer base. E.g. Qatar Airways, Asiana Airlines, Cathay Pacific Airways, Emirates, etc.
   - In the face of a more globalised market and strong international competition, developing countries tend to be at a disadvantage even in light of a larger consumer market and increasing air travel.
   - Hence, developing countries may not experience increases in employment in certain industries that tend to benefit developed countries instead.

2. Larger consumer base in the international market
   - Globalisation has allowed for all economies to enjoy a larger consumer base.
   - However, the ability to take advantage of this increase in market size may be limited for developing countries, especially if these industries tend to be small.
   - For example, recent years have seen the expansion of many multinational corporations into new markets, especially in developed countries.
   - Furthermore, the industrialisation of developing countries would mean greater demand for technology and capital goods from developed countries to further develop the infrastructure of their economy.
   - Thus, globalisation may have increased employment in developed countries in such industries more so than that of developing countries.

Note: Points are non-exhaustive. Other examples of changes in employment opportunities that are linked to the phenomenon of globalisation are acceptable as well.

Evaluation/Conclusion

- Each country, regardless of its state of development, will experience both job creation and destruction to different extent in face of globalisation.
- To better understand the impact of globalisation on the employment of each country, it is also crucial to consider the characteristics of each country in question. Less open economies tend to experience a smaller impact of globalisation and as such, may not see large changes in terms of job creation/destruction, regardless of the state of economic development of the country.
- However, the reaches of globalisation are likely to continue to expand and the impact that it may have is likely to continue to increase in **magnitude.**
- Thus, it is increasingly important for all governments to be forward-looking in their policy making in order to continue to ride the wave of globalisation, such that it best benefits the country in sustaining high employment rates in the economy.

Level (Marks)	Knowledge, Application, Understanding and Analysis
L3 (9 – 11)	A comprehensive analysis of the relative cost and benefits of globalisation faced by developed as well as developing countries in the area of employment with good use of economic theory and real-life examples to substantiate the arguments put forth.
L2 (6 – 8)	An under-developed response which attempted to explore both sides of the argument, but lacked depth in analysis due to conceptual errors, insufficient use of economic concepts/theories, lack of real-life examples, etc.
L1 (1 – 5)	A one-sided answer which tended to be largely descriptive and /or theoretical or for a response that demonstrates little use of the relevant economic analysis to justify arguments made.
E2 (3 – 4)	For a critically-analysed judgement with the relevant economic substantiation of how globalisation has affected employment opportunities in developing as well as developed countries.
E1 (1 – 2)	For unexplained judgement, mere stating of stand or weak evaluative comments without economic justification of how globalisation has affected employment opportunities in developing as well as developed countries.

~ End ~