

2014 Prelim II PU2 H1 Economics Suggested Answers
Section A CSQ 1: The World Cup in Brazil

(a) With reference to Figures 1 and 2,

- (i) Compare the trend of the costs of World Cup TV Rights with the historical US World Cup Viewership between 1994 and 2010. [2]**

Similarity: Both have overall increasing trends.

Difference: World Cup Viewership numbers fell between 1994 to 2002 whereas costs rise throughout.

- (ii) Using demand and supply analysis, account for the identified trend. [4]**

Increase in viewership indicates an increase in quantity demanded for World Cup broadcasts. World Cup TV rights have increased together with World Cup Viewership as firms are willing to pay more due to the increase in demand (or expectation of increase in future demand) of live sports broadcasts.

The fall in viewership between 1994 to 2002 might be due to the fact that there is a fall in demand of World Cup broadcast as the 2002 matches were held in Asia, which would have been aired at an inconvenient time for US consumers.

- (b) (i) Explain what is meant by “Price Elasticity of Demand”. [2]**

The responsiveness of quantity demanded to a change in the price of a good.

Formula: $\% \text{change in quantity demand} / \% \text{change in price of a good}$

- (ii) With reference to Extract 1, explain whether live sports telecasts are price elastic or inelastic in demand. [4]**

Demand for live sports telecasts is likely to be inelastic.

Reasons

- 1) No close substitutes for ‘live’ broadcasts: “live sports telecasts...are exclusively watched live” [Extract 1]
- 2) Addiction: fans of sports teams are likely to follow their teams on TV. “soccer’s surge in domestic popularity” [Extract 1]

- (c) Using economic analysis, explain why World Cup broadcasts are “deemed to be of major importance for society and shown for free” in the UK. [6]**

World Cup broadcasts are deemed to be merit goods by the UK government.

Merit goods are goods deemed intrinsically desirable by the government and usually exhibit positive externalities. Positive externalities refer to the external benefits enjoyed by someone other than the consumers or producers of the good, for which no compensation occurs.

In this case, $MSB > MPB$, as $MEB > 0$. MEB here may refer to the fostering of national identity, promotion of healthier lifestyle and promotion of football as a national sport in the UK.

Positive externality analysis with diagram, including why ‘free’.

L1 (1 – 3 m)	Descriptive explanation of why broadcasts are free. OR Theoretical explanation of market failure without referring to context.
L2 (4 – 6 m)	Correct identification of merit good as the source of market failure, with detailed explanation of what the external benefits refer to. Detailed economic analysis with the use of a diagram.

- (d) (i) Using the Production Possibility Curve, explain the difference between real growth and potential growth. [4]**

Definition of PPC.

Real growth: movement from a point within the PPC to a point closer to the frontier. Usually due to increase in production of goods and services.

Potential growth: outward shift of the PPC. Usually due to increase in capacity to produce

- (ii) **As an economic consultant to the Brazilian government, evaluate whether the hosting of the World Cup has benefitted Brazil's economy in terms of real and potential growth.** [8]

Use opportunity costs and PPC.

Thesis: Hosting the World Cup has benefitted Brazil's economy

Investments in infrastructure

- Airports, roads, flood control systems (more in terms of potential growth)

Provision of jobs

- From building of infrastructure, tourism (in terms of real growth)

Increase international recognition

- Tourism and other political / social impacts (more in terms of real growth)
- Due to worldwide television broadcasts (in terms of real growth)

Increase in tourism revenues (in terms of real growth)

Anti-Thesis: Hosting the World Cup has not benefitted Brazil's economy

Loss of productivity

- Holidays decreed to lower strain on public transport network (in terms of real growth)

Spending on infrastructure (stadiums) that do not serve a purpose beyond the event.

- Opportunity costs in terms of other spending (healthcare, education) (in terms of potential growth)

Tourism receipts may not cover costs (in terms of real growth)

Evaluation

Ceteris Paribus assumption

- The effects of hosting the World Cup on the Brazilian economy also depend on the current state of world economy. For e.g., if there is a major world recession, the positive effects from hosting the World Cup may be diminished. (in terms of real growth)

Short run VS Long run

- Long term infrastructural gains may not be captured by data now, as some of these gains will only be realised in full in the future (in terms of potential growth) e.g. roads / flood control, airports etc

L1 (1 – 3 m)	<p>Descriptive explanation of both thesis and anti-thesis with no link to extracts and/or economic concepts.</p> <p>OR</p> <p>Detailed Explanation of only one point of view.</p>
L2 (4 – 6 m)	Detailed explanation of both points of view with consistent links to extracts and/or economic concepts.
E1 (1 m)	Evaluative comments
E2 (2 m)	Evaluative comments with justification

2014 Prelim II PU2 H1 Economics Suggested Answers
Section A CSQ 2: The Chinese Economy

- (a) (i) **Compare the contributions of consumption and investment to the growth of the Chinese economy from 2008 to 2012.** [2]
- **Similarity:** Both contributions by consumption and investment increased from 2008 to 2012.
 - **Difference:** Investment contribution to growth was higher than consumption contribution to growth from 2008 to 2010 and the reverse occurred in 2011 and 2012.
- OR**
Contribution by investment was highest in 2009 while the contribution by consumption was highest in 2011.
- OR**
While contribution by consumption rose in from 2010 to 2011, the contribution by investment fell during the same period.
- (ii) **Using information from the case, account for the difference between contributions by investment and consumption to growth from 2008 to 2012.** [3]
- Investment contribution was greater in the earlier part of the period because of the large amounts of FDI that was entering the country (Ext 4).
 - Subsequently, as China's consumption rises, consumption contribution overtook investment contribution as suggested by Ext 4 that stated that "domestic consumption is going to drive the economy."
 - However, consumption contribution did not rise significantly because despite the higher incomes enjoyed, people in China prefer to save rather than spend (Ext 8).
- (b) **Using information from the extracts, explain the reasons why China has increased its imports in recent years?** [4]
- China increases its imports of "parts and components for final assembly from other parts of Asia" because it needs these raw materials and intermediate goods for production of its exports (Ext 4).
 - China is also increasing its consumption of consumer goods from other parts of Asia because it does not have comparative advantage in the production of those goods and also because of its rising consumption (Ext 4).
 - Appreciation of the yuan makes imports into China cheaper so there is an increase in the volume of imports. [2]
- (c) (i) **Explain the effects of undervaluation of the Chinese currency on its balance of payment.** [3]
- "Critics say China has undervalued its currency against the dollar and has made Chinese goods cheaper in the US and American products more expensive in China." (Ext 5)
 - Undervaluation of the yuan has made Chinese exports relatively cheaper than domestically-produced goods in the US. Export revenue is likely to increase.
 - Undervaluation of the yuan has also made imported goods from other countries to China relatively more expensive than the domestically-produced goods. Import expenditure is likely to fall.
 - Assuming that the Marshall-Lerner condition ($PED_x + PED_m > 1$) holds,

undervaluation of the Chinese currency will lead to an improvement in the BOP position of China.

- (c) (ii) Discuss whether China's trade position with the US is necessarily good for the Chinese economy. [6]

China has a trade surplus with US

Trade surplus is good	Trade surplus is bad
<ul style="list-style-type: none"> Trade surplus indicates that $(X-M)$ is high therefore AD would increase. This results in increase in equilibrium national income, output and employment via the multiplier process. → Actual economic growth Increase in foreign reserves is often regarded as a symbol of economic success. 	<ul style="list-style-type: none"> Persistent trade surplus may result in demand pull inflation especially if the economy is operating at full employment. Persistent trade surplus will cause retaliation by trading partners. There has been increased political pressure in the US to impose protectionistic measures in the form of economic sanctions on China (Ext 5). Persistent trade surplus will create pressure for the external value of the yuan to rise. Hence, the central bank would have to intervene by selling the yuan and buying foreign currencies if it has no wish for the yuan to appreciate.

Knowledge, Application, Understanding and Analysis		
L3	A detailed answer explaining both the positive and negative implications of China's trade surplus.	5 – 6
L2	For an answer that attempts to explain both sides but undeveloped OR For an answer that only discusses one side of the argument.	3 – 4
L1	For an answer that shows some knowledge of trade surplus and merely lifts from the extracts.	1 – 2

- (d) Based on information from the extracts, explain why the US has launched a growing number of protectionist measures against the Chinese products. [4]

- Ext 6: "Growing complaints that China's undervalued yuan has made it difficult for manufacturers...to compete with China's exports."
- Ext 7: "The latest US tariffs were imposed in response to a complaint...there was unfair competition...lead to loss of local employment."
- Tariffs will increase the cost of production of Chinese products thus reducing the supply of those products in the US market. This will lead to higher prices of the products when entering the US market.
- When prices of Chinese products increase, the prices of locally-produced substitutes may seem relatively cheaper thus causing US consumers to switch from buying Chinese products to buying locally-produced substitutes.
- This will cause the demand for locally-produced goods to increase thus encouraging the local firms to maintain or even increase employment levels to meet the demand.

- (e) **“Revaluation was never going to be the hardest part of Chinese development” (Extract 8). Is revaluation the only policy that the Chinese economy can undertake to achieve its macroeconomic aims of sustained economic growth and healthy balance of payments?**

[8]

Revaluation of yuan (Exchange rate policy)

- *P_x will increase while P_m will fall. Demand for Chinese exports is likely to be price inelastic so higher P_x will still help China gain export earnings. Since China is dependent on other Asian countries for raw materials and intermediate goods (Ext 4), China will stand to benefit from a stronger yuan because it will be able to increase the imports of these materials and components. At the same time, consumers in China are increasing their consumption of imports. If demand for imported consumer goods is price elastic, it is likely that import expenditure will increase.*
- *Overall, there is a possibility that China’s trade surplus may be reduced and China will be able to enjoy healthy BOP with lesser likelihood of its trading partners retaliating*
- *Evaluation: Revaluation may result in lower export earnings if demand for China’s exports is price elastic. When this happens, AD will fall and China may not be able to enjoy high economic growth rates as before.*

Other than revaluation, China may want to use other policies to help the economy achieve the two macroeconomic aims.

Freeing finance (Expansionary monetary policy)

- *Increase MS → Reduce i/r → Lower cost of borrowing → Consumption and investment will increase → AD increase → Actual economic growth*
- *Evaluation: Unfortunately consumption in China seems to be interest inelastic. Chinese consumers prefer to save rather than spend as mentioned in Ext 8 that “saving will only slowly fall from the extraordinarily and unhealthily high levels now observed.”*
- *Too much saving means that there will be more withdrawals from the circular flow of income thus the effectiveness of this policy is limited.*

Build an innovative economy (Supply-side policy)

- *Increase LRAS through investments → Potential economic growth → Sustained economic growth since the demand for Chinese exports is also rising.*
- *With innovation, China can make the demand for its exports more price inelastic and will guarantee greater export earnings in the future.*

Knowledge, Application, Understanding and Analysis		
L3	A detailed discussion of the relevant policies that the Chinese economy has undertaken to achieve its macroeconomic aims.	5 – 6
L2	For an undeveloped answer that attempts to discuss the different policies undertaken.	3 – 4
L1	For an answer that shows some knowledge of macroeconomic policies without reference to extracts.	1 – 2
Evaluation		

E2	Evaluative comments, with justification.	2
E1	Evaluative comments, unexplained.	1

2014 Prelim II PU2 H1 Economics Suggested Answers

3	(a)	Using appropriate examples, explain why the existence of negative externalities and public good causes market failure.	[10]
	(b)	<p>As a city develops, air pollutants are inevitably produced. Without control measures, increased urbanisation and industrialisation threaten to degrade our air quality.</p> <p>Source: http://app.mewr.gov.sg/web/contents, accessed on 18 Aug 2014</p> <p>Discuss the appropriate policies which a government may undertake to</p>	

Section B

Part (a)

Introduction

- **Define market failure**

Market failure refers to a situation in which the market when left on its own is unable to attain social optimal output level where marginal social benefit (MSB) is equal to marginal social cost (MSC). Alternatively, market failure would mean that the *price mechanism has failed to allocate resources efficiently*, that is, the good is either under- or over-produced/consumed.

Body

- **Explain meaning of negative externalities**

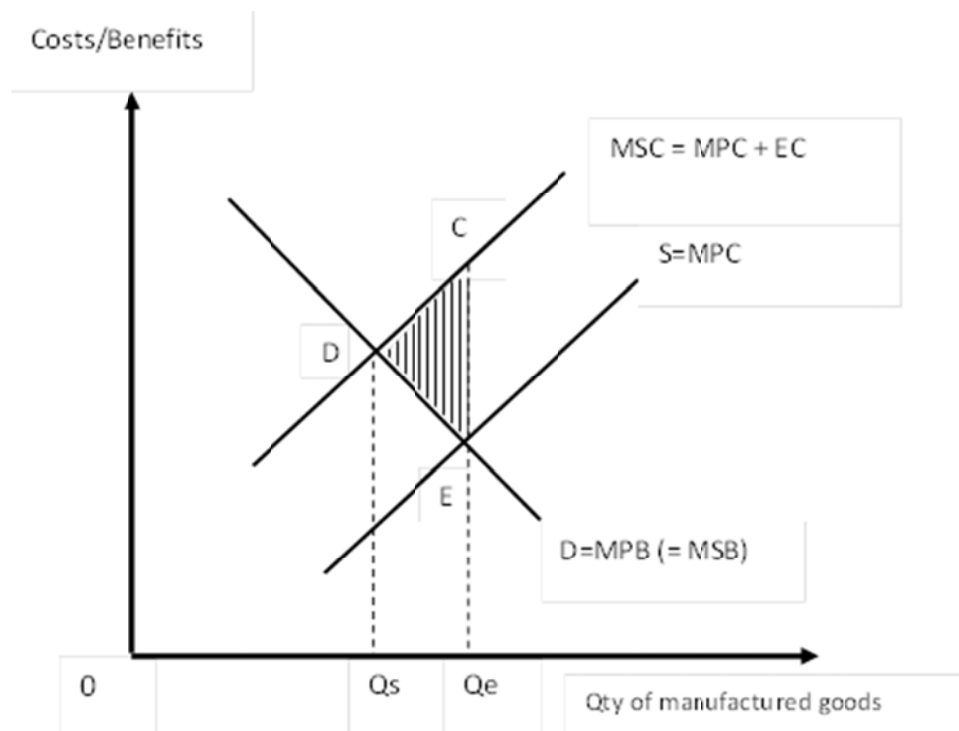
Negative externalities refer to the external costs imposed on someone other than the consumers or producers of the product, for which no compensation occurs. (*i.e. harmful effect on 3rd parties*). Individual decision makers are not internalising all the costs that society is bearing.

Examples of negative externalities include pollution, traffic congestion and environmental damages. Such negative externalities can be generated from the consumption or production of goods and services. For instance, car consumption gives rise to air pollution caused by exhaust fumes. Other road users and residents in the neighbourhood will suffer third party costs to such as breathing difficulties and lung problems without being compensated for the costs incurred. Thus, negative externalities are generated whenever other people are affected adversely.

- **Explain how negative externalities cause market failure**

To illustrate how negative externalities lead to market failure, let's take the example of negative externalities generated from a factory. In a free market, producers pursuing their self-interest of profit maximisation take into account only their own private costs and benefit.

	tackle the problem of pollution.	[15]
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In the figure above, the demand curve, D , reflects the marginal private benefit (MPB) of the factory from its production of goods which is the revenue they receive from the sale of each unit of good. The supply curve, S , reflects the marginal private cost (MPC) which is the additional cost of producing an additional unit of goods. If the factory is left to make its decision on how much to produce, it will only consider private costs and benefits, ignoring the negative externalities and will produce up to the point where **MPB = MPC** (private efficiency). As such, **Q_e** is being produced.

However, the negative externality generated from the production of goods creates a divergence between MPC and MSC, i.e. MSC is higher than MPC. On the other hand, since there is no external benefit incurred, $MSB = MPB = D$. As such, at market equilibrium output, Q_e , **MSC is greater than MSB**, meaning that the society values an extra unit of good less than what it would cost the society to produce it

The **socially efficient level of output** should be where $MSC = MSB$, ie. at output **Q_s** . Therefore, the price mechanism **over-allocates** resources to the production of the good since $Q_e < Q_s$, that is, there is an over-production of the good. Area ECD represents the **welfare/deadweight loss** to society as a result of this over-allocation of resources. Therefore, the market fails to allocate resources efficiently because it does not take into account the external cost in production and market failure arises.

- **Explain How Public Goods cause markets to fail**

Public goods are goods where the positive externalities ($MSB > MPB$) are so great that the free market may not produce at all. A pure public good is a good which has the features of **non-excludability** and **non-rivalry in consumption**.

A classic example of a public good is national defence. Other examples include lighthouse, flood control dams, street lights and bridges.

Non-excludability means it is either not economically feasible or not possible to exclude anyone from using the good, once it is provided. It is collectively consumed and it is not possible to assign property rights to only those who pay for the good. For example, when a streetlight is built, the owner cannot exercise private property rights and prevent other people who walk pass from enjoying the light as it is not economically feasible.

Thus, the property of non-excludability could give rise to **free rider problem** where it is possible for a person to consume a public good without having to pay for it. From the demand side of the market, the desire to be a free rider weakens the incentive for consumers to offer to pay for the public good. In the case of streetlight, the passer-by would not want to offer to pay for enjoying the light since it is impossible for the streetlight owner to charge him/her a fee. This would also mean that there is an incentive to refrain from expressing demand in the market. Hence, since there is no expression of demand, it is **impossible to charge a market price** for the good. The missing market price would lead to **no provision** of such goods at all if left to the private enterprise.

Non-rivalry in consumption means the consumption of the good by one person does not diminish another person's ability to consume the same good. This implies that once the good is produced, additional resource cost to provide for another person benefiting from consuming the good is zero. For instance, while one enjoys the streetlight, others could also enjoy the same amount of streetlight. Thus, there is no additional cost involved when another passer-by walk pass and enjoy the streetlight. This means that **marginal cost is equal to zero**. At social optimal level, MSB should be equal to MSC. Since MSC of streetlight is equal to zero, the **socially ideal price should be \$0**. However, at \$0, there will be **no supply** because producers are profit motivated.

Hence, the characteristics of non-excludability and non-rivalry in consumption explain why there is no provision of public goods in a free market economy. This results in complete market failure as **no resources are allocated to these goods** which are essential and beneficial to the society. In other words, resources are not allocated efficiently.

Mark Scheme

L3	8-10	Good analysis of welfare loss using relevant marginal cost and benefit concepts, with help of appropriate diagram and examples. Competent explanation with good description of terms and a clear understanding of the concepts involved..
L2	4-7	<ul style="list-style-type: none">• Shows understanding the market failure which results in welfare loss and/or with little explanation• Diagram is drawn but with errors• Examples are missing but may show some inaccuracies; if they are included, concept of external cost is not clearly explained.
L1	1-3	Showed little/ some basic concepts. May contain inaccuracies and/or irrelevant information

Part (b)

Introduction

- **Explain that pollution is a negative externality**

It arises largely from industrial production, usage of vehicles and excessive use of electricity. The harmful pollutants or greenhouse gases released into the environment cause ill health to people who live near factories and contribute to global warming which leads to adverse weather conditions and disruption of people's lives (external costs on 3rd parties). MSC is higher than MPC and there is over-production/consumption of manufactured goods.

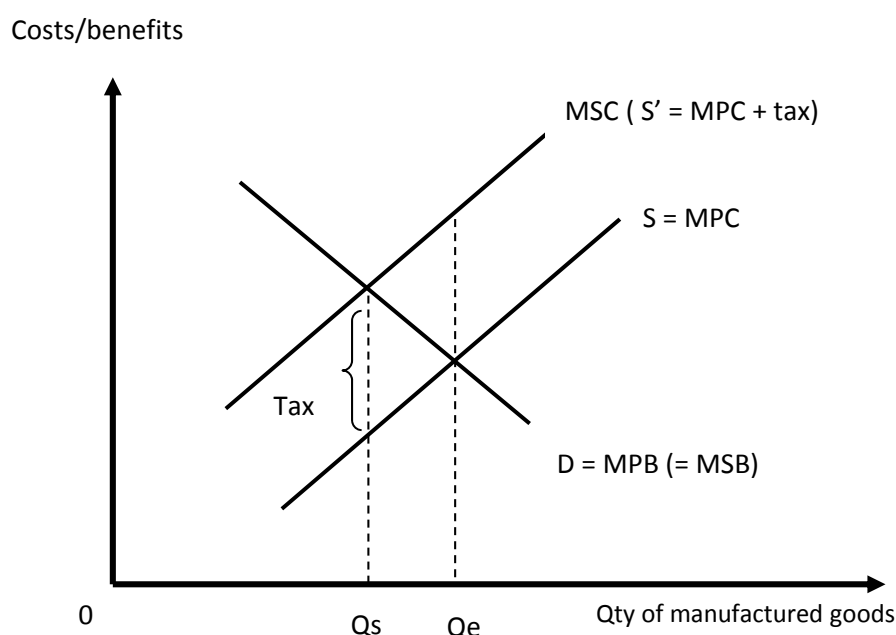
Government intervention is therefore required. Government can intervene by implementing taxes, tradable permits or legislation to reduce pollution generated and correct market failure.

Body

- **Explain and evaluate appropriate policies**

Taxes

To correct **negative** externalities, the government would have to impose a **tax** on production that is equal to the **external cost**. Consider the use of taxes to decrease production/consumption in the case of negative externalities.



The market equilibrium (where $MPC = MPB$) will give a quantity Q_e which is higher than the socially efficient level Q_s (where $MSC = MSB$). The market does not take into consideration the external costs involved (EC).

If the government imposes a tax equal to the external cost, then it will effectively internalize the externality. Cost of production will increase and producers will be induced to produce less; the supply curve will shift to the left to S' (MPC raised to the same level as the MSC). The socially efficient level Q_s will thus be achieved.

Evaluation:

Advantages

- The tax system still allows the market to operate, and also acts as an incentive to encourage firms to seek low-cost alternatives such as installing certain anti-pollution devices or use cleaner fuels to reduce emission so as to pay less tax.
- The revenue from the tax could be used by the government to pay for the external damages from the production of the product. For example, when a chemical firm dumps waste in a river or pollutes the air, the revenue collected from the tax can be used to clean up the river.

Disadvantages

- The main difficulty is in assessing the monetary value of the external costs. If the government assesses wrongly the amount, that itself will lead to resource misallocation. For example, if the external costs are overestimated, the government may levy excessively high taxes that over-correct for the actual external cost, resulting in underproduction of the good and thus greater inefficiency in resource allocation.
- Another problem is that each firm produces different levels and types of externality; and it would be very difficult and costly for the government to charge each offending firm its own particular tax rate.

Tradable Permits

Tradable permits aim to solve pollution by getting firms to internalize the external cost. Firms that wish to pollute above a certain limit may do so by buying permits. Firms who pollute less than their allocated portion may sell their excess to other firms for extra profits. The gap between MSC and MPC is narrowed as those who are polluting more are paying more. Overall pollution may fall if low polluting firms gain a competitive advantage and drive some of the high polluting firms out of business.

For firms that face high costs in decreasing pollution, they may find it cheaper to buy permits from the market. This forces them to internalise the negative externality. The cost of the permits adds on to the costs of production for the firm. The MPC curve will shift leftwards towards the MSC. Firms will reduce their production towards the socially optimal level of production at Q_s , and this reduces the extent of the market failure due to the overproduction of manufactured goods.

Evaluation

Advantages

- Gives firms an incentive to cut back on pollution levels if they desire to sell their allocated share. In addition, if cuts to pollution are made where they are cheapest, those firms who find it easy to reduce their pollution emission will gladly do it for greater profits. In general, tradable permits which are market based solutions are good because their prices are determined by their demand and supply in the market. Requirements on government monitoring are minimal. For example, pollution permits are allocated to those who are willing and able to pay for it and price of the permits is determined by the forces of demand and supply which ensures efficiency
- Includes the advantage of a command and control type of intervention where the maximum pollution can be dictated directly by the number of permits issued.
- **Superior to taxes:** Tradable permits direct government intervention on those firms that are polluting, unlike taxes which may be imposed across entire industries which punishes the less polluting firms. Thus tradable permits system is seen as a more effective and fair instrument. Furthermore, imposing taxes may permanently increase costs of production for firms, thereby either reducing export competitiveness to domestic firms producing for

the exports market, or reducing the country's international competitiveness to foreign firms.

Disadvantages

- The disadvantage is that the price of the pollution permits varies according to the demand and supply of them in the secondary market and this will affect firms in their production costs planning.
- It may also lead to pollution being concentrated in certain geographical areas if all the firms in that particular region has the purchasing power to buy the excess credits from other firms in other regions, with serious consequences for the environment in that region.

Legislation

This is a process of controlling business activities through licences, setting standards, laws and administrative rules. The government may lay down the maximum pollution levels. Firms have to adhere to the standards otherwise they will be punished, e.g. fined or licence revoked. This requires firms to install pollution abatement equipment (such as filters or scrubbers that remove harmful materials from the emissions) or use energy saving technologies to reduce pollution.

Evaluation

Advantages

- A legal maximum ensures certainty in outcome; there is a limit (cap) on the maximum amount of externality that can be produced.
- Legal regulations are **easy to understand, implement and are relatively easy to monitor**. Random spot checks or checks based on public complaints can be made and those who flout the regulations are then heavily fined. The penalties, if set high enough acts as an effective deterrent to prevent the undesirable behavior that imposes negative externalities on others.

Disadvantages

- Legal regulations tend to be a rather **blunt weapon**. They are inefficient because they do not pinpoint and focus on punishing only the main culprits. Once imposed, all will have to abide by the regulations. There is also **no incentive** for firms to reduce emissions below the permissible level.
- In addition, to design good rules, the government regulators need to know the details about specific industries and about the alternative technologies that those industries could adopt. This **information is often difficult for government regulators to obtain**. Without full knowledge of the cost of pollution abatement, determining the emission standards (socially optimal level of pollution) becomes a guessing game. Too stringent standards and there could be underproduction.
- For the law to be effective, the penalties for breaking the law can be made sufficiently harsh and inspections made more frequent. Hence, there is the need to incur costs of policing and enforcing the law by the government.
- In extreme cases, when a **complete ban is imposed**, this removes the entire benefits of using the goods. This can result in a **welfare loss** to society, and is not allocative efficient either.

Subsidies

The government could provide subsidies to firms to carry out R&D to develop more environmentally friendly methods of production or more energy efficient technologies. Successful R&D measures carried out by the firms would help reduce the amount of pollution produced in the long run.

Advantages

This measure address the root of the problem, and its effects would be longer lasting as compared to tradable permits and legislation. Improving energy efficiency will result in overall cost savings to businesses, helping the country to maintain its competitiveness in the long term.

Disadvantages

It is costly, and might have to be funded by increases in taxation, which would have disincentive effects on work and investment. Such spending also involves an opportunity cost – the government could have used the funds on other projects.

Conclusion

To conclude, there is no one best policy to deal with pollution in a free market economy. The form of government intervention to adopt depends on the cause of market failure and its benefits and limitations must be weighed. To alleviate pollution in the long term and by its root, governments need to go beyond punitive policies such as pollution permits and legislation. Citizens and businesses need to be educated on the harmful effects of negative externalities and thus make it their own duties to reduce emissions. One must also not neglect pollution from household consumption and traffic emissions. Hence, a combination of policies should thus be used so that the policies could complement and offset each other's weaknesses.

Mark Scheme

Level	Descriptor	Marks
L3	For a good analytic discussion of at least 2 different government interventions to reduce pollution.	9 – 11
L2	For an underdeveloped explanation of how different government interventions can be used to reduce pollution. OR A developed explanation of at least one possible government intervention.	5 – 8
L1	For an answer that shows some knowledge of the possible government interventions to reduce pollution	1 – 4
E2	Evaluative comment with justification	3 – 4
E1	Evaluative comment	1 – 2

2014 Prelim II PU2 H1 Economics Suggested Answers

Section B

4 (a) Explain the different types of inflation that can occur in an [10] economy.

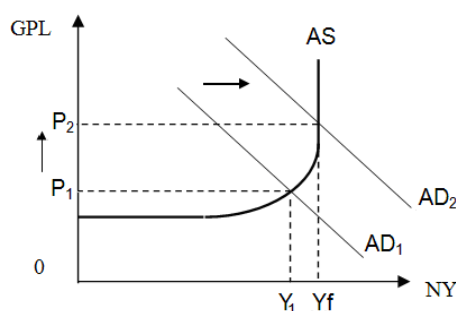
Introduction

- Define inflation: A situation when there is a sustained and inordinate increase in the general price level → Fall in the value of money and reduces the purchasing power of money
- The different types of inflation can be categorised according to the rate of inflation and according to the causes of inflation.

Body 1: Different types of inflation according to rate of inflation

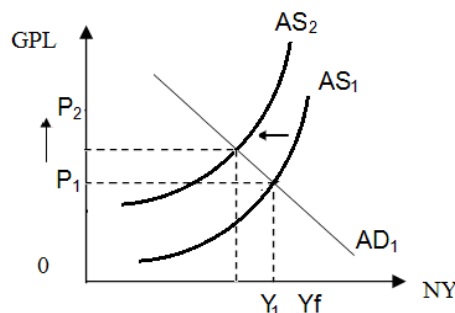
- Mild inflation $< 5\%$ = expanding economy that is generating jobs and output, while enjoying economic growth
- Strato-inflation about 10 to several hundred %
- Hyperinflation = rapidly accelerating inflation → usually short-lived

Body 2: Demand-pull inflation



- Increase in AD from AD1 to AD2 → GPL rises from P1 to P2
- Caused by faster increase in AD relative to AS
- Likely to happen when the economy is operating near or at the full employment level, Y_f , because it is difficult to increase production when scarce economic resources are mostly or fully employed.

Body 3: Cost-push inflation



- Decrease in AS from AS1 to AS2 → GPL rises from P1 to P2
- Occurs when firms respond to the rising costs of production (COP) → Firms will produce lesser and will have to increase prices to maintain profit margin
- Can be caused by rising price of imported raw materials (a.k.a. imported inflation)

Conclusion

- Policies can be implemented to achieve price stability but it is important for the government to identify the cause(s) of inflation in order to implement the appropriate policy.

Knowledge, Application, Understanding and Analysis		
L3	Well-developed and in-depth explanation of the different types of inflation. Answer is based on solid economic analysis with neat organisation of points.	8-10
L2	Attempts to explain the different types of inflation. Lacks detailed economic analysis.	4-7
L1	Some knowledge of the types of inflation with inaccuracies.	1-3

(b) Assess the effectiveness of macroeconomic policies used to achieve low and healthy inflation rate in an economy. [15]

Introduction

- After determining the cause(s) of inflation, the government can implement appropriate policies to achieve low and healthy inflation rate in an economy.
- Demand-pull inflation can be tackled with demand-management policies like contractionary fiscal policy (FP) and contractionary monetary policy (MP).
- Cost-push inflation can be tackled with supply-side policies.

Body 1: Contractionary FP can reduce demand-pull inflation

- Reduction in G → Lower AD
- Rise in T → Rise in personal income tax will reduce disposable income, Y_d , and lower C
- Rise in T → Rise in corporate tax will reduce firms' after-tax profits and lower I
- Overall, AD will fall and lower GPL → Demand-pull inflation reduced

Body 2: Evaluation of contractionary FP

- Contractionary FP is preferred over contractionary MP because increase in T can increase govt's revenue that can be kept as reserves for future use, esp during recession.
- Difficulty in determining type of inflation, time lags, small size of multiplier, difficulties in reducing G and raising T, assumption of ceteris paribus.

Body 3: Contractionary MP can reduce demand-pull inflation

- Reduce MS → Higher i/r → Higher cost of borrowing → C and I fall → AD falls, lower GPL → Demand-pull inflation reduced

Body 4: Evaluation of contractionary MP

- Contractionary MP is preferred over contractionary FP when the country wants to pursue a more favourable BOP position because increase in i/r can attract hot money, which will improve BOP via the capital account.
- Interest inelasticity of C and I

Body 5: Supply-side policies can reduce cost-push inflation

- Supply-side policies = instruments that affect AS
- Education and training, R&D, other policies like price/wage controls
- Supply-side policies reduce COP → Rightward shift of SRAS and LRAS → Lower GPL → Cost-push inflation reduced

Body 6: Evaluation of supply-side policies

- Heavy govt expenditure in education and training = opportunity cost, adults are often reluctant to attend training
- R&D requires large funding and long-term financial investment, no guarantee that R&D will be successful
- Price/wage controls are SR solutions that will not increase productive capacity of the economy

Conclusion

- No one best policy.
- Decision on which policy to be adopted depends on the cause(s) of inflation.
- There may be conflicts with other macroeconomic aims when policies are implemented to achieve low and healthy inflation rate.

Knowledge, Application, Understanding and Analysis		
L3	Very clear and precise answer that is able to suggest relevant policies to tackle the different types of inflation. Very detailed economic analysis.	8-11
L2	Able to explain relevant policies that can generally help achieve low and healthy inflation rate. Lacks detailed economic analysis.	4-7
L1	Able to briefly highlight the policy options that the government has to achieve low and healthy inflation rate.	1-3
Allow up to 4 additional marks for Evaluation		
E2	Able to identify and explain the limitations of all the policies mentioned.	3-4
E1	For unexplained limitations of some policies.	1-2