



Skoolumy

CAMBRIDGE A LEVEL ECONOMICS TOPICAL ESSAY QUESTIONS

MARKET FAILURE, EFFICIENCY AND GOVERNMENT INTERVENTION

PAST QUESTIONS

1. Public services – better or worse?

A government usually has macroeconomic policy aims that it hopes will enable some success in raising the quality of life, or well-being, of the population. In doing this the government also hopes achieve efficiency in the use of resources.

Efficiency is measured by relating inputs to outputs. Inputs are relatively easy to count: they are financial costs of public services. Output can also be counted, but it is not necessarily a good measure of the outcome. The outcome is much harder to calculate. It is broader and more subjective – how do we assess whether a public service is ‘better’ or ‘worse’?

This is where a knowledge of well-being makes an enormous difference. It could provide a much clearer view of the trade-offs that have to be made in allocating taxpayers’ money to public services. Take the example of healthcare. To maximise the impact of expenditure on well-being, the budget may need to be adjusted to give more to mental health services and less to building general hospitals. For older people it could mean giving priority to programmes that would keep them out of hospital.

A focus on well-being should lead to better outcomes. This is where policymakers need a better understanding of behavioural economics. Governments have established Behavioural Insights teams, or Nudge Units. They have had some success. A small change in the wording of a letter to people who owed tax demonstrated how more behaviourally sensitive language sped up payments. The unit also found that jobseekers were nearly twice as likely to turn up for a job fair if the text message from the job centre used their names, and nearly three times as likely if the person sending the text message added ‘good luck’.

Do tax reliefs persuade people to save? No. So enrol them instead automatically in a pensions programme as a default position, with the possibility of opting out. Allowing people to learn from mistakes is good: it reduces dependency on the public sector and helps people make better decisions for themselves. But some errors, such as failing to save anything until you are too old to earn, cannot be reversed. Then an early ‘nudge’ is justified. It has proved successful in spreading the habit of saving for retirement into groups not persuaded by tax reliefs alone.

In the long term this, and similar behavioural changes, may well have more influence on well-being than can be represented by concentrating on a monetary calculation of GDP. Other economic indicators could be used to assess this change in well-being.

Source: RSA Issue 1, 2017

The article says that 'efficiency is measured by relating inputs to outputs'. Is this how economic theory states that efficiency is determined? [5]

2. Assess the suggestion that a free market economy is neither possible nor desirable. [25]

3. Discuss whether competitive markets in the private sector are the best way to achieve an efficient allocation of resources. [25]

4. (a) Explain the meaning of and whether there is a link

(i) between externalities and public goods

(ii) between transfer payments and the poverty trap. [12]

(b) Consider whether the existence of externalities in production means that it is impossible to achieve an optimal allocation of resources. [13]

5. (a) A dictionary defines efficiency as 'the power to produce the result intended'. Explain what is intended by achieving economic efficiency and why its attainment is considered important. [12]

(b) Discuss whether it is sometimes necessary to use the public sector to try to achieve economic efficiency rather than the private sector. [13]

6. 'Lack of efficiency in the use of resources is not due to the market's inability to function. It is due to government intervention in a system that is best left to its own workings.' (Source: RSA Journal, Issue 4, 2013)

Consider this opinion. [25]

7. International conferences have been held to discuss the effects of global warming and to persuade governments to agree to improve efficiency in the use of resources by limiting the amount of harmful gases produced by their country.

Explain what is meant by an efficient use of resources and discuss whether efficiency can only be achieved if governments are involved. [25]

8. There is concern about conservation of the environment, prevention of waste and efficient use of resources. Economic theory is clear on how to allocate resources efficiently in a market but in reality such allocation is a problem.

Discuss this opinion. [25]

9. It is important that an economy makes the most efficient use of its resources. This can only be done if firms are allowed to increase in size. Government regulation of firms should, therefore, be minimised.

Discuss whether you agree with this statement. [25]

10. Explain the difference between productive and allocative efficiency and discuss the suggestion that it is only possible to achieve such efficiencies through government intervention. [25]

11. Discuss whether economic efficiency can be improved if governments are involved in the regulation and provision of goods and services when there is market failure. [25]

12. (a) Explain what is meant by an efficient market equilibrium. [12]

(b) Discuss how the market mechanism might fail in the allocation of resources. [13]

13. Explain what economists mean by a public good and discuss why the provision of such a good is associated with market failure. [12]

14. A World Bank report in 2007 commented on the continuing need for major spending worldwide on infrastructure on everything from roads and railways to water and electricity generation.

Discuss whether an efficient allocation of resources can be obtained only if large-scale investment is undertaken by the public sector rather than the private sector. [15]

15. (a) Explain what is meant by productive and allocative efficiency. [12]

(b) The decision to privatise Kenya Railways and Uganda Railways has met with interest among international rail operators as it is thought that profits could be made and current commercial losses could be avoided.

Discuss how the privatisation of an industry might affect efficiency in the allocation of resources. [13]

16. 'Governments, unlike the private sector, can create some of the necessary conditions for the efficient allocation of resources. It is, therefore, best if there is as much government involvement in the economy as possible.' Discuss whether you agree with this opinion. [25]

17. The following extract is adapted from an article that appeared in 2003.

Diversification in Botswana

The Botswana government wishes to use the wealth that the country obtains from diamonds to diversify its economy. Botswana is the world's largest producer of diamonds, which accounted for 77% of the country's export earnings and 45% of GDP in 2002.

The diamond industry is controlled by one company, Debswana, which is a partnership between De Beers (a private sector company) and the Botswana government. Each owns 50% of Debswana but De Beers keeps 75% of the profits.

Botswana has various incentives for investors. The corporate tax rate is one of the lowest in Africa at 15% and profits can easily be sent back to the home country because there are no exchange controls. Wage rates are relatively low and the workforce is the most educated in Africa. Botswana is also perfectly located to become a financial hub for the 200 million people in the 14 African countries in the Southern African Development Community.

However, there are problems for investors. Usable water is in short supply and transport costs are high. Labour is also in short supply because the population is only 1.7 million and life expectancy is only 39.

Despite its problems, Botswana remains an example of prosperity in conflict-ridden Africa. US President George W Bush said 'Botswana has demonstrated sure, sound economic administration and a commitment to free market principles.'

President Bush said 'Botswana has demonstrated a commitment to free market principles'. What did he mean, and does the article support this view? [5]

18. Discuss the assertion that the market system is not able to allocate resources efficiently. [25]

19. In many cities the level of traffic congestion is causing increased concern.

(a) Discuss whether the existence of traffic congestion in cities might be considered as evidence of market failure. [12]

(b) Analyse what might be done when market failure does exist. [13]

20. It was reported in June 2001 that Vietnam was 'on the verge of liberalising state control of the arts by allowing privately run museums'.

(a) Explain the sources of market failure. [12]

(b) In the light of the existence of market failure, discuss whether the operation of museums can be left to the private sector. [13]

21. Competition, monopoly and the market

Firms are sometimes thought of as machines: inputs go in, products come out. However, it matters how powerful these firms are allowed to become.

Competition law – the law that governs how firms compete in the market, how they may exert their power and how and when they may join forces – has not prevented high concentration ratios in many industries.

Global monopolies have been created in the name of ‘free market’ capitalism. Mergers have been approved and monopolies tolerated under the assumption that they are efficient. Their ability to enable innovation is relied upon to justify these monopolised industries.

Competition law is being used to protect a narrow set of public interests based on the idea of ‘consumer welfare’. The test applied by the law is whether any change will result in lower prices for consumers and thus is beneficial. This is regardless of how monopolised the resulting market structure becomes.

The logic that focuses on consumer prices is flawed. This can be seen in the impacts of firms on the environment. Prices do not capture the negative externalities of production, for which neither the producer nor the consumer pays.

Low consumer prices are not an adequate indicator for consumer welfare. The low price/low wage spiral keeps pushing for cheaper goods and services to increase the profitability of the firm.

The result is that workers are paid less. Low prices cause unequal bargaining positions between powerful employers and workers, and between powerful buyers and small independent suppliers.

Regulation has a role to play in protecting consumers from the worst abuses of market power by firms. There needs, however, to be new competition law that promotes the free market rather than the desires of the monopoly firms. It needs to consider the balance of power between the public sector and private enterprise.

Source: RSA Journal. Issue 3, 2020 p 32.

(a) Explain, with an example, whether the article is correct in saying that neither the producer nor the consumer pays for negative externalities. [4]

(b) Apart from negative externalities, describe two reasons why the article says increased concentration in an industry may not improve consumer welfare. [4]

(c) The article says that monopolies are tolerated because they are efficient.

Assess, with the help of a diagram, whether economic theory supports the idea that monopolies are efficient. [8]

22. To improve allocative efficiency economists frequently advise governments to remove existing subsidies to the private sector providers of education.

With the help of a diagram, evaluate this advice. [20]

23. French electricity prices

In 2022 the French government ordered a large electricity company, partly owned by the state, to sell more electricity at lower prices than its rivals. The company said this would have a negative impact on its profits and result in a decrease in the value of the company's shares owned by the private sector.

Competitors in electricity supply in France are allowed to buy power from this company at a 40% discount due to its monopoly position. The government instructed the company to increase the amount they must sell to competitors at the discounted market price.

The government also cut taxes on electricity to try to keep the increase in prices for households and small businesses to 4%, rather than the expected 35%, without any government action.

As well as producing electricity in France, the company owns nuclear power stations and gas-fired power stations in the UK and supplies 11% of the UK's electricity.

A global shortage of natural gas supplies caused a crisis, pushing up electricity prices. Much electricity is produced in gas-fired power plants. The situation was worsened by faults in the electricity-producing nuclear power plants in both the UK and France.

In January 2022 alone, a further five nuclear power plants in France were forced to close. That meant that 18 of the 56 plants had closed; a worrying proportion for a company that derives 70% of its electricity output from nuclear power. The plants were old. Corrosion caused safety fears and the closures restricted supplies.

Previously, the nuclear power plants put France in a strong self-sufficient position of which other European countries can only dream. The UK, for example, has to import expensive gas to produce electricity, where the price rise was expected to be not 35%, as in France, but 56%. However, the cost to the French government of reducing the electricity price affected its ability to finance renewable energy projects as well as build a new generation of nuclear reactors.

The government claimed the benefit was that they rescued millions of households from the prospect of excessive rises in electricity prices.

Source: The Daily Telegraph, 15 January 2022

(a) Identify what caused the rise in the electricity prices and explain whether it can be concluded from the article that the price rise was an example of market failure. [5]

(b) Is there any evidence in the article that the French government's decisions will increase competition or efficiency in the energy market? [4]

(c) (i) Distinguish between equality and equity. [3]

(ii) Consider whether the actions of the French government on electricity prices might be thought to increase either equality or equity for consumers and producers. [8]

24. With the help of a diagram, assess the effectiveness of a government's intervention in the price mechanism to address the causes of climate change. [20]

25. The long-term equilibrium position in perfect competition is frequently used to illustrate efficient resource allocation in a free market economy.

Explain why this is so and consider what prevents efficiency from being achieved. [20]

26. Governments in many countries are promoting policies that reduce the impact of the negative externalities.

Evaluate, using appropriate diagram(s), the extent to which two policies used to reduce negative externalities can also improve allocative efficiency. [20]

27. The provision of health care by the public sector is inefficient and therefore all health care should be provided by firms operating in the private sector.

Evaluate this comment. [20]

28. Pollution is caused when consumers or producers make decisions based on self-interest. This is a sign of market failure.

With the help of a diagram, evaluate the extent to which government policies should rely upon market forces to address this market failure. [20]

29. Negative externalities of production cause market failure.

With the help of a diagram, assess the extent to which the introduction of indirect taxation is likely to address this cause of market failure. [20]

MARK SCHEME

1. Partly it is for productive efficiency – cost against output; not really the case for allocative efficiency.

2. Explanation of meaning of the free market economy and its link to an efficient allocation of resources. Distinction between productive and allocative efficiency.

Discussion of whether it is desirable – individual actions are not always best for society as a whole. Discussion of whether it is possible – existence of market failure and necessity/desirability of government intervention to achieve efficiency

L4 (18–25 marks) For a thorough explanation and a reasoned discussion dealing with both desirability and possibility; efficiency and possible reasons for market failure/government intervention. A conclusion should be drawn. Max 21 no conclusion.

L3 (14–17 marks) For a competent explanation of the meaning of pure market. The analysis will probably concentrate on either the desirability or the possibility with little reference to the other.

L2 (10–13 marks) For a correct but undeveloped explanation with some attempt at analysis but only brief discussion with no conclusion.

L1 (1–9 marks) For an answer that has some basic correct facts but includes irrelevancies and errors of theory.

3. Explanation of efficiency. Discussion of what is meant by competitive markets and whether this means only perfect competition. Efficiency is achieved in perfect competition but other competitive markets may not and individual actions are not always best for society as a whole. Discussion of reasons for market failure and necessity/desirability of government intervention to achieve efficiency.

L4 (18–25 marks): For an accurate discussion of efficiency, competition and market failure, with examples and a conclusion about the need for government intervention. No conclusion – maximum 21.

L3 (14–17 marks): For a competent explanation of productive and allocative efficiency and more limited discussion of different competitive markets. Still expect a consideration of the reasons for market failure and the need for government.

L2 (10–13 marks): For a briefer analysis of efficiency and of market failure with few examples and no comment about different types of competitive markets. No conclusion.

L1 (1–9 marks): For an answer that has some basic correct facts but includes irrelevancies and errors of theory.

4. (a) Meaning of externality and public goods (4), link? Existence of externalities can be found with public goods which are not provided by the market. (2); meaning of transfer payments and poverty trap (4) link? Poverty can be relieved by transfer payments. Finding work but only on a low income may result in withdrawal of transfer payment and cause return to poverty (2)

L4 (9–12 marks) For a sound explanation of all four concepts and conclusion about the two links.

L3 (7–8 marks) For weaker explanation of four concepts or sound explanation of three concepts and conclusion about at least one of the links.

L2 (5–6 marks) For a sound explanation of two of the concepts but little comment about the link.

L1 (1–4 marks) For an answer that has some basic correct facts but includes irrelevancies and errors of theory.

(b) Explanation of meaning of efficiency allocation and explanation of the analysis which ensures an efficient optimum may be reached. Allocative efficiency is intended. Allocative efficiency ensures that no one can be made better off without someone being worse off. Individual actions are not always best for society as a

whole and externalities (market failure result). Discussion of necessity/desirability of government intervention to achieve efficiency. This could be by taxes, subsidies, regulation, information provision, ownership, persuasion (nudge theory) rather than by enforcement.

L4 (9–13 marks) For an accurate discussion of externalities and market failure, with examples and a conclusion about the need for and methods of government intervention. Expect at least three methods.

L3 (7–8 marks) For a more limited discussion of the externalities and market failure and more limited range of methods governments can use to overcome market failure. Expect at least two methods.

L2 (5–6 marks) For a brief analysis of externalities and very scant coverage of methods to correct them. Expect at least one method.

L1 (1–4 marks) For an answer that has some basic correct facts but includes irrelevancies and errors of theory.

5. (a) Explanation of meaning of efficiency and explanation of the analysis which ensures an efficient optimum may be reached. Productive and allocative efficiency are intended. Its attainment is considered important as it makes the best use of resources and allocative efficiency ensures that no one can be made better off without someone being worse off.

L4 (9–12): for a thorough explanation dealing with productive and allocative efficiency and a comment on the importance of both concepts

L3 (7–8): for a competent but less developed explanation of the terms with accurate but limited comment on the importance

L2 (5–6): for a correct but brief explanation with some attempt at analysis possibly with only one type of efficiency correctly elaborated, no comment on importance

L1 (1–4): for an answer that has some basic correct facts but includes irrelevancies and errors of theory

(b) Individual actions are not always best for society as a whole. Discussion of reasons for market failure and hence the necessity/desirability of government intervention to achieve efficiency. Intervention could be by persuasion (nudge theory) rather than by enforcement, by designing choices to encourage decision-making in wider positive interests of society. Government intervention may thus be necessary, but it might not be sufficient to overcome inefficiency as there can be inefficiency in government through lack of information.

L4 (9–13): for an accurate discussion of market failure, with examples and a conclusion about the need for government intervention and whether such intervention is a sufficient solution

L3 (7–8): for a more limited discussion of the reasons for market failure and the need for the government but without a comment on whether such intervention is sufficient to overcome market failure

L2 (5–6): for a brief analysis of market failure with few examples and no conclusion about necessity or sufficiency

L1 (1–4): for an answer that has some basic correct facts but includes irrelevancies and errors of theory

6. Explanation of meaning of efficient allocation and explanation of the analysis which ensures an efficient optimum may be reached. Distinction between productive and allocative efficiency.

Discussion of reasons for market failure and necessity/desirability of government intervention to achieve efficiency. This could be by persuasion (nudge theory) rather than by enforcement. Nudge theory, originally an ethical idea not a government manipulative tool, involves designing choices to encourage decision making in wider positive interests of society. But it can be used in government context. Government intervention itself sometimes creates inefficiency.

Level 4 (18–25 marks): for a thorough explanation and a reasoned discussion dealing with both aspects of efficiency and possible reasons for government intervention. A conclusion should be drawn.

Level 3 (14–17 marks): for a competent explanation of the terms with accurate but limited discussion.

Level 2 (10–13 marks): for a correct but undeveloped explanation with some attempt at analysis but only brief discussion with no conclusion.

Level 1 (1–9 marks): for an answer that shows some knowledge but does not indicate that the question has been fully grasped or where the answer is mostly irrelevant.

7. Explanation of meaning of efficient allocation and explanation of the analysis which ensures an efficient optimum may be reached. Distinction between productive and allocative efficiency. Discussion of reasons for market failure and necessity/desirability of government intervention to achieve efficiency.

L4 (18–25) For a thorough explanation and a reasoned discussion dealing with both aspects of efficiency and possible reasons for government intervention. A conclusion should be drawn.

L3 (14–17) For a competent explanation of the terms with accurate but limited discussion. There should still be a conclusion.

L2 (10–13) For a correct but undeveloped explanation with some attempt at analysis but only brief discussion with no conclusion.

L1 (1–9) For an answer which shows some knowledge but does not indicate that the question has been fully grasped, or where the answer is mostly irrelevant.

8. The definitive solution of economic theory should be explained in terms of productive and allocative efficiency. Candidates should then consider whether the market ever achieves such efficiencies. These efficiencies may be possible in a perfect market but the reality is that there will be inefficiencies due to market failures: excess profits, lack of information, externalities, merit goods, and public goods might all prevent the achievement of efficiency. Whether the efficiency can instead be achieved by government intervention should also be discussed. Candidates could debate what type of intervention might be suitable and whether the theory has any use.

L4 (18–25) For a thorough discussion of both efficiency and the uncertainties of the market with a comment on the role of the government in promoting efficiency overcoming market failure. A reasoned conclusion should be presented.

L3 (14–17) For a competent explanation with either a more limited comment on both efficiency and the uncertainties of the market, or a full explanation of efficiency but with little comment on uncertainties. The role of the government will be discussed in a more limited way but a conclusion should still be presented.

L2 (10–13) For an undeveloped explanation of efficiency/market failure with very little discussion of the role of the government. Mention of the government will be descriptive rather than in the form of a discussion related to the role of economic theory. It is likely that there will be no conclusion.

L1 (1–9) For an answer which shows some knowledge but does not indicate that the question has been fully grasped, or where the answer contains irrelevancies and errors of theory.

9. Candidates are expected to consider the argument. First, what is meant by resources and whether the premise is correct about their use; second, if it is correct, whether this can be achieved only by larger firms and thirdly whether the conclusion is correct. Candidates may refute, or accept, the subsidiary conclusion about larger firms, or the final conclusion or both.

L4 For a clear consideration of each stage of the argument in the question. A reasoned conclusion should be presented. (18–25)

L3 For a competent but more limited comment on the whole argument or by concentrating on part of the argument – maybe the link between resource use and large firms perhaps by discussing economies of scale; or of the final part of the argument about the role of the government. (14–17)

L2 For an undeveloped discussion of the argument concentrating on only one aspect and with no overall comment on the conclusion in the question. (10–13)

L1 For an answer which shows some knowledge but does not indicate that the question has been fully grasped, or where the answer contains irrelevancies and errors of theory. (1–9)

10. Economic efficiency should be explained in terms of productive and allocative efficiency. Candidates should then consider whether the market ever achieves such efficiencies. They may be possible in a perfect market but the reality is that there will be inefficiencies due to market failures – excess profits, lack of information, externalities, merit goods, public goods might all prevent the achievement of efficiency. Whether the efficiency can instead be achieved by government intervention should also be discussed. Candidates could debate what type of intervention might be suitable. (25)

L4 For a thorough discussion of both efficiency and market failure and a competent discussion of the role of the government in promoting efficiency overcoming market failure. A reasoned conclusion should be presented. 18 –25

L3 For a competent explanation with either a more limited comment on both efficiency and market failure (perhaps concentrating on productive efficiency) or a full explanation of one but little comment on the other. The role of the government will be discussed in a more limited way but a conclusion should still be presented. 14 –17

L2 For an undeveloped explanation of efficiency/market failure with very little discussion of the role of the government. Mention of the government will be

descriptive rather than in the form of a discussion related to efficiency/market failure. It is likely there will be no conclusion.10–13

L1 For an answer which shows some knowledge but does not indicate that the question has been fully grasped, or where the answer contains irrelevancies and errors of theory. 1–9

11. There should be an attempt to explain the meaning of economic efficiency and of market failure. Economic efficiency should be explained in terms of productive and allocative efficiency, market failure can be explained by reference to possible excessive profits, the need for very large investments, the existence of externalities, merit goods and of the need for public goods. There should then be an attempt to discuss whether governments can overcome these market failures in order to increase efficiency.

L4 For a thorough discussion of both efficiency and market failure and a competent discussion of the role of the government in promoting efficiency overcoming market failure. A reasoned conclusion should be presented. (18–25)

L3 For a competent explanation with either a more limited comment on both efficiency and market failure (perhaps concentrating on productive efficiency) or a full explanation of one but little comment on the other. The role of the government will be discussed in a more limited way but a conclusion should still be presented. (14–17)

L2 For an undeveloped explanation of efficiency/market failure with very little discussion of the role of the government. Mention of the government will be descriptive rather than in the form of a discussion related to efficiency/market failure. It is likely there will be no conclusion. (10–13)

L1 For an answer which shows some knowledge but does not indicate that the question has been fully grasped, or where the answer contains irrelevancies and errors of theory. (1–9)

12. (a) Explanation of equilibrium in terms of productive efficiency and allocative efficiency.

L4 For a clear explanation of both types of efficiency and a comment on the possibility of achieving efficiency in different market structures. [9–12]

L3 For a more limited explanation of both types of efficiency but with little comment. [7–8]

L2 For a limited attempt probably with an explanation of only productive efficiency or a more general explanation using demand and supply curves only. [5–6]

L1 For an answer which has some basic correct facts but includes irrelevancies. There will be errors of theory or omissions of analysis. [1–4]

(b) Discussion of areas of market failure through lack of knowledge, imperfections, monopolies and externalities.

L4 For a sound discussion with good explanation of the several market failures with a discussion of the resulting misallocation of resources. [9–13]

L3 For a full comment of one market failure, probably monopoly or externalities and a briefer discussion of the effect on the allocation of resources. [7–8]

L2 For a correct but very limited explanation of market failure, either with a brief examples or in general terms. [5–6]

L1 For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. [1–4]

13. Answers should provide a clear explanation of the meaning of a public good.

Key characteristics: non rival; non excludable should be identified. Some reference to non- divisible/non-rejectable might also be referred to. Examples provided might include:street lighting/national defence/lighthouse

The link between the characteristics of a public good and the difficulty associated with the provision of such a good by the free market should be established i.e. the ‘free rider problem’ Market failure should be discussed in the context of allocative

inefficiency. Allocative efficiency is attained when resources are allocated to maximise consumer satisfaction. If public goods are not provided, consumer satisfaction is unlikely to be maximised, hence unless the State provides public goods, market failure will occur.

L4 (9–12 marks): For a reasoned and clear discussion which explains the key characteristics of a public good and analyses the links between allocative efficiency and the concept of market failure. An attempt should be made to evaluate the potential impact on total consumer satisfaction if certain public are not provided. A conclusion should be provided which might comment on the importance of public goods and how a government can help to address this type of potential market failure.

L3 (7–8 marks): For a competent comment which clearly defines the concept of a public good and market failure together with limited elaboration of the analysis or imprecise links in the argument. Evaluation will not be fully developed and no attempt will be made to provide a conclusion to summarize the preceding argument.

L2 (5–6 marks): For a limited explanation of the key terms but weak or ill explained links between these terms. The explanation will be undeveloped with some attempt at analysis but the emphasis will be on descriptive comment.

L1 (1–4 marks): For an answer that has some basic correct facts but includes irrelevancies and errors of theory

14. Discussion of the wide effects of infrastructure development and a consideration of the efficient allocation of resources which may involve government regulation if not government investment.

L4) For a reasoned discussion and clearly structured answer with conclusion on both types of efficiency. (12–15)

L3) For a full discussion possibly of one type of efficiency with only a limited attempt at a conclusion. (9–11)

L2) For a limited but acceptable attempt which may not define efficiency, omit one type of efficiency, not have a conclusion, and not have any development of analysis.

(6–8)

L1) For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. (1–5)

15. (a) (L4) For a reasoned and clear explanation of both types of efficiency, mentioning types of market structure when they could occur. [9–12]

(L3) For a competent comment but with either a limited elaboration of the whole analysis or a concentration on one type of efficiency and the likelihood of achieving it. [7–8]

(L2) For a correct explanation and limited development of part of the analysis – probably productive efficiency. [5–6]

(L1) For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis will be substantial. [1–4]

(b) Candidates should explain how increases in competition might affect output decisions and changes in costs. Whether these lead to an approach to productive efficiency once possible opportunities for economies of scale are removed is debateable. It is also debateable whether competition – unless it is perfect - allows allocative efficiency and no account is taken of externalities so social allocative efficiency is not attained.

(L4) For an explanation of how competition affects each type of efficiency, a discussion of the possible outcome of a market system with a reasoned conclusion.

[9–13]

(L3) For a competent explanation which does not fully analyse both types of efficiency. There will be some discussion but the evaluation will not be fully developed or extensive.

[7–8]

(L2) For an accurate though undeveloped explanation concentrating on only one type of efficiency (probably productive) with some attempt at analysis but only limited evaluation.

[5–6]

(L1) For an answer which shows some knowledge but does not indicate that the question has been fully grasped. The answer will have some correct facts but include irrelevancies. Errors of theory or omissions of analysis will be substantial.

[1–4]

16. The answer should be in three parts. It should first identify and describe the necessary conditions for efficient resource allocation. It should then consider if these conditions are able to be created by the government and whether it is true that these are not possible in the private sector of the economy. Thirdly, the answer should debate whether, in the light of the findings of section two of the essay, the conclusion in the statement is correct.

L4) For a reasoned and clear discussion with accurate development of theory and good links to the statement covering all time parts including a reasoned conclusion.

[18 - 25]

L3) For a clear description and structure although a limited elaboration of the analysis or imprecise links to the statement. There will be some discussion but the evaluation will not be fully developed or extensive.

[14 - 17]

L2) For a correct explanation of efficient allocation but weak or ill-explained links to the statement. The explanation will be undeveloped with some attempt at analysis but only limited evaluation and the conclusion will not be drawn.

[10 - 13]

L1) For an answer which shows some knowledge but does not indicate that the question has been fully grasped. The answer will have some correct facts but include irrelevancies. Errors of theory or omissions of analysis will be substantial.

[1 - 9]

17. Explanation of meaning of free market principles and brief comment on the way in which a free market allocates resources. The article does, however, say that the government is involved in the industrial sector and this contrasts with the textbook view of a free market system.

18. Candidates should explain what is meant by efficiency. They should then discuss whether the areas of 'market failure' prevent the achievement of an efficient allocation of resources.

L4 For an explanation of efficiency, a discussion of the possible outcome of a market system with a reasoned conclusion

18 – 25

L3 For a competent explanation which does not fully analyse either the meaning of efficiency or the likely market failure. There will be some discussion but the evaluation will not be fully developed or extensive

14 – 17

L2 For an accurate, though undeveloped, explanation with some attempt at analysis but only limited evaluation

10 – 13

L1 For an answer which shows some knowledge but does not indicate that the question has been fully grasped. The answer will have some correct facts but include irrelevancies. Errors of theory or omissions of analysis will be substantial

1– 9

19. (a) Discussion of the meaning of market failure – monopoly, lack of information, externality, public goods. Consideration of whether congestion and resulting pollution and time delays can be classified in one of these categories.

L4) For a reasoned and clear discussion with accurate explanation of theory.

9 - 12

L3) For a fair but undeveloped discussion.

7 - 8

L2) For a limited but acceptable attempt to consider the theory but with little reference to the particular changes mentioned in the question.

5 - 6

L1) For an answer which has some basic correct facts but includes irrelevancies and errors of theory.

1 – 4

(b) Analysis of changes that a government might implement through subsidies, taxation, regulation, ownership, provision.

L4) For a reasoned discussion and clear analysis. 9 - 13

L3) For a fair but undeveloped analysis. 7 - 8

L2) For a limited but acceptable attempt to consider the possible policies. 5 - 6

L1) For an answer which has some basic correct facts but includes irrelevancies and errors of theory. 1 – 4

20. (a) Explanation of the areas of market failure – imperfect competition, externalities, public goods, incomplete valuations with merit goods.

L4 For a reasoned and clear explanation with accurate development of theory together (9-12)

L3 For a fair but undeveloped explanation (7-8)

L2 For a limited but acceptable attempt to consider the theory but with a greater concentration on the descriptive elements (5-6)

L1 For an answer which has some basic correct facts but includes irrelevancies and errors of theory (1-4)

(b) Discussion of whether museums fall into any of the above categories. Museums provide interest in cultural heritage, require large amounts of capital to establish, often are unprofitable, increase tourism, create employment in areas other than the museum, provide education. Some of these fall into the categories of market failure.

L4 For a reasoned and clear evaluative comment (9-13)

L3 For a fair but undeveloped comment (7-8)

L2 For a limited but acceptable attempt to consider the possible effects (5-6)

L1 For an answer which has some basic correct facts but includes irrelevancies and errors of theory (1-4)

21. (a) A negative externality is a cost that is incurred by a third party. (1) Negative externalities exist when individuals bear a portion of the cost associated with a good's production without having had any influence over the related production decisions. (1)

Accept any relevant example of the effect of production on a third party. (1 for example, 1 for application).

Maximum 3 marks if only consumption externality discussed.

Max 3 mark if only consumer

(b) 2 marks for each reason. 1 for identification, 1 for explanation.

2 marks for each reason. 1 for identification, 1 for explanation.

2 marks for each reason. 1 for identification, 1 for explanation.

- it allows increased power to monopolies with resulting higher profits that benefit the shareholders and producer management not the consumer.
- it results in unequal bargaining power between employers and workers. Workers have little scope for arguing for pay rises.
- it allows an unequal negotiation between large organisations and small independent suppliers. Large organisations can insist on low purchasing prices and small suppliers have limited power to resist. This has been noticeable in large supermarkets dealings with small farmers.

(c) Definition of efficiency:

- Productive efficiency producing at the lowest cost for the particular output. (2)
- Allocative efficiency where every good or service is produced up to the point where the last unit provides a marginal benefit to consumers equal to the marginal cost of producing it. (2)

Diagram should illustrate:

Correctly drawn and labelled Monopoly diagram. (3marks)

Conclusion: the theory does not support this opinion. (1)

22. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

- The distinction between public and private ownership should be clearly explained
- Education should be identified as a merit good and the significance of merit goods explained.
- The links between a merit good, positive externalities and allocative efficiency should be analysed.
- Analysis of the relationship between the private provision of education, the use of subsidies and potential efficient outcomes should be provided.
- A diagram should be provided to illustrate the impact of a subsidy on the provision of education by the private sector

Where no diagram – max marks top L2

AO3 Evaluation

- The use of subsidies to encourage the provision of education in the private sector might not be entirely successful because of the difficulties involved when attempting to assess the precise level of subsidy required to achieve an allocatively efficient outcome.
- Subsidies provided by the public sector are often expensive and their use will automatically create opportunity costs. For example, money spent on state subsidies to health care
- Subsidies in the private sector will mean that access to education is still based on an ability to pay, this might create inequitable outcomes in society.
- The pursuit of profit supported by subsidies might enable private firms to cut costs and reduce any unnecessary bureaucracy thus leading to a more efficient use of scarce resources.

- Direct state provision of education might lead to less efficient outcomes and reduce the time taken to ensure a high standard of education is available on an equal basis throughout the population.
- A conclusion should be attempted which examines the net benefits of each alternative i.e. private or public sector provision of education.
- Also, the impact on price and output in some circumstances takes a long time to become effective.
- Advertising is often costly and it is not always certain that it will have a sufficiently persuasive effect to ensure the correct level of output / consumption is reached
- It is possible to show that government intervention can reduce the level of inefficiency caused by the existence of negative externalities, but it is not clear whether the net effect of government intervention will always be positive. Some types of intervention will be more effective than others depending on the nature of the good / service under consideration.

Accept all valid responses.

AO1 Knowledge and understanding and AO2 Analysis 14

AO3 Evaluation 6

23. (a) Natural gas supply shortage (1) breakdown of nuclear reactors (1). Market failure occurs when price mechanism fails to account for all of the costs and benefits necessary to determine price equilibrium and this results in allocative inefficiency (accept alternative definitions of market failure) (2). There is no evidence of allocative inefficiency and no market failure (accept either) (1).

(b) Competitors got cheaper electricity, so this maybe increases competition (1). Alternative renewable energy projects were stopped, so possibly leading to less efficiency (1). Five reactors were forced to close due to poor maintenance and becoming less efficient (1). The reactors enabled self-sufficiency so this is now less likely.

Conclusion: some evidence of increasing competition, no evidence of increasing efficiency (1). Accept fall in monopoly profits might lead to a fall in dynamic efficiency (1).

4 marks maximum

(c) i. Economic equality is the equal distribution of income, wealth in society (1) plus (1) for further development.

Equity is fairness/justice particularly in regard to welfare economics (1) plus (1) for further development.

3 marks maximum

ii. Cannot show that changes in price are linked to any notion of fairness, in relation to producer (1). Therefore, producer equity will be unaffected (1). A tax cut might increase consumer equity (1).

Explanation (1) equality possibly, consumer rescued from excessive price increase (1) but as both rich and poor consumer benefit it is not conclusive that consumer equality is improved (1).

Small firms will get cheaper electricity at the expense of large firms and this suggests an increase in equality between producers might be obtained (2).

However, a cut in electricity taxes might benefit the large electricity company more than its smaller rivals, therefore any conclusion on the impact of equality for producers might remain uncertain (2).

8 marks maximum

24. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

- An explanation of the link between climate change and negative externalities.

- Explanation of negative externalities
- Recognition that negative externalities can be caused by production or consumption.
- Use of a diagram to show the links between climate change and negative externalities
- Analysis of how market forces can be used to address the consequences of climate change.

L2 maximum if no accurate diagram provided.

AO3 Evaluation

- The link between climate change on negative externalities is very difficult to accurately establish
- It is also extremely difficult to measure negative externalities
- The use of taxation to influence price and output is unlikely to remove all negative externalities because it is very difficult to measure the correct amount of taxation that should be applied.
- The use of minimum prices to reduce negative externalities would only be partially effective and might have significant effects on firm's profits and employment.
- Alternatives to the use of the price mechanism might, in some circumstance, allow a government to achieve a more precise control of negative externalities. For example, through the use of a complete ban of consumption/production.
- A conclusion should be attempted which examines the net benefits of each alternative i.e. through direct government intervention or through the use of market forces.

Accept all valid responses.

AO1 Knowledge and understanding and AO2 Analysis 14

AO3 Evaluation 6

25. AO1 and AO2 out of 14 marks.

AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

Explanation of allocative and productive efficiency.

Diagram and/or explanation of the long term equilibrium in perfect competition

Efficiency may not be achieved because of

- Market failure, explained by reference to possible excessive profits, the need for very large investments, the existence of externalities, merit goods and of the need for public goods.
- Government intervention can help overcome this by regulation, taxation, subsidies, or ownership aimed at achieving productive and allocative efficiency.

AO3 Evaluation (max 6 marks)

- The concepts of allocative and productive efficiency are mainly theoretical and rest upon fine calculations of marginal changes or precise allocations of costs.
- Government intervention in the production of a good or service does not necessarily achieve productive or allocative efficiency – there may be government failure.

AO1 Knowledge and understanding and AO2 Analysis 14

AO3 Evaluation 6

26. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

- Definitions of negative externalities.
- Explanation of negative externalities with example(s).
- Analysis of the effects on output and price of negative externalities leading to over-production and under-pricing of goods and implication for allocative efficiency.
- Identification, application and analysis of two policies which may reduce negative externalities.
- Candidates may refer to: indirect taxation of activity, subsidies of alternative, prohibition of activities, improved information, pollution permits.

Note: Maximum L2 if no diagram

AO3 Evaluation

- Evaluation may refer to direct cost of implementation, extent of impact on allocative efficiency, effect on production costs, local effects on employment, or regressive/progressive income effects.
- Information failure preventing the extent of the negative externality being known.

Accept all valid responses.

27. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

- The distinction between public and private ownership should be clearly explained.
- Health care should be identified as a merit good and the significance of merit goods explained.
- The links between a merit good, positive externalities and allocative efficiency should be analysed.
- Analysis of the relationship between the public provision of health care and efficient outcomes should be provided.
- Analysis of the possible causes of inefficiency relating to the provision of health care by the public sector.

AO3 Evaluation

- Private providers of health care are unlikely to provide an allocatively efficient level of health care because of a failure to take into account the additional benefits of positive externalities.
- Private firms are likely to aim for profit maximization and this might lead to a higher cost of receiving health care.
- If access to health care in the private sector is based on an ability to pay, this might create inequitable outcomes in society.
- The pursuit of profit might lead private firms to cut costs and reduce any unnecessary bureaucracy thus leading to a more efficient use of scarce resources.
- The substitution of public provision by private provision might enable additional resources to become available in the public sector.
- A conclusion should be attempted which examines the net benefits of each alternative ie private or public sector provision of health care.

- Also, the impact on price and output in some circumstances takes a long time to become effective.
- Advertising is often costly and it is not always certain that it will have a sufficiently persuasive effect to ensure the correct level of output/consumption is reached.
- It is possible to show that government intervention can reduce the level of inefficiency caused by the existence of negative externalities but it is not clear whether the net effect of government intervention will always be positive. Some types of intervention will be more effective than others depending on the nature of the good/service under consideration.

Accept all valid responses.

AO1 Knowledge and understanding and AO2 Analysis 14

AO3 Evaluation 6

28. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

- An explanation of the link between pollution and market failure.
- Recognition that pollution can be caused by production or consumption.
- Explanation of negative externalities
- Use of a diagram to analyse the links between negative externalities and market failure.
- Analysis of how market forces can be used to solve the problem of market failure, caused by negative externalities.

AO3 Evaluation

- Private firms are likely to aim for profit maximisation and this might lead to these firms focusing upon private costs and ignoring social cost.
- The use of taxation to influence price and output is unlikely to remove all market inefficiency because it is very difficult to measure the correct amount of taxation that should be applied.
- The use of minimum prices would only be partially effective and might have significant effects on firm's profits and employment.
- Alternatives to the use of the price mechanism might, in some circumstance, allow a government to achieve a more precise control of negative externalities. For example, through the use of a complete ban of consumption/production.
- A conclusion should be attempted which examines the net benefits of each alternative i.e. through direct government intervention or through the use of market forces.

Also, the impact on price and output in some circumstances takes a long time to become effective.

- Advertising is often costly and it is not always certain that it will have a sufficiently persuasive effect to ensure the correct level of output/consumption is reached.
- It is possible to show that government intervention can reduce the level of inefficiency caused by the existence of negative externalities but it is not clear whether the net effect of government intervention will always be positive. Some types of intervention will be more effective than others depending on the nature of the good/service under consideration.

Accept all valid responses.

AO1 Knowledge and understanding and AO2 Analysis 14

AO3 Evaluation 6

29. AO1 and AO2 out of 14 marks. AO3 out of 6 marks.

Indicative content

Responses may include:

AO1 Knowledge and understanding and AO2 Analysis

- Market failure regarding this question would relate to allocative inefficiency. Market failure can be explained by defining allocative efficiency and linking this to the requirement to allocate resources to maximise consumer satisfaction.
- This can be supported by a diagram illustrating a level of output where $AR = MC$ which is consistent with an outcome that achieves allocative efficiency.
- Negative externalities occur when the consumption/production of a good produces a cost to society which is greater than that incurred by an individual consumer/producer. This is sometimes described as a negative 'spill-over' effect.
- One form of government intervention might be the introduction of indirect taxation. A clearly labelled, accurate diagram can be used to show the impact of an indirect taxation on the level of output and efficiency.
- Analysis would use this to show the impact of an indirect tax on the PC curve.
- Further analysis should then identify the links between the indirect tax and the behaviour of firms. This would link the creation of negative externalities to the benefits of removing them and then linking this to addressing this cause of market failure

N.B: L2 max if no or incorrect diagram provided.

AO3 Evaluation

- A government might introduce indirect taxation however it is difficult to determine the extent of the taxation necessary which will address the issue of market failure without causing other problems, for example, an increase in unemployment.
- Also, the impact of indirect taxation in some circumstances takes a long time to become effective.

- Some large firms might produce and sell products which have an inelastic demand therefore this would be unlikely to have a significant impact on output and efficiency.
- The introduction of indirect taxation might be costly and unnecessarily bureaucratic, as well as being difficult to monitor and enforce.
- It might be that government intervention based on the use of alternative more direct approaches such as the use of pollution permit might be more effective.
- Indirect taxation is regressive and might unfairly penalise lower income groups.
- A conclusion should consider alternatives, compare these with the use of indirect taxation and attempt to form some judgement regarding the effectiveness of this type of policy.

Accept all valid responses

AO1 Knowledge and understanding and AO2 Analysis 14

AO3 Evaluation 6