

ECONOMICS

Paper 9708/11
Multiple Choice

<i>Question Number</i>	<i>Key</i>	<i>Question Number</i>	<i>Key</i>
1	A	16	D
2	B	17	D
3	A	18	B
4	D	19	C
5	C	20	B
6	A	21	D
7	C	22	B
8	C	23	A
9	D	24	D
10	B	25	D
11	B	26	A
12	D	27	A
13	A	28	C
14	C	29	B
15	C	30	B

Key messages

While candidates are successful on the standard diagrams, they need to master diagrams of a less usual form.

General comments

There was a wide spread of marks gained. Two questions, **8** and **13**, were easier than expected while one other, **Question 16**, proved more difficult.

The topics that candidates found easiest were consumer and producer surplus, exchange rate determination, transfer payments and ceteris paribus. The topics which proved most challenging were subsidies, rate of inflation (both as diagrams), enterprise and minimum prices. Generally, candidates found questions of a numerical form the most difficult, although the two lowest-scoring marks were for diagram questions.

Comments on specific questions

In **Question 1** the even spread of responses suggested a degree of guessing. The key, **B**, referred to standard payments by a firm which do not include the essential element of risk-taking associated with enterprise. Extra care is required when dealing with the infrequent questions using 'not'.

The largest group on **Question 9** wrongly selected option **A** (inelastic supply) as the cause of the least excess supply with a minimum price. Zero elasticity is likely to reduce the excess still further, hence **D** is correct. Candidates might have tested their answer by sketching relevant diagrams.

The most difficult question on the paper proved to be **Question 16**. The incidence of tax is well-known to candidates but the incidence of a subsidy is not. The impact of the subsidy on the producer is shown by the upper section of the total rectangle, which itself shows government expenditure. The key is therefore **D** not the most preferred choice of **B**.

Question 21 dealt with a common problem for candidates namely the confusion between rates of inflation and price levels. The price level will rise whenever the inflation rate is positive. It falls only when it is negative. The majority of candidates opted for **B**. This is incorrect as year two has a positive constant rate of inflation and year three has a positive falling rate of inflation. Consequently the price level rose in both years. The key is **D**.

In **Question 23** a significant number of candidates opted for **C** rather than the key **B**. An increase in other countries' exchange rates is the equivalent of a decrease in the national foreign exchange rate, which would be expected to reduce, not increase, a deficit.

In **Question 26** there was a common misconception that lowering a quota (option **B**) decreased protectionism. A lower quota allows fewer imports hence raising protection. The correct choice is **A** as an embargo (ban) is more protection, while reduced subsidies make foreign products relatively more competitive so giving less domestic protection.

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Paper 9708/12
Multiple Choice

<i>Question Number</i>	<i>Key</i>	<i>Question Number</i>	<i>Key</i>
1	B	16	B
2	D	17	A
3	A	18	D
4	C	19	A
5	B	20	C
6	D	21	A
7	C	22	D
8	C	23	B
9	D	24	C
10	D	25	C
11	D	26	B
12	C	27	B
13	A	28	D
14	A	29	B
15	A	30	C

Key messages

Candidates need to be prepared to test their answers by sketching their own diagrams and making their own calculations even if the question does not make this an explicit task.

General comments

A good spread of marks was seen. Three questions (**2**, **8** and **16**) proved to be easier than intended, while none was more difficult than intended. The topics that candidates found easiest were opportunity cost, price elasticity of supply, market equilibrium and subsidies. Difficulties arose with private goods, the price mechanism, tax structure and currency depreciation. The performance on diagram questions was strong and ahead of the verbal and numerical forms.

Comments on specific questions

In **Question 4** a significant number opted for a free good (option **A**). The toys would have an opportunity cost so would not be a free good. They do possess the qualities of a private good such as rivalry and excludability, hence the key is **C**.

In **Question 11** more than one third of candidates opted for **C**. The increase in the supply of a good will lower its price and increase its consumption. The increase in the demand for the complement good will increase (not decrease) its price, making **D** the key.

The advantages of the price mechanism as a rationing device were the focus of **Question 12**. Option **A** was a commonly chosen distractor. However, wants are only wishes or desires and not necessarily effective demand so they may not be ensured by the price mechanism. The key **C** meets the requirement for demand to be effective.

Question 15 posed problems even for the high-scoring candidates. The largest group selected option **C**. However, when the tax-free income allowance is accounted for, the rate of tax becomes progressive for incomes above \$20 000. It is not progressive below \$20 000, where no tax is deducted. Candidates might have tested their answer by calculations at two levels above \$20 000.

In **Question 21** the even spread of responses suggested possible guessing. A depreciation of a foreign exchange rate is expected to lower the price and raise the demand for exports (increased aggregate demand) and increase the price of imports, particularly raw materials (reducing aggregate supply). The key **A** combines these two effects.

More than one third of candidates opted for **A** in **Question 30**. While they understood the relevance of higher interest rates they missed that a deflationary policy would include removing demand from the system by increasing a budget surplus. Key **C** combined both of these effects.

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Paper 9708/13
Multiple Choice

<i>Question Number</i>	<i>Key</i>	<i>Question Number</i>	<i>Key</i>
1	A	16	C
2	D	17	C
3	A	18	D
4	B	19	A
5	B	20	A
6	D	21	D
7	B	22	C
8	C	23	A
9	C	24	D
10	B	25	C
11	B	26	A
12	D	27	A
13	B	28	D
14	A	29	D
15	B	30	C

Key messages

The correct application of opportunity cost, which is a fundamental economic concept, proved to be a major problem.

Candidates should practise the various forms of numerical questions and take particular care when answering the few questions which include ‘**not**’ in the stem.

General comments

A range of scores were recorded. Four questions – **13**, **14**, **15** and **28** – were easier than intended. No question proved to be more difficult than intended.

The topics found most easy were supply-side policy, consumer surplus, maximum and minimum prices and subsidies. The latter three cases indicated a good grasp of applications of demand and supply analysis. The least well-answered questions concerned opportunity cost, production possibility curves, public goods and comparative advantage. Unlike last year, the performance on numerical questions was below that of verbal and diagram forms.

Comments on specific questions

In **Question 2** candidates needed to calculate the opportunity cost as more of good Y and less of good X were produced. Values of $1Y = 1.3X$, $1Y = 1.3X$, $1Y = 1.3X$ and $1Y = 1.6X$ at subsequent stages would be established. Hence **D** is the key as it is never above $1Y$ to $2X$. The majority who selected **A** seem to have concentrated on the total output of X.

The focus of **Question 25** was the setting of the exchange rate under comparative advantage. This has to be between the opportunity cost ratios of the two countries. These were $1 \text{ food} = 2.5 \text{ drink}$ and $1 \text{ food} = 1.66 \text{ drink}$ making **C** the key at $1 \text{ food} = 2 \text{ drink}$. No other option was within these values.

Production possibility curves and public goods are not topics that usually cause great problems and featured in **Question 3** and **Question 17** respectively. The questions had in common the inclusion of 'not' in the stem. This format is used rarely but is necessary on some occasions. It needs an extra level of attention.

In **Question 3** the key is **A** as changes in employment/unemployment are moves within the production possibility curve and do not shift its position. Option **B**, chosen by one third of candidates, would cause the shift as it would increase the available workforce, so makes it a wrong answer.

In **Question 17**, while the largest group correctly selected key **C**, a significant proportion opted for **B**. The answer requires recognition that flood defence is a public not a merit good. That alone means **C** is the correct response as it does not apply to flood defence. Option **B**, however, involves an opportunity cost like any other government expenditure so does apply to flood defence making it a wrong answer.

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Paper 9708/21 Data Response and Essay
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Key messages

- Candidates need to ensure they focus on the particular ‘command’ word that is being used in a question, such as ‘**calculate**’, ‘**explain**’ or ‘**discuss**’.
- Candidates should be aware that in the ‘**discuss**’ questions in **Section B**, a certain number of marks are awarded for evaluation.
- Candidates need to ensure that diagrams are correctly drawn and clearly labelled.

General comments

A range of marks were seen, with questions involving calculations and demand and supply analysis being found easiest. The most difficult element of the paper was the evaluation in part (b) of the essays.

There were instances of candidates not following the instructions in the question carefully. In **Question 1 (d)** a diagram was explicitly required, but some candidates did not draw one. Some candidates wrote about changes in demand rather than changes in supply. In **Question 3 (a)**, some candidates wrote about the price elasticity of demand for a product rather than the price elasticity of supply as asked.

It was obvious in some answers that candidates had not looked closely at the ‘command’ word being used. It is important that candidates do recognise whether they are being asked to ‘**calculate**’, ‘**explain**’ or ‘**discuss**’ something. When evaluation is required, as in the ‘discuss’ questions, there is often a clue in the question to guide candidates towards this. In **Question 2 (b)**, candidates were required to discuss whether enterprise was crucial to the outward shift of the production possibility curve in a mixed economy. In **Question 3 (b)** candidates needed to discuss whether income elasticity of demand was the most useful measure of elasticity to a firm. And in **Question 4 (b)** candidates should have discussed the extent to which free trade should always be preferred to protectionism. There are marks awarded for such evaluation in part (b) of the essays, and performance in this aspect was weaker than on the rest of the paper.

Comments on specific questions

Section A: Data Response

Question 1

- (a) Most candidates successfully calculated the percentage increase in prices in the US between April 2015 and January 2016. Some candidates gained one mark for the use of the correct formula, even though they provided an incorrect answer. A number of candidates simply gave the difference of 2.1 without finding this as a percentage.
- (b) Some candidates were able to explain why the prices of products used to calculate the CPI were given weights, demonstrating an understanding of the fact that this would give an indication of the relative importance of expenditure on different items by people in an economy. Most candidates used examples to support their explanation, as they were required to do in the question, but a few candidates included no examples or only one example. A few candidates seemed to believe that ‘weights’ was a reference to how much different products weighed.
- (c) Many candidates were able to explain why the DPI was more likely to be used for measuring the rate of inflation in the future, such as the fact that it tracks more products and that it is based on actual purchases.

- (d) The majority of candidates were able to explain how changes in supply might be the cause of a fall in the price of computers at a greater rate than the CPI. They were able to refer to a range of factors that could increase supply, such as a fall in the cost of component parts, improvements in technology, the provision of subsidies or more competition from new entrants into the market. Some candidates focused on changes in demand rather than changes in supply. Most candidates were able to draw the diagram and shift accurately. Unfortunately, the diagrams were not always labelled correctly, with some candidates getting D and S and/or P and Q the wrong way round. Some candidates shifted the supply curve to the left, rather than to the right, and some shifted the demand curve.
- (e) Many candidates made a reasonable attempt to explain the implications of inflation for borrowers and savers, pointing out that borrowers will benefit from inflation because they will be paying less back in real terms and that savers will be made worse off because they will be receiving less back in real terms. Unfortunately, some candidates got it the wrong way round, explaining that savers would gain and that borrowers would lose.
- (f) A number of candidates made quite a good attempt to discuss whether monetary policy could operate effectively if inflation was not measured accurately. They pointed out that decisions about changes in the rate of interest and/or the money supply would be taken in relation to what was known about the rate of inflation, and if the rate was not measured accurately the policies adopted might not be the appropriate ones. However, a number of answers were descriptive rather than analytical in approach and did not attempt to offer very much evaluation or any conclusion, despite the fact that it was a 'discuss' question. A number of answers seemed like 'prepared' answers to a question on the control of inflation rather than answers to the actual question being asked. Additionally, some candidates seemed confused between fiscal policy and monetary policy and discussed whether fiscal policy could operate effectively if inflation was not measured accurately.

Section B: Essay

Question 2

- (a) In this part of the question, candidates were required to explain how capital goods contributed to production in a modern economy and how capital was rewarded. Most candidates were able to answer the first part reasonably well, pointing out that capital referred to a variety of human-made aids to production, such as tools, equipment, plant, machinery and factories. They explained that capital could be combined with labour and land to produce products. Unfortunately, some candidates wrote about capital in the sense of finance rather than the means of production. The second element of this part question was answered less well, with many candidates unable to explain how capital was rewarded in a modern economy through interest payments. A number of candidates incorrectly believed that capital was rewarded through profit and not interest.
- (b) In the second part of the question, candidates were required to discuss whether enterprise was crucial to the outward shift of the production possibility curve in a mixed economy. They needed to discuss the contribution of enterprise and then to go on to discuss the contribution of investment decisions taken by a government in a mixed economy. Unfortunately, some candidates focused on enterprise and did not seem to understand the significance of the reference to a mixed economy in the question, i.e. the fact that decisions will be taken by both the private and the public sector. A number of candidates provided analysis but there was little or no evaluation and no logical and reasoned conclusion – very few marks were awarded for the evaluative element as a result.

Question 3

- (a) In this part of the question, candidates were required to explain the factors that could affect the value of the price elasticity of supply for a product. Most candidates were able to give a correct definition of PES, although some of them omitted the reference to 'percentage change' and some put changes in the quantity supplied and changes in the price the wrong way round. Most candidates were also able to comment on the different values of PES, ranging from perfectly inelastic to perfectly elastic. Unfortunately, some candidates wrote about PED rather than PES. Candidates were generally able to explain a number of possible factors affecting the PES for a product, including the number of producers in a market, the availability of stock or the difficulty of keeping stocks of some products, the time period, the extent of spare capacity, the length of the production period, the availability and nature of resources and the degree of factor mobility and the

possibility of switching factors of production. The question did refer to factors and so an explanation of at least two factors was required – however, some candidates explained only one.

- (b) In the second part of the question, candidates were required to discuss whether income elasticity of demand was the most useful measure of elasticity to a firm. Many candidates were able to offer a useful analysis of YED, especially in relation to positive YED, in the case of normal goods, and negative YED, in the case of inferior goods. Candidates then needed to go on to discuss other elasticities, such as PED, XED or PES before coming to a conclusion as to whether YED was the most useful or not. Unfortunately, the evaluation offered by many candidates was rather limited, despite the reference to the need to discuss whether YED was the most useful measure of elasticity to a firm in the question. Marks for the evaluative element were low as a result.

Question 4

- (a) In this part of the question, candidates were required to explain the difference in the way tariffs and quotas operated as methods of protectionism. Many candidates were able to clearly explain the difference in the way that the two methods operated, with tariffs operating as a tax on an imported product to make it more expensive and quotas operating as limits on the imported products that would be allowed into a country. A number of candidates provided some good answers in terms of an explanation of how the effect of a tariff would depend on the PED for a product. Unfortunately, a few candidates seemed confused between a quota and an embargo.
- (b) In the second part of the question, candidates were required to discuss the extent to which free trade should always be preferred to protectionism. Most candidates were able to offer a useful analysis of the potential advantages of free trade, such as an increase in world output, a more efficient allocation of resources, a wider range of products for consumers to choose between and the potential for a substantial increase in economic growth. They then went on to consider a number of possible situations where protectionism could be preferred to free trade, such as support for infant/sunrise industries, support for sunset/declining industries, support for a strategic industry, protection against dumping and the use of protectionism as a means of reducing a current account deficit. A number of candidates provided analysis but little or no evaluation, and did not offer a logical and reasoned conclusion. Marks for the evaluative element were low as a result.

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Paper 9708/22 Data Response and Essay
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Key messages

- In order to score well it is essential that candidates apply their knowledge and understanding to answer the question set.
- Careful consideration of the directive word in each question will ensure that the answer provided is appropriate.
- Analysis must be well directed and sufficiently developed to cover all aspects of a question.
- Evaluative comment should be balanced and sufficiently detailed to lead to a reasoned conclusion.

General comments

There was evidence that knowledge and understanding of economic concepts was generally good. However there was considerable variation amongst candidates in the extent to which these concepts could be applied to answer the question set. Analysis was also generally sound although in some areas the analysis provided was incomplete because the full extent of the question requirements was not grasped. Inevitably, superficial or incomplete analysis undermined the extent to which marks could be scored for evaluation and this continues to be a key weakness in many responses.

Comments on specific questions

Section A: Data Response

Question 1

- (a) (i) A small number of responses did not display the required knowledge and understanding of the balance of payments accounts to answer this question correctly. However, most were able to perform the required calculation to arrive at the difference between the EU's balance of trade in goods with China in 2010 compared to 2015. Many responses did not score, however, because they neglected to identify the negative figure as a deficit. It is essential that the correct economic terms are used when answering questions. A simple statement that the balance of trade in goods was in deficit in 2010 and that this deficit had worsened/increased in 2015 was sufficient to earn both marks available.
- (ii) Again, the use of the correct economic terms was essential here. The EU's balance of trade in services with China was in surplus whereas the balance of trade in goods was in deficit over this period. Surprisingly, some candidates correctly stated that the services balance was in surplus, but failed to contrast this with the deficit on the balance of trade in goods.
- (b) Many answers gained a single mark here for explaining that the impact of subsidies to Chinese steelmakers was to reduce their cost and allow them to sell steel at more competitive prices. However, few were able to explain why this might be considered to be an 'unfair advantage'. It was expected that candidates would suggest that the subsidies were unfair because it allowed the Chinese steelmakers to sell at a price that did not reflect their relative efficiency in steelmaking. Prices were often below cost as a result of government intervention in the market. As stated few candidates considered the question of whether the subsidies could be considered as unfair and failed to go beyond the impact of a subsidy on market price.
- (c) Many candidates provided good answers to this question and scored well. Some good diagrams were provided that showed the impact of the tariff upon the price of steel in India, imports of steel

and the domestic production of steel. There was some variation in the quality of the accompanying explanations provided and in addition there were a number of errors that frequently occurred. For example, a number of candidates shifted the demand curve for steel as a result of the tariff rather than shifting the supply curve. On the whole, however, this question was well answered by many candidates and some good marks were awarded.

- (d)(i) In order to gain both marks here candidates needed first to identify who would lose in China as a result of the tariffs and secondly provide a simple explanation of why they would lose. Most candidates stated that China's steelmakers would lose because the increased prices that would result from the tariffs would lead to a fall in sales and as a result, total revenue and profits. Others gave valid explanations suggesting why the Chinese government would lose. Some candidates revealed weaknesses in their comprehension of the data, however, as they suggested that China's consumers would lose from the tariffs.
- (ii) The most common losers identified in the EU were producers who used steel as a raw material. This was because their input costs would increase as a result of the tariffs and they would become less competitive. Others suggested that consumers in the EU would lose but many explanations provided were too vague and failed to link this to the rise in the price of consumer products that contained imported steel. In addition, there was a lack of comprehension displayed by some candidates – suggesting, for example, that China's consumers would lose.
- (e) This question was relatively poorly answered. Those who were familiar with the principle of comparative advantage often did not apply it successfully to the question set and within the context of the material provided. It was expected that candidates would use the principle to explain the benefits that would result if there was increased free trade in the market for steel. The context of the data was that the growth in EU exports of services to China far out-stripped the growth in imports of services from China. This suggested that the EU had a comparative advantage in services. The text also suggested that there was a growth in steel imports into the EU from China, but that this was a reflection of subsidisation and overcapacity rather than necessarily China's comparative advantage in steelmaking. As a result the growth of services exports to China and the EU's increased import of China's steel was not a reflection of free trade. It resulted from the protection of steelmaking practiced by China. Candidates needed to comprehend this and then discuss the implications. As stated, many candidates did not grasp the significance of the data and were unable to discuss the issues inherent in the question. The marks awarded to a large number of candidates were very disappointing with many failing to add much to a brief statement of the principle of comparative advantage.

Section B: Essay

Question 2

- (a) This question was generally answered well and many candidates gained full marks. There was clear knowledge and understanding displayed of the underlying concepts and a large number of candidates were rewarded with full marks. However a number lost marks through carelessness. Some, for example, inverted the formula, while others confused the relationship between substitutes and complements stating that substitutes had a negative coefficient and complements had a positive coefficient, but generally speaking marks here were very pleasing.
- (b) Many candidates who scored well on part (a) of this essay scored poorly on this section. Part (a) of each essay on this paper is designed to test knowledge and understanding together with the ability to apply this to answer the question set. Part (b) of each essay requires analytical skills together with the ability to evaluate the issues raised. Many candidates do not seem to appreciate this and as a result score poorly. No marks were available for long explanations of how the coefficients of price and cross elasticity of demand or price elasticity of supply are calculated. Many candidates also wasted time explaining, for example, what makes the demand for a good or service relatively elastic or inelastic. Many drew diagrams of perfectly elastic and perfectly inelastic demand curves that had no significance for the question set. Some did gain credit for explaining how knowledge of the price elasticity of demand of tourism might be useful in price setting, but few were able to go on to explain how income elasticity and price elasticity of supply might be useful. Inevitably, the absence of full and relevant analysis undermined candidates' opportunities to score marks for the exercise of evaluative judgement.

Question 3

- (a) Most candidates who attempted this question showed a good idea of the meaning of deflation and how it is measured. There was also good knowledge and understanding of the impact of deflation on an economy with a wide range of effects considered. Some candidates distinguished between a 'bad' and a 'good' deflation and explained why these terms might be used. Those who missed out on marks often did so because their explanation of the impact was superficial and lacked depth and development.
- (b) Some good answers were provided here with sound analysis of both fiscal and monetary policy. Also, many candidates made good use of appropriate diagrams. The main weakness displayed by many responses was in their evaluation. Many pointed out the advantages and disadvantages of each type of policy, but this is an aspect of the analysis, not evaluation. Evaluation on this question required a comparison of the advantages and disadvantages of each type of policy to arrive at a reasoned conclusion on which is likely to be more effective. Many candidates appear to assume that a brief comment at the end of an essay is sufficient to receive a good mark for evaluation. It is not. Four marks are available for the display of this skill on the essay questions and a reasoned and considered assessment of the relative strengths and weaknesses of each type of policy to arrive at a relevant conclusion was essential here for a good mark.

Question 4

- (a) Disappointingly, many candidates displayed a misunderstanding of what economists consider to be a public good. Many assumed that a public good is simply any good that is supplied by the public sector. In fact, public goods are characterised as non-excludable, non-rejectable and non-rival in consumption. At least two of these characteristics needed to be explained to demonstrate knowledge and understanding here. These then needed to be applied to consider whether a motorway provides an example of a public good. A motorway can be considered a private good because it is excludable through tolls, it can be rejected if drivers decide to take a different route and it is rival in consumption as traffic congestion often occurs on motorways. So although a motorway might be provided by governments through the public sector it is not a public good. Some candidates gained credit for the idea that a motorway might be a public good if the three characteristics did not apply in all circumstances. For example, some reasoned that a motorway was non-excludable if it was impractical or too expensive to erect toll-booths and others that there was no rivalry in consumption at certain times of the day when traffic was light. Such approaches were valid and credit was awarded because these candidates had applied their knowledge and understanding of the concept to answer the question and some gained full marks through the adoption of this approach.
- (b) Although many candidates were able to provide analysis to explain how an increase in government spending would increase aggregate demand and potentially cause inflation, a disappointingly large number of candidates failed to see how the increased spending on a country's infrastructure would affect aggregate supply. The effect would be to shift aggregate supply to the right and this could be sufficient to offset the increase in aggregate demand and prevent a rise in the rate of inflation. Inevitably, this omission resulted in analysis that was incomplete and this undermined the candidate's ability to provide evaluative comment and reach a reasoned conclusion. Marks were generally disappointing here.

ECONOMICS

Paper 9708/23 Data Response and Essay
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Key messages

- Candidates must ensure that all the economic concepts indicated in the syllabus are fully understood. Gaps in knowledge and understanding undermine the ability to apply concepts, to develop analysis and to evaluate issues.
- Candidates must read the questions carefully to ensure that all aspects are considered and the response appropriate to the question set.
- Analysis must be well directed and sufficiently developed to cover all aspects of a question.
- Evaluative comment should be balanced and sufficiently detailed to lead to a reasoned conclusion.

General comments

Some high quality scripts were produced in which candidates displayed knowledge and understanding of all the key economic concepts tested together with the ability to apply these concepts and develop detailed analysis. The better scripts also showed the ability to provide evaluative comment where required.

Unfortunately, a disappointing number of candidates were unprepared for an examination in economics at this level. Many showed a lack of understanding of some of the concepts tested. In addition, many did not develop their analysis and as a result lacked the analytical framework that would allow them to go on to evaluate issues as required, particularly in the essay questions.

Comments on specific questions

Section A: Data Response

Question 1

- (a) (i) In order to score maximum marks on this question it was necessary to state that overall the number of air passengers had increased and then to identify some detail within this trend. For example, many gained the second mark for stating that the growth rate accelerated after 2005. Most candidates were able to gain both marks available here.
- (ii) In response to this question candidates showed good knowledge and understanding of a range of both demand and supply factors that would lead to an increase in passenger numbers as shown in Figure 1.1. For example, many suggested that an increase in incomes would cause an increase in demand; others suggested that the entry of low-cost carriers into the market would lead to an increase in supply. Both of these would have caused the change in the Indian travel market. This question was, on the whole answered well and some pleasing marks awarded.
- (b) Most candidates were able to identify and provide an example of two factors of production that are required by airline operators. For example, many chose labour and provided pilots as an example and a popular example of a capital good was aeroplanes. Some candidates suggested that the airport buildings or runway are land, but this is not correct. Land is all natural physical resources, so while the space taken up by airports is land, the airport infrastructure is not.

- (c) This question created difficulty for a large number of candidates. Most recognised that a tax on aviation fuel was an example of an indirect tax and provided an appropriate diagram showing a shift to the left of the supply curve, the resulting higher price and reduced quantity. Marks were awarded for this, but some made the error of shifting the demand curve and lost marks as a result. In addition, many lacked a firm understanding of the factors that would determine the incidence of the tax between fuel producers and airline operators. Some attempted to explain the factors, but made errors in the diagram provided and lost marks as a result. A disappointing number did not consider this aspect of the question at all and scored very poorly. Only a small number successfully explained the influence of price elasticity in determining the incidence and disappointing marks resulted.
- (d) The responses to this question were also disappointing. This was either because of carelessness in reading the question or through a lack of comprehension of the text. As a result, many did not consider the benefits of ending the 5/20 rule. Some provided descriptive answers that were largely irrelevant. In order to score well it was necessary to assess the potential advantages of removing the 5/20 restriction and to compare these with any potential costs to arrive at a reasoned conclusion. As stated, many candidates failed to understand the requirements of this question and scored poorly as a result.

Section B: Essay

Question 2

- (a) This question required candidates to have a clear understanding of what is meant by a private good in terms of excludability and rivalry in consumption. They then needed to go on to apply these concepts to consider why goods that are non-excludable and non-rival in consumption cannot be supplied as private goods. It was also necessary to illustrate this through the use of valid examples. Most candidates had the required knowledge and understanding of the characteristics of private goods and most provided valid and appropriate examples, but there was considerable variation in the ability of candidates to apply these characteristics to answer the question. Many failed to explain clearly why some goods could not be provided as private goods and as a result there was considerable variation in the marks awarded.
- (b) This question showed considerable variation amongst candidates in their ability to provide the necessary analysis that was appropriate to answer the question set. Many candidates were able to explain the impact of a subsidy upon the market for various forms of transport, but there was insufficient consideration given by many to the reasons why some forms of transport should be subsidised and some should not. However, there were some excellent answers provided by those who suggested that public transport should be subsidised because it could reduce congestion and pollution. They contrasted this with subsidisation of private transport such as cars, which they explained would lead to more negative outcomes.

Question 3

- (a) This was the least popular choice of the three essay questions. Many candidates appeared not to have the required knowledge and understanding of the foreign exchange market to answer the question concerning government intervention and scored few marks. However, some candidates did provide excellent answers applying their understanding to explain how governments intervene in the market to influence the demand and supply of their currency in order to manage its value. Many did this through contrasting government intervention with an exchange rate system where the exchange rate was freely floating.
- (b) Some good answers were provided here although some candidates missed out on marks because they did not read the question carefully and neglected to consider the effects of the devaluation on both the Chinese economy **and** countries that trade with China. Inevitably, these candidates missed out on marks for evaluation because they could not make evaluative comment on the likely relative effects of the devaluation.

Question 4

- (a) Most candidates who attempted this question showed a good grasp of aggregate demand and aggregate supply and the significance of their point of intersection in terms of equilibrium national income. Many also showed understanding of the significance of this in terms of the general price level, unemployment and real output. Diagrams were accurate on the whole and fully labelled. Some good marks were awarded. It was disappointing though that a considerable number of candidates attempted this question with little idea of the underlying concepts. As a result they scored very few marks.
- (b) As was the case with part (a) of this essay there was considerable difference between the ability of candidates to answer this question. Some candidates were very successful and gained a high mark. They were able to explain the causes of an increase in aggregate supply such as an improvement in technology and consider the costs and benefits of this increase. Many explained, for example, that the increase in aggregate supply could lead to lower prices and an improvement in the standard of living. The costs identified included the unemployment that might result and the increased pollution that might occur. Explaining both the costs and benefits allowed candidates to go on to make some evaluative judgement on the extent to which the increase in aggregate supply would be beneficial for an economy. As stated, however, some candidates lacked the required grasp of the underlying concepts here and were unable to develop relevant analysis to answer all aspects of the question. Inevitably they scored poorly.

ECONOMICS

Paper 9708/31
Multiple Choice

<i>Question Number</i>	<i>Key</i>	<i>Question Number</i>	<i>Key</i>
1	A	16	D
2	D	17	B
3	A	18	C
4	B	19	C
5	B	20	A
6	C	21	B
7	B	22	D
8	B	23	C
9	B	24	C
10	A	25	B
11	B	26	C
12	B	27	A
13	D	28	C
14	C	29	A
15	D	30	D

General comments

The questions for which most candidates selected the correct answer were **1, 2, 3, 9, 11, 13, 17, 19, 20, 21** and **22**. These questions covered different parts of the syllabus and were set to test different skills.

The questions for which the fewest candidates selected the correct answer were **4, 10, 14**, and **28**. The rest of the questions gave results which were well within the levels expected.

Comments on specific questions

Question 4 was answered correctly by 35 per cent of the candidates, who chose the key B. Four per cent chose option A, 34 per cent chose option C and 28 per cent chose option D. In B there is a 10 per cent decrease in income which will shift the budget line parallel to the left. However, there is a 20 per cent decrease in the price of both products. When only one price changes the budget line pivots but when both prices change the budget line moves, and in this case moves in a parallel manner. It will move to the right. Moreover, the price change outweighs the decrease in income and so the budget line will move to the right of the original.

Question 10 was answered correctly by 14 per cent of the candidates, who chose the key A. The split for the other options was 19 per cent for option B, 36 per cent for option C and 31 per cent for option D. Option C does not represent a long run productively efficient output because point G is not on the LRAC. There is no revenue on the diagram so it is not possible to conclude option D. For output Q_1 the lowest possible cost for that output is E. It is preferred to F (option B) as it is lower and as it is the lowest possible cost it is productively efficient **for that output** (A).

Question 14 was answered correctly by 27 per cent of the candidates, who chose the key C, while 32 per cent chose option A, 34 per cent chose option B and 7 per cent chose option D. Using pollution permits incorporates the cost of the pollution into the production costs and helps overcome market failure.

Question 28 was answered correctly by 24 per cent who chose the key C, while 2019 per cent chose option A, 17 per cent chose option B and 39 per cent chose option D. The accelerator refers to the positive effect on investment of the growth of the market economy. It shows the effect on investment of a change in National Income, especially of an increase in consumption or consumer demand.

ECONOMICS

Paper 9708/32
Multiple Choice

<i>Question Number</i>	<i>Key</i>	<i>Question Number</i>	<i>Key</i>
1	C	16	A
2	B	17	D
3	B	18	B
4	D	19	D
5	D	20	D
6	D	21	B
7	A	22	A
8	C	23	C
9	B	24	C
10	D	25	B
11	A	26	A
12	D	27	C
13	A	28	D
14	C	29	B
15	A	30	C

General comments

The questions for which most candidates selected the correct answer were **1, 2, 7, 14, 15, 19, 23, and 28**. These questions covered a range of topics from different parts of the syllabus and were set to test different skills.

The questions for which the fewest candidates selected the correct answer were **8, 9, 13 and 25**. The rest of the questions gave results which were well within the levels expected.

Comments on specific questions

Question 8 was answered correctly by 31 per cent of the candidates, who chose the key C, while 6 per cent chose option A, 22 per cent chose option B and 42 per cent chose option D. To maximise a firm's total revenue the marginal revenue must be zero. To maximise profits the marginal revenue must be equal to the marginal cost. So, for the firm to maximise both profits and total revenue the marginal revenue and the marginal cost must be zero.

Question 9 was answered correctly by 29 per cent of the candidates, who chose the key B, while 19 per cent chose option A, 35 per cent chose option C and 16 per cent chose option D. To obtain economies of scale it is usually presumed that the firm will increase in size. If technical efficiency can be achieved with a reduction in the scale of production it would imply that the size of the firm required to achieve that would be reduced. The ability to have a smaller firm would be likely to allow an increased number of firms which would not be prohibited by the high costs of entry to the industry required by larger firms.

Question 13 was answered correctly by 30 per cent of the candidates, who chose the key A, while 7 per cent chose option B, 20 per cent chose option C and 42 per cent chose option D. With low elasticity of demand any percentage change in price will result in a smaller percentage change in demand. If the aim is to reduce the use of private cars, charging for the use of the road would not be very effective (C). No information is given about the cross elasticity of demand between bicycles or public transport and cars (B and D). The most likely way to reduce the use of cars would be to ban them from town centres (A).

Question 25 was answered correctly by 31 per cent of the candidates, who chose the key B, while 49 per cent chose option A, 4 per cent chose option C and 16 per cent chose option D. The effect on national income of a change in investment is a multiplier effect, not an accelerator effect (A). No information is given about tax rates of imports (C and D). If the marginal propensity to consume is $\frac{2}{3}$ then the multiplier is 3 and with an increase in investment of 100, national income will thus rise by 300. (B).

ECONOMICS

Paper 9708/33
Multiple Choice

<i>Question Number</i>	<i>Key</i>	<i>Question Number</i>	<i>Key</i>
1	D	16	C
2	D	17	C
3	C	18	B
4	B	19	A
5	A	20	C
6	B	21	A
7	B	22	A
8	D	23	C
9	D	24	D
10	B	25	A
11	C	26	D
12	C	27	A
13	B	28	D
14	B	29	B
15	A	30	A

General comments

Most of the questions were answered correctly by a large majority of the candidates. Only **Questions 20, 22** and **25** were answered correctly by 50 per cent or fewer of the candidates

Comments on specific questions

Question 20 was answered correctly by 43 per cent of the candidates, who chose the key C, while 17 per cent chose option A, 37 per cent chose option B and 3 per cent chose option D. Changes in quotas are often confusing. A reduction in a quota on imports means that fewer imports would be allowed to enter the developed country. This would not help the developing country who would be exporting the products. Those who chose option B may not have noticed that the question asked what policy would be **least** likely to help the developing country.

Question 22 was answered correctly by 40 per cent of the candidates, who chose the key A, while 4 per cent chose option B, and 56 per cent chose option D. The majority of candidates chose option D. If the developed country is relying on primary products it is likely that it will have to purchase manufactured products. An increase in the price of the manufactured products it purchases (D) would not make it more likely that the developing country would benefit from trade.

Question 25 was answered correctly by 47 per cent of the candidates, who chose the key A, while 3 per cent chose option B and 50 per cent chose option C. The country wishes to avoid deflation. This might be achieved if there were an increase in consumer spending. Extra borrowing and thus spending would be likely to be greater if consumption spending was interest elastic. So the choice of the candidates was between A and C. (B and D were chosen by very few candidates). Of that choice, the change in asset prices in A would be more likely to avoid deflation than that in C.

ECONOMICS

Paper 9708/41 Data Response and Essays

Key message

- In questions where there are multiple elements to be addressed, candidates need to ensure that they fully answer the whole question.

General comments

There were some good answers to this year's paper and those candidates are to be congratulated on the use of their studies to achieve such marks. Their skill at writing answers that were accurately directed to the question, illustrated by pertinent examples and applications where appropriate, was evident.

There were fewer answers this year that presented diagrams that were difficult to read or which were not labelled clearly or not explained in the narrative.

Unfortunately, some candidates concentrated on only part of the question they were answering. For example, in **Question 2** the explanation of efficiency was often accurate but the answer did not give an opinion on the second part of the question regarding the necessity for public sector intervention. Again, in **Question 3(a)** although the explanation of consumer equilibrium was clear, there was little written on the underlying assumptions. In **Question 3(b)** candidates focused on analysing the difference between the types of good and omitted to deal with what was asked about a company. For **Question 7(a)** some omitted to discuss the possible links between economic growth and economic development.

Comments on specific questions

Section A: Data Response

Question 1

- (a) This question was accurately answered. Candidates chose problems from either the fact that the cost of building the power stations was high, production was erratic and depends on the wind, the environment was affected detrimentally, prices have risen, employment has been affected and subsidies were preventing investment in alternative efficient gas-powered production.
- (b) This question presented a challenge for most candidates and there was some confusion between equity and equality. Equitable means fair. The article says that the elderly and poor have to pay for subsidies and are disproportionately hit hardest. It also says small companies have to pay towards subsidies while large companies receive subsidies and that there is a detrimental effect on the landscape. It may be concluded that the article does not provide evidence for equity.
- (c) Candidates were clear about the conditions for a competitive market, stating, for example that a competitive market has ease of entry and prices determined by demand and supply. They commented on the fact that the article says there are small farmers. It says that 70% of population rely on agriculture, which implies a small-scale competitive market but there is counteracting evidence that large multinationals control the seeds, grain and pesticides and their political power can restrict supply and control the market. Some answers suggested that there was not enough information to make an overall conclusion of the strength of each side.
- (d) This question required some evidence from the article. Some candidates gave adequate general analytical discussions about large businesses but did not use the article. Using the article, for

example, it could be said that in agriculture large businesses can control the market and put pressure on small farmers to buy inputs. Furthermore, industrial methods pollute the soil and damage water tables, which could be considered detrimental. For wind-power, large companies are subsidised and make profits on an insecure supply. This means that jobs are lost, the landscape is changed, with no reduction in carbon emissions. Also the article says that energy-intensive industries are driven abroad because of high operating costs.

Section B: Essays

Question 2

This question required an evaluation and discussion of an argument. Candidates should have considered the conclusion in the question. It required an explanation of efficiency. Candidates provided a good analysis of the different types of efficiency. It was expected that candidates would then discuss the reasons for market failure and the possible necessity/desirability of government intervention to achieve efficiency. This intervention could be by persuasion (nudge theory) rather than by enforcement or fiscal/monetary measures. Government intervention may thus be necessary, but it need not overcome inefficiency as there may be inefficiency in government through lack of information. Many candidates presented very well-reasoned answers to this question. Others did not conclude whether economic efficiency could only be achieved by the public sector.

Question 3

- (a) This question required that candidates explain that equilibrium is a relation between the marginal utility and the price that can be analysed using either marginal utility or indifference curves – marginal rate of substitution equal to the price ratio. Most candidates dealt with this part of the question but the consideration of the second part was less developed or not attempted. Candidates could have mentioned the assumptions of rationality, sovereignty and the presumption that utility can be measured.
- (b) This question required an explanation of indifference curves, a description of a normal good, (positive substitution, positive income effect for a price fall), an inferior good, (negative income effect does not outweigh positive substitution effect for price fall), and a Giffen good, (overall change is that less is bought when the price falls). It was also expected that there would be a clear link from the indifference curve equilibrium to a demand curve which could show the possible different changes in demand as a result of a price change. This would be useful for a company to know, but as well as that overall change, the knowledge of elasticity would be significant. Income elasticity and price elasticity of demand would affect the change in revenue and cross elasticity of demand and a knowledge of the range of substitutes could also guide decisions. The explanation of the types of goods was usually competently done but many omitted to refer to the second part of the question that asked about the importance of changes in price to a manufacturer.

Question 4

- (a) This question required an explanation of the demand for labour in a perfect market. It was expected that candidates would analyse how the wage rate was fixed in the industry and then explain how that wage level would determine the demand for labour in an individual firm. It was surprising that many of the answers did not relate the individual firm to the market. The answer, therefore, only dealt with part of the question.
- (b) The question deals with a situation of imperfect competition in labour markets. When a factor market is imperfect it is likely that the wage rate would be lower than that in a perfectly competitive market, unless collective bargaining raises it. The analysis would also suggest that the marginal revenue product curve (mrp) would move to the left as, in imperfect markets, marginal revenue is no longer equal to average revenue and thus the marginal physical product $\times$ the marginal revenue is lower than in perfect competition. Thus it is possible that the theory could determine a wage rate and employment level in imperfect competition. However, a trade union could influence the outcome by a process of collective bargaining. This might alter the theoretical position of wages and employment but it would not indicate that wages are determined solely by trade unions.

Question 5

There were few answers to this question but those who selected it gave responses that provided a clear explanation of what economists mean by recession – mentioning low growth rates, possible deflation and rising

unemployment. The link between recession and national debt and budget deficits was discussed. The analysis of how Keynesian demand management policies are supposed to work was competently presented and linked to the situation given. Some omitted an overall conclusion but for most there was an evaluation summarising the answer.

Question 6

- (a) This was not a popular question and there were few answers. It was hoped that candidates would indicate that when the money supply is increasing this would normally lead to a fall in interest rates. Interest rate changes would not affect active balances based on the transactions/precautionary motives which are interest inelastic. A lower rate of interest would, however, affect the speculative demand for money which is influenced by an individual's expectations of what is going to happen to the level of interest rates in the future. The overall effect on the speculative demand will depend upon the starting point when the money supply is increased. If interest rates are already very low the demand for money will increase significantly. The use of credit/debit cards will decrease both the transactions and precautionary demand for money.
- (b) This part of the question proved challenging. Quantitative easing takes place when governments create money to purchase long-term securities from banks or the non-bank public. This will cause the price of bonds to rise and a downward pressure on interest rates. The fall in interest rates, plus negative expectations, is likely to depreciate the value of the currency. Lower interest rates might promote demand-pull inflation and lower exchange rates might cause cost-push inflation. There are, however, some factors that might prevent such changes automatically causing inflation, for example, the existing state of the economy or consumer/investor confidence.

Question 7

- (a) Many candidates answered this question and wrote clear decisive comments stating that economic growth is measured by the change in GDP/GNP in a particular time period, allowing for changes in the price level. Sometimes per capita growth may be used to take into account changes in population. They also explained that economic development is a much wider term which encompasses reducing poverty; provision of education; provision of healthcare; maintenance of law and order. Where there was a weakness in the answers it was because candidates did not deal with the last part of the question and consider possible links between growth and development. They could have stated, for example, that they are linked because economic growth creates the wealth to provide education, healthcare and reduce poverty – all of which are part of development.
- (b) There were two elements to this question and both were usually answered. There was a discussion of the difficulties associated with alternative measures of GDP (income/output/expenditure). The responses then addressed the question of whether GDP can be used as a reliable indicator of living standards. Evidence was produced to support the view that it is not a reliable indicator and some reference to alternative indicators was provided.

ECONOMICS

Paper 9708/42 Data Response and Essays

Key messages

- Candidates generally demonstrated that they understood the relevant theory and the best candidates were able to articulate the analytical aspects within the context of the question. Others failed to fully develop the analytical aspects of the question or to apply it to the context of the question.
- Many questions contained the command word 'discuss' or 'consider'. Both these terms require an argument or debate within the answer and the drawing of a conclusion to access the higher levels in the mark scheme. Many answers were one sided or left the examiners free to draw their own conclusions.
- Candidates are reminded that a thorough reading of the question is necessary to pick out the full breadth of the question. This is especially true of the questions without sub-divisions.

General comments

Many answers were again of a high standard in response to the questions.

The common faults were as in previous examinations, but they are worth repetition. The use of badly drawn, or inaccurately labelled diagram, or even more distressing perfectly presented diagram without any reference to them in the essay re-occurred as did the use of pre-learned answers that did not match the question which had been set. Care should be taken in assembling the completed script with all the pages in the correct order, so that the examiner does not have to decide in which order the pages should be read. The faults, however, should not detract from the impression that the standard of response was high.

A number of candidates wrote at great length. In many examples these responses were poorly directed towards the question set. Candidates who can produce a relevant, concise and well directed answer will always be fully rewarded.

Comments on specific questions

Section A: Data Response

Question 1

- (a) Most candidates successfully defined equality but were not so certain regarding equity.
- (b) Candidates identified two examples of the harmful effects of inequality and the majority went on to explain in their own words what were the implications of such inequality.
- (c) Many candidates were successful in identifying the pattern of the data and differentiating between the change in real incomes of the top 1 per cent and the average wage earner. The better candidates commented upon the variability of the top 1 per cent compared to the more gradual but consistent rise of the average wage earner. Some commented on the need for additional data to be sure of drawing correct conclusions which also gained credit. Most concluded, based on the data given that inequality has increased

- (d) Good candidates defined fiscal policy and identified aspects of a progressive taxation system which reduced incomes of the highest earners and redistributed the proceeds to the poor. They then discussed the impact of such a policy on the incentive effect of both rich and poor before coming to a conclusion. Some considered other aspects of government expenditure which might have reduced inequality for example, education and health expenditure. The best responses included a conclusion.

Section B: Essays

Question 2

This was the second most popular question on the paper. Some very good responses were seen. The best candidates defined and explained two forms of economic efficiency (usually productive and allocative efficiency) before discussing how these were not always attainable due to either imperfect information, externalities or market failure for example, monopoly from which two examples were sufficient to attain the highest marks. This enabled them to directly respond to whether 'efficiency is **always** achievable'. Some responses wrote at great length on the forms of efficiency. This left the candidates with limited time to write about their achievability. Other candidates concentrated all their criticisms on externalities this was too narrow a focus.

Question 3

- (a) Good candidates explained how the equality of marginal cost and marginal revenue leads to the profit maximising output and price in monopolistic competition. The appropriate diagrams were drawn and used to support the answer. The short run and long run were correctly explained. Some candidates substituted an analysis of monopoly for monopolistic competition which restricted the range of marks available.
- (b) The responses were very variable. The best candidates understood the requirements of the question and explained sales revenue maximisation in terms of zero marginal costs. They saw the pursuit of such a policy as a result of the divorce of ownership and control. They were able to discuss the implication of this in terms of a range of outcomes: lower prices, lower profits, greater market share and benefits to managers. The marks awarded reflected the candidates' recognition of two or more of these outcomes.

Question 4

- (a) Candidates were well prepared to discuss the derivation of the demand curve for labour. It was pleasing to see that more candidates referred explicitly and correctly to the derivation of the marginal revenue product for labour. Candidates explained the derivation of the supply curve. The better candidates also explained the implications of elasticity of demand and supply for labour on the level of wages. They then considered whether these factors were the sole determinant of wage levels through government determined minimum wage levels or trades union negotiated wages.

Question 5

- (a) Most candidates recognised the impact of robots on the level of technological or structural unemployment. This was as far as the weaker candidates went. The better candidates explained how regional and demand deficient unemployment might occur as a result of the use of robots.
- (b) Most candidates were able to explain the relationship between the level of GDP and living standards. The differentiation between candidates occurred with the quality of the discussion of the limitation that GDP possesses in measuring living standards. The best candidates also discussed the use of at least one other measure of living standards. Weaker candidates merely mentioned an alternative measure of living standards without explanation.

Question 6

This was the least popular essay.

- (a) The best candidates defined an open economy and explained the role of increasing exports and the reduced supply of labour in framework of aggregate supply and demand analysis. The correct

diagrams were drawn accompanied by an accurate explanation. Weaker candidates' responses were limited to a description of the process.

- (b) Most candidates had a strong knowledge of the basic process of monetary policy and were able to explain the impact of the process. The best responses were applied to the question set rather than being a generic response. Good candidates identified that a discussion of the effectiveness of monetary policy compared with either fiscal or supply side policy was also required.

Question 7

This was the most popular essay.

- (a) The best candidates not only described the differences between the developed and developing countries but were also able to explain the connection between aspects of the differences rather than a series of paragraphs which simply compare level of education, etc. For example, candidates need to explain the consequence of the different population pyramids rather merely than state the differences.
- (b) Candidates showed a good knowledge of the role of multinational corporation (MNC) in creating jobs and other advantages to the host country. Good candidates wrote accurately at the issues raised by MNC. A minority analysed the effect of the investment in terms of a framework of injections and leakages which led to higher quality response. Some candidates made no explicit reference to economic growth.

ECONOMICS

Paper 9708/43 Data Response and Essays

Key message

- Answers should refer to the evidence in the article where this is required in the question.

General comments

There were some excellent answers to this year's paper and those candidates are to be congratulated on the use of their studies to achieve such marks. Their skill at presenting answers that were accurately directed to the question, illustrated by pertinent examples and applications where appropriate, was evident.

There were fewer answers this year that presented diagrams that were difficult to read or which were not labelled clearly or not explained in the narrative.

Comments on specific questions

Section A: Data Response

Question 1

- (a) Candidates were able to explain that the term 'principal-agent' is usually applied to possible conflicts of interest that may result between the shareholders (principal) and the management (agent) of a firm. They were also able to apply the same idea to the second part of the question and describe how the term might be relevant to those who form the rules (government – principal) and those who carry out the rules (businesses – agent). A conflict could occur in this case because businesses do not necessarily seek to achieve what is good for the wider society.
- (b) The concept of inefficiency was usually well explained as producing at an output which is either not productively efficient – minimum cost for the output in question, or allocatively efficient – marginal social cost does not equal marginal social benefit.
- (c) The majority of candidates found no difficulty with this question. Some explained what was meant by externalities but did not fully grasp the idea of the cost of negative externalities being transferred from those who experience them, but who do not cause them, to those that are responsible for their cause.

The second part of the question on the difficulties of giving a monetary value to externalities using cost-benefit analysis was clearly answered.

- (d) The question required a reference to the article. Some answers had a clear account of market failure but the weakness of the presentation was that the answer did not make reference to the evidence in the article.

In the article, for example, in support of the idea of inadequacy it suggests that the use of cost-benefit has limitations – but it does not say exactly what those limitations are; it says that there is 'crowding out' – private businesses are discouraged from investing by large government expenditure; it also says that the policy does not create a dynamic new environment or new products.

Against the opinion of the inadequacy of the policy, the article says that the government creates a bigger national output which benefits everyone and that new products have been funded by

government. It gives examples of these. The overall balance of the article is mainly against MFT as a solution to the current situation but there could be other evidence which is not given

Section B: Essays

Question 2

This question required an explanation of how demand might change as a result of a change in price. Basic answers referred to a simple demand curve but better answers illustrated any change in demand by explaining income and substitution effects. When dealing with the part of the question that asks whether consumers always buy more of a good at a lower price it was important to distinguish between normal, inferior and Giffen goods.

Surprisingly, a significant number of answers omitted to deal with the part of the question that asks about the revenue of the bus company. Revenue change will depend partly on the type of good and partly on the price elasticity of demand. Bus journeys used to be classified as inferior good. Some excellently reasoned answers briefly debated whether that is still the case suggesting that bus journeys may increasingly be preferred to travel by car because of congestion and parking charges.

Question 3

- (a) Price discrimination requires separate markets – either by ignorance, irrationality, or geography. To be profitable the markets need to have different elasticities of demand. There should be no possibility of re-sale of the product. Candidates were often able to develop the analysis of price discrimination and distinguish between first degree discrimination – different price for each person reflecting consumer surplus; second degree – discounts for bulk purchases; third degree – different prices for different groups of consumers. The answers to this part of the question were well-presented and clearly expressed.
- (b) This question required a comparison of monopoly and a competitive market. It is often asserted that the monopoly market would result in higher prices, supernormal profits and lower output than the competitive market. Candidates were able to present this argument. A diagram was required. There were a significant number of candidates who labelled the diagrams incorrectly, particularly when indicating areas of supernormal profit. However, this year there were fewer diagrams squashed into the corner of a page. Most were clearly readable. That comparative analysis, however, presumes that the cost curves are identical for both markets. This need not be the case. For example, there may be economies of scale with large companies such as monopolies and such savings in cost may be passed onto the consumer. The consumer, or public, need not necessarily be the victim.

Question 4

The question required a discussion of wage determination. The question refers to any labour market so both perfect and imperfect markets could have been considered. There were some well-reasoned answers to this question. Candidates ought to have considered each part of the statement. The theory of wage determination needed to be explained and a comment given on how the outcome may be affected by the existence of trade union bargaining, by minimum wages affecting the supply, by large monopolies forcing down wages from the competitive level, by whether the worker is in the private or public sector.

This analysis could then have been linked to the payment of wages for the different examples given. Skill levels and elasticity from the supply side, productivity from the demand side and whether external factor such as trade unions or government minimum wage levels were applicable. Most candidates who answered this question presented well-informed answers. The most common difficulty found in answers that were less precise was that the answers related to the product market and the analysis was of profit maximisation and pricing for the product rather than the analysis of the factor market.

Question 5

- (a) Responses to this question should have related the natural rate of unemployment to a situation where there is no excess or deficiency of demand for labour. Known as the equilibrium rate of unemployment, it is caused primarily by frictions in the labour market. Types of unemployment which are likely to cause this rate to rise would include structural; technological; frictional and seasonal. A common response which detracted from the answers to this question was that

candidates wrote in general terms about all the different types or causes of unemployment without concentrating on those that form part of the natural rate of unemployment.

- (b) It was expected that there would be a clear distinction between the role of market forces, which rely heavily on the price mechanism to match people to jobs, and the use of direct government intervention to achieve the same outcome. Better answers recognised that government policies could incorporate market forces as well as direct intervention. The focus of such answers was on how both occupational and geographical mobility can be increased to reduce frictions in the labour market.

Question 6

- (a) There were significantly fewer answers to this question. It was hoped that answers would address both parts of the statement. Central banks can control interest rates in different ways. Some announce changes to the bank rate while others operate in short term money markets to influence interest rates. Answers recognised that central banks also have access to a range of policies which can be used to determine the money supply. Good answers discussed how commercial banks can influence both interest rates and the money supply. Part of the assessment of the statement could have included a recognition that interest rates and the money supply are closely related.
- (b) It was expected that answers would refer to the transmissions mechanism to show how monetary policy might have some effect on real variables such as the level of output. There were some well-developed answers that referred to reasons why monetary policy might not work, including references to the liquidity trap, the elasticity of the marginal efficiency of capital curve and the effect of negative expectations on investment. Such answers usually also discussed whether monetary policy was the only effective way to control inflation and considered alternatives such as fiscal policies and/or direct controls such as prices and incomes policies.

Question 7

- (a) There were some excellent answers to this question. The Kuznets curve was explained and the answers discussed the links between the process of economic development and its impact upon income distribution. Worker migration from agriculture to industry and the movement from a rural to an urban environment were explained in the context of economic development. These movements were linked to factors such as increases in income and access to education to explain the first part of the hypothesis. How these benefits might be shared as productivity in general starts to rise was described in order to deal with the second part of the hypothesis. Some answers went further and queried the second part of the hypothesis by drawing attention to the fact that for some economies income inequality is not continually decreasing.
- (b) The better answers focused on the use of fiscal policy in developed economies. Answers considered the role of a range of fiscal policies which have been used to address the problem. They referred to progressive taxation, maximum price controls, minimum wage controls and transfer payments. Many answers also gave a critique of such policies and discussed the possible potential of each to cause long term negative consequences.