ECONOMICS

Paper 9708/11
Multiple Choice

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

General comments

Questions 1, **2**, **12**, **14**, **15**, **17** and **23** were answered most successfully. These questions covered the full range of skills and syllabus topics, although the majority of these responses related to microeconomic issues. **Questions 8**, **13**, **21**, **27**, and **30** were found the most difficult.

Comments on specific questions

Questions 14 and **17** were dealt with the most effectively by candidates. **Question 14** required basic knowledge recall and **Question 17** required an ability to assess the impact of a subsidy and the market equilibrium price.

Question 8 was answered correctly by 35 per cent of candidates, who chose the key **C**. In essence, this question required candidates to apply an understanding of the concept of consumer surplus using a diagram. A significant number of candidates chose option **A**, but this option was incorrect because it simply identified the new consumer surplus, not the loss, and option **D** made the incorrect assumption that X + Y + Z was the original consumer surplus. The key to answering this question related to an ability to recognise that the initial consumer surplus was X + Y (not X + Y +Z).

Question 13 was answered correctly by 33 per cent of candidates. It was expected that information provided in the stem would lead candidates to recognise the link between price elasticity of demand and the impact of a change in price on total expenditure. When expenditure rises after a price fall, then the demand for a good must be elastic. Hence option **A** was the key.

Fewer than 50 per cent of candidates answered questions **Question 21** and **Question 27** correctly. **Question 21** required candidates to use a table to distinguish between absolute and comparative

advantage. This type of question is asked frequently and is often misunderstood. A surprisingly large proportion of candidates' responses to **Question 27** did not recognise that the 'Terms of Trade' is not an item in a country's balance of payments accounts.

Question 30 was the hardest item and 29 per cent answered this question correctly by choosing the key **C**. This question required candidates to consider aggregate supply and aggregate demand to decide which of the four options was most likely to reduce the level of inflation. Depreciation – option A – was chosen by 28 per cent of candidates. This was incorrect because a depreciation of the domestic currency would be likely to cause the price level to rise. Option **D** was chosen by 29 per cent but this was incorrect because the negative effect of a tax increase would be countered by the increased welfare payments. Option **C** was correct because a world-wide recession would be most likely to produce a fall in aggregate demand, hence a fall in the rate of inflation.

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Paper 9708/12
Multiple Choice

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

General comments.

Candidates dealt with the microeconomic section of this paper more successfully than the macroeconomic questions. **Questions 1**, **3**, **5**, **9**, **11**, **12**, and **24** were answered most successfully. These questions covered the full range of skills but six of these seven questions were based on microeconomic syllabus topics.

In contrast, **Questions 8**, **15**, **16** and **23**, were answered correctly by fewer than 50 per cent of the candidates.

Comments on specific questions

Questions 1 and **11** were found the easiest on the paper. **Question 1** required basic knowledge recall in relation to an introductory part of the syllabus. **Question 11** focused on knowledge and application in relation to factors which influence market demand and market supply.

Question 8 was answered correctly by 46 per cent of the candidates, who chose the key **D**. This question required understanding of the concepts of consumer and producer surplus, plus an ability to identify how these might change after the introduction of a maximum pricing policy. Many chose option **A** because they did not recognise that the question referred to the imposition of a maximum price **above** the market price; it was therefore an ineffective price control.

Question 15 was answered correctly by 38 per cent of candidates, who chose the key **B**. This was the correct option because all three options were straight lines through the origin. A significant number chose option **C**.

Only 22 per cent of candidates answered **Question 16** correctly. In this case, based on the given relation between demand and price, it could bse inferred that if the government purchased 400 units, it could fix the demand at $10. Therefore this would require an overall government expenditure of 400 · $10 = $4000, so option **D** was the key.

Question 23 was answered correctly by 32 per cent of candidates, who identified the key as option **C**. It was important for candidates to recognise that the table was referring to units of inputs rather than units of output, therefore the country with relatively lower number of units used had the lower opportunity cost.

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Paper 9708/13
Multiple Choice

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

General comments

Overall candidates generally dealt with macroeconomic topics less effectively and this was consistent with performance over the last two examination sessions

Questions 2, **9** and **13** were answered most successfully. Each of the three questions related to microeconomic topics. These questions covered knowledge, application and evaluation skills.

Questions 12, **16**, **22**, **24**, and **27** were answered correctly by fewer than 45 per cent of the candidates. Four out of five of these questions were based on the macroeconomic section of this syllabus

Comments of specific questions

Question 12 was answered correctly by 28 per cent of candidates, who chose the key **C**. This was because when income rose from Y1 to Y2, the amount of tax paid remained the same, therefore the average rate of tax is falling. Also, as income rose there was no change in the amount of tax paid therefore the marginal rate was constant (zero). A significant number of candidates chose options A or B (64 per cent combined) because in both cases it was wrongly assumed that the average rate of tax between Y1 and Y2 would remain constant.

27 per cent of candidates answered **Question 16** correctly. This question required candidates to identify the greatest incidence of a subsidy on consumers. Four diagrams were provided and candidates were asked to identify which consumer would benefit the most from a subsidy. This benefit is represented by the greatest incidence. A simple rule can be applied which states that the greatest incidence would occur when the greatest proportion of a subsidy goes to the consumer in the form of a price reduction. On this basis it was clear that the diagram represented by option **C** was consistent with that rule.

Question 22 was dealt with least effectively. Only 23 per cent of candidates correctly identified the key **D**. This was a demanding question which required candidates to visualise the impact of a rise in tariff and possible changes in the price elasticity of supply and demand on the domestic producer. Successful responses recognised that the question was referring to the gain generated for domestic producers, not the total welfare gain. The two key elements were therefore the tariff rate and the price elasticity of domestic supply. Price elasticity of demand would not be relevant.

Question 24 was answered correctly by 43 per cent of the candidates who chose the key **A**. This question required candidates to demonstrate knowledge of the factors which might have a negative effect on the balance of payments.

33 per cent of candidates correctly chose the key **D** for **Question 27**. Candidates were expected to apply the Marshall-Lerner condition to show that, when the combined sum of the two elasticities is the greatest, then an appreciation is likely to lead to the greatest negative effect on the current account of the balance of payments.

ECONOMICS

Paper 9708/21
Data Response and Essay

Key messages

- Candidates need to focus on the 'command' word that is being used in a question, such as 'describe', 'explain' or 'discuss'.
- In the second part of the questions in ***Section B***, a certain number of marks are awarded for 'evaluation'. There is often a clue in the question to guide candidates towards this, such as in **Question 2(b)** which required candidates to discuss **the extent** to which a supermarket could make use of the concept of income elasticity of demand in relation to the different types of goods being sold when there was an increase in incomes or in **Question 3(b)** which required candidates to discuss whether a government should **directly** provide certain goods and services in an economy or in **Question 4(b)** which required candidates to discuss whether supply-side policies were **likely to be effective** in increasing employment in an economy.
- It is also important that candidates understand the need to include the use of relevant examples in their answers where these are explicitly asked for in a question, such as in **Question 2(b)** and **Question 3(b)**.
- Candidates need to ensure that diagrams are correctly drawn and clearly labelled. There were, unfortunately, a number of examples of poor labelling and, in some cases, no labelling at all. A diagram was required in **Question 2(a)**, **Question 3(a)** and **Question 4(a)**, but there were other questions where diagrams could have been used to support an answer.
- It is important that candidates read questions very carefully to avoid making an error in their answer. For example, in **Question 1(d)**, some candidates wrote about the possible impact of demonetisation on the Indian government's monetary policy rather than its fiscal policy, while in **Question 2(a)**, some candidates explained how a free market would react if a maximum price, rather than a minimum price, was removed.

General comments

A diagram was explicitly required in three of the questions in ***Section B***, **Question 2(a)**, **Question 3(a)** and **Question 4(a)** but some candidates did not include one.

It was obvious in some answers that candidates had not looked closely at the 'command' or 'directive' word being used in the question. It is important that candidates do recognise whether they are being asked to '**describe**, '**explain**' or '**discuss**' something.

It is also important that candidates focus on whether there is any additional guidance provided in a question, such as in **Question 4(b)**, where candidates were required to discuss whether supply-side policies were likely to be effective in increasing employment in an economy. Unfortunately, some candidates simply wrote about the various supply-side policies that could be used to increase employment in an economy without considering whether they were likely to be effective or not.

Comments on specific questions

Section A: Data Response

Question 1

(a) (i) Most candidates were able correctly to describe the immediate impact of demonetisation on India's M1 money supply as a fall or reduction. However not all of them gained the second mark because of the vagueness of their answers. For example, some candidates simply wrote that there had

been a decrease from about 28 to about 20, but did not specify that this represented a decrease in 'trillions of rupees' which is how the vertical axis of Fig. 1.1 had been labelled.

(ii) Many candidates were able to explain a possible reason why India's M1 money supply had increased early in 2017 after the most used bank notes had been withdrawn from circulation. For example, some explained that many Indian people were opening bank accounts to deposit the 500 and 1000 rupee notes into bank accounts, especially if the government had succeeded in introducing incentives to persuade people to open such accounts. Other candidates explained that the Indian monetary authorities may have increased the supply of smaller denomination bank notes to offset the fall in the money supply.

(b) Many candidates were able to explain that a cheque was not a form of money, but a method of payment facilitating a financial transaction by transferring money from one account to another. However, a number of candidates argued that a cheque should be regarded as money. This was clearly an element of the syllabus that many candidates did not appear to understand.

(c) Many candidates were able to explain how the Indian government's decision to withdraw the two most used bank notes were likely to affect the use of cash as a store of value in India over time. They explained what was meant by describing cash as a store of value in that it was an asset that would maintain its value over a period of time, at least to a large extent, without depreciating, i.e. a store of value was something that could be used to transfer purchasing power from the present to the future. Some candidates pointed out that people hold on to money to finance some future purchase of a product without loss of purchasing power during that time. However, some candidates clearly did not understand what was meant by a store of value, with a number of them describing a bank account as such a store. The candidates then went on to point out that the store of value function of money would depend on the banknotes retaining their real worth. However, the short-notice removal of large denomination banknotes may well have reduced people's confidence and trust in holding them as a store of value since they may lose value almost instantly if not cashed in within the deadline. This would be a particular problem in the short-term, although over time people were likely to downgrade the risk.

(d) Many candidates made quite a reasonable attempt to explain the possible impact of demonetisation on the Indian government's fiscal policy. They pointed out that a smaller informal economy and a larger formal economy would enable the authorities to better understand the fiscal situation and that more people were likely to be brought within the tax structure. This would be likely to be significant in a country where only 1% of workers paid income tax and so if the Indian government was able to raise more revenue through tax it would enable it to increase public expenditure.

(e) A number of candidates made quite a good attempt to discuss whether demonetisation in India would be likely to be inflationary, looking at both possible sides of the argument. For example, it could be inflationary if the government used the increased tax revenue to stimulate aggregate demand in the Indian economy, creating demand-pull inflation. It might also be inflationary if it increased production costs and so brought about an element of cost-push inflation. However, it might not be inflationary if the wages of workers were paid directly into bank accounts as this could reduce the extent of liquidity in the economy. Also, if some people were more fearful of the future of the economy, this may lead them to be more cautious in their spending patterns. A few candidates made good use of the Quantity Theory of Money in their answers, even though it is not on the AS syllabus and was not required, pointing out that as there was a reduction in the money supply in the short-term, this would not be inflationary, but in the long-term the eventual increase in the money supply as people opened bank accounts could be inflationary. Unfortunately, a number of candidates did not offer a conclusion, even though it was a 'discuss' question.

Section B: Essays

Question 2

(a) In this part of the question, candidates were required to explain, with the help of a diagram, how a free market would react if a minimum price which had been set above the equilibrium was removed. Most candidates drew and labelled the diagram correctly, although a few labelled the curves AD and AS rather than D and S. Many candidates clearly showed the situation of excess supply in their diagrams. Some candidates did not show the equilibrium position clearly. Even though the question explicitly required a diagram to be included, a few candidates did not include

one. The reaction of the market when the minimum price was removed was covered reasonably well, with candidates explaining that if the price floor was removed, the excess supply would disappear leading to a fall in price and an increase in quantity until a market clearing position was established where there would be neither excess supply nor excess demand. In this equilibrium position, there would be no tendency to change. A number of candidates also pointed out that there would be an increase in consumer surplus.

(b) In the second part of the question, candidates were required to discuss, with the use of examples, the extent to which a supermarket could make use of the concept of income elasticity of demand (YED) in relation to the different types of goods being sold when there was an increase in incomes. Most candidates were able to discuss the situation with regard to normal goods, pointing out that YED would be positive for normal goods and so as consumer incomes increased, the demand for such products would rise. Some candidates included a consideration of luxury goods in this section. Most candidates were also able to discuss the situation with regard to inferior goods, pointing out that YED would be negative for inferior goods and so as consumer incomes increased, the demand for such products would fall. Candidates generally used appropriate examples in terms of both normal and inferior goods. Unfortunately, relatively few candidates brought necessity goods into the discussion, although those that did correctly pointed out that the YED for necessity goods would be positive, but rather low, i.e. less than one and therefore inelastic. A number of candidates just offered analysis and did not attempt to offer an evaluation and yet there were up to four marks available for candidates who exercised some judgement on the extent to which a supermarket could actually make use of the concept of YED in relation to the different types of goods being sold by the supermarket when there was an increase in incomes.

Question 3

(a) In this part of the question, candidates were required to explain, with the help of a diagram, the effect and incidence of a subsidy in a market for essential transport. Most candidates were able to draw and label the diagram correctly, showing the shift of the supply curve to the right leading to a lower price and a higher quantity. Unfortunately, however, a few candidates shifted the supply curve to the left rather than to the right and a few shifted the demand curve rather than the supply curve. Even though the question explicitly required a diagram to be included, a few candidates did not include one. Relatively few candidates made any reference to the incidence of a subsidy, although some did point out that the incidence would depend on the impact of the different elasticities and that this would determine the eventual distribution of the advantage of a subsidy. Also, many candidates did not make any reference to the fact that it was essential transport and that therefore it would be expected that the demand for such transport would be relatively inelastic with respect to price. In fact, many of the candidates that did make a reference to the price elasticity of demand for essential transport thought that it would be relatively elastic rather than relatively inelastic.

(b) In the second part of the question, candidates were required to discuss, with the use of examples, whether a government should directly provide certain goods and services in an economy. There were many good answers to this question, with candidates discussing a number of possible reasons for such provision by a government, including the provision of public goods, merit goods, natural monopolies and goods where there was a strategic argument for a government to provide them. Appropriate examples were included of each of these different types of government provision. Candidates also discussed possible arguments against such provision, such as the fact that the outcome might be a reduction of efficiency and innovation and that the situation might lead to a lack of competition. Unfortunately, the evaluation offered by many candidates was rather limited, though some did make a good attempt to exercise judgement, such as by pointing out that public goods would have to be provided by a government as goods would otherwise not be provided at all.

Question 4

(a) In this part of the question, candidates were required to explain, with the help of a diagram, the difference between what causes a movement along an aggregate supply curve and a shift in an aggregate supply curve. Most candidates drew and labelled the diagram correctly, although some labelled the curves D and S instead of AD and AS and some labelled the axes incorrectly as P and Q instead of general price level and real gross domestic product or real output. Some candidates drew a diagram that only included AS, but not AD. Even though the question explicitly required a diagram to be included, a few candidates did not include one. Most candidates understood that a

movement along a supply curve was caused by a change in the price level or by a change in the AD curve and that there would then be a movement along the AS curve to restore the equilibrium position. They also understood that a shift in an aggregate supply curve was caused by a reason other than a change in the price level, such as a change in the costs of factors of production or a change in the quality or quantity of inputs. In the majority of cases, the explanation of a shift in an aggregate supply curve was more convincing than the explanation of a movement along a supply curve.

(b) In the second part of the question, candidates were required to discuss whether supply-side policies were likely to be effective in increasing employment in an economy. There were some good answers to this part of the question, with candidates discussing a range of possible policies, such as the privatisation of firms to make them more efficient, increased spending on education and training to increase labour productivity, lower corporate taxes leaving firms with more money to employ workers, the provision of subsidies which could encourage firms to increase employment, policies to make the labour market more flexible and policies to increase competition. Candidates then went on to discuss the possible limitations of such supply-side policies, such as the expense of implementing them, the opportunity cost involved and the long time that some of them could take to become effective. Although candidates generally provided useful analysis, there was often no, or very little, evaluation, such as the fact that some of the policies could actually lead to a decrease in employment, such as privatisation.

ECONOMICS

Paper 9708/22
Data Response and Essay

Key messages

- Candidates need a good knowledge and understanding of all areas of the syllabus.
- Candidates should be given guidance on how to assess question requirements so that their response is directly relevant to the question set.
- Candidates should practise applying the tools of economic analysis in a range of contexts and avoid writing rehearsed answers to a question that they expect to appear.
- The analysis provided must be sufficiently developed in order to move beyond a superficial explanation of the economic concept tested.
- Candidates must always reach a conclusion where this is required based upon careful evaluation of the analysis provided.

General comments

Some scripts were of a high quality showing very sound knowledge and understanding of relevant economic concepts together with the ability to apply these in context to the questions set. There were answers with good, sound and full analysis enabling evaluative judgement to be made where required.

It was disappointing to see, however, the large numbers of candidates who appear to be insufficiently equipped to produce good answers across the syllabus areas tested. Many candidates had the necessary knowledge and understanding to do well, but seemed insufficiently practised in using this to score well.

Comments on specific questions

Section A: Data Response

Question 1

(a) (i) Ethiopia's current account balance differs from its balance of trade in goods and services because the current account balance includes items that are in addition to the balance of trade in goods and services. The generally recognised terms for these categories are the primary income and secondary income balances and it was sufficient to mention the omission of these from the data to score both marks available. It is clear that these terms are not yet commonly used in all centres however so it was acceptable to use other terms that were equivalent to these categories. Candidates who made reference to at least one item from each category were awarded the mark. So candidates who referred to profits, interest and dividends gained the mark available for recognition that data on the primary income account was missing and those who referred to net transfer payments gained the mark available for the secondary income account.

Disappointingly, a large number of candidates continue to suggest that the current account includes flows of capital between economies.

(ii) Most candidates explained that the impact of the new railway line to Djibouti would be to reduce the cost of transporting Ethiopia's goods and that this would lead to rise in revenue from exports and a positive impact on Ethiopia's balance of trade. Few suggested however that the impact of the reduced cost of transporting goods might also lead to increased import expenditure so that the overall impact on the balance of trade of the reduced costs of transporting goods depended upon the change in export revenue compared to the change in import expenditure. As a result, many candidates missed out on a mark here.

(b) This question was well done by most candidates with many gaining both marks available. Disappointingly, a number lost a mark because they failed to read the question carefully and identified only one way in which China's economy might benefit.

(c) Although most candidates were familiar with the production possibility curve and the concept of opportunity cost many found it difficult to apply these in the context of the data. As a result, many provided axes that were inappropriate and many were unable to use opportunity cost to answer the question set. Without access to help from China, Ethiopia would be forced to rely upon its own production possibilities. If it chose to produce more infrastructure it would need to sacrifice consumer goods. This would mean a fall in the standard of living that, in a country described as 'one of the world's poorest', would create severe hardship. The opportunity cost of the infrastructure would be the consumer goods and hence the standard of living that would be sacrificed.

(d) Many candidates identified the characteristics of non-excludability and non-rivalry in consumption as the key characteristics of public goods but it was disappointing to see that many of these were unable to explain clearly what these terms meant. There was considerable confusion apparent in the explanations of these features. When considering whether these features applied to Ethiopia's upgraded road network to determine whether this could be considered a public good candidates often provided unconvincing explanations. A road is not a public good because free riders can be excluded – since a price could be charged through a toll road. Also, many roads suffer from congestion and so they display rivalry in consumption. It was only necessary to consider one of these features to conclude that a road network could not be classified as a public good. Some scored well because they provided sound analysis to explain that roads could be considered as quasi-public goods, but a disappointing number of candidates provided answers that failed to provide a clear answer to the question set.

(e) Many candidates explained that the increased expenditure on the development of infrastructure would increase aggregate demand and then went on to explain that the creation of the new infrastructure would increase aggregate supply and hence increase potential output in Ethiopia. The impact of these changes would certainly lead to an increase in output and employment, but the impact upon the price level was less certain. This depended upon the increase in aggregate demand compared to the increase in aggregate supply. Many failed to recognise this and explained the impact of an increase in aggregate demand and an increase in aggregate supply in isolation. Only by comparing the relative shifts could the impact upon the general price level be assessed.

Section B – Essay

Question 2

(a) This was the least popular essay of the three choices. Most candidates who answered this question were able to provide an accurate diagram showing equilibrium price and quantity and the shift to the right of the supply curve as technology improves. Unfortunately few provided the required accompanying explanation. The question required an explanation of the process through which the equilibrium price and quantity of a good would change when there is an improvement in the technology underlying the production of a good. As technology improves, the costs of producing a good will fall and the supply curve will shift to the right. This means that at the old equilibrium price there will be an excess supply; market forces will cause equilibrium price to fall and equilibrium quantity to adjust accordingly.

(b) Most candidates explained that supply-side policies are intended to increase aggregate supply and many were able to go on to describe measures that could be adopted to achieve this. These included increasing the training of labour to improve skills, cutting taxes to increase the motivation of labour to join the workforce and paying subsidies to encourage firms to invest in capital goods. Few candidates, however, suggested ways to increase the supply of the factor enterprise to the economy. When considering the problems associated with the policies, most candidates considered the long period of time before they would have an impact and the high costs that these policies would entail. Disappointingly, many candidates did not consider whether the problems identified could be overcome, so the full scope of the question was often not answered.

Question 3

(a) This was the most popular essay option. Most candidates knew what price elasticity of demand measures and quoted the formula. Most also knew the link between changes in price and changes in total revenue for different values of price elasticity of demand. Some missed out on marks by not explaining how changes in the price of goods with unitary price elasticity would leave total revenue unchanged. The main weakness in responses, however, was a lack of clarity in the explanations. As in previous years, many candidates provided explanations that suggested, for example, that if demand is price inelastic a change in price will not affect demand 'very much' or that if demand is price elastic a change in price will lead to a 'great' change in demand. To score well it is necessary to provide a clear explanation based upon the formula for price elasticity. So in the case of a price inelastic good a clear explanation would be that a percentage change in price will lead to a smaller percentage change in quantity. This will mean that a rise in price in the case of these goods would result in a rise in total revenue.

(b) Most candidates were aware of how indirect taxes on cigarettes would affect the demand for cigarettes if the demand is price inelastic and how educational campaigns could raise awareness and reduce the consumption of this demerit good. However, many provided analysis that was too descriptive, and this did not make good use of economic concepts relevant to the underlying analysis. Nevertheless some good discussion was provided and most candidates were able to arrive at a conclusion.

Question 4

(a) Many candidates showed good understanding of the terms of trade and how changes in the terms of trade are measured. In addition, most candidates appeared to have a clear grasp of how changes in an economy's exchange rate would affect that economy's terms of trade. Unfortunately, a number of candidates confused the terms of trade with the balance of trade and explained how a change in the exchange rate would affect expenditure on imports and exports. Inevitably, they usually did not score any marks for this part of the question.

(b) Most candidates knew in broad terms the distinction between expenditure-reducing and expenditure-switching policies although some became confused when identifying examples of each. Many for example identified exchange rate depreciation as an example of an expenditure-reducing policy. This is incorrect because a reduction in the exchange rate can boost net exports and increase aggregate demand. In addition some candidates did not consider the drawbacks of each policy and as a result this meant the assessment of which policy was most likely to be effective was not complete. This reduced the opportunities to score marks for evaluation.

ECONOMICS

Paper 9708/23
Data Response and Essay

Key messages

- Candidates should practice applying concepts in a variety of contexts.
- Candidates should become familiar with the range of data handling skills that underpin many elements of the data response question.
- Candidates should be given guidance on how to assess question requirements so that their response is relevant to the question set.
- Analysis must be sufficiently developed to move beyond a superficial explanation of the economic concepts tested.

General comments

Most candidates displayed good knowledge and understanding of the key concepts tested. In response to the essay questions, they were able to use concepts and theoretical frameworks to provide sound analysis, but many found the data response questions challenging. Many seemed unsure of the appropriate concepts to apply in the context of the data provided. In addition, many candidates displayed significant weakness in data handling skills.

Comments on specific questions

Section A: Data Response

Question 1

(a) (i) Two marks were available and to earn them it was necessary to manipulate the data to provide the basis for a comparison between the rate of inflation of China with that of India between 2012 and 2015. Simply repeating the data with no attempt to provide a comparison scored no marks. Many candidates scored the marks available here, but a disappointing number simply described the data in each country with no attempt to compare the rates.

(ii) India has a very large economy, so data collection is clearly problematic. In addition, there is a large informal/unrecorded economy and some transactions are non-monetised. As a result, the data used to calculate the rate of inflation is likely to be incomplete and an inaccurate figure produced. In addition, there is a large subsistence economy in a nation such as India and this could overstate or understate the pressure on prices again producing an inaccurate figure. Many candidates scored poorly here through giving more general answers that shifted or missed the focus of the question. Many answers explained why the rate of inflation produced by the authorities in India might not be an accurate reflection of the pressure on the standard of living of families in India. Although this is related to the question set, candidates raised largely irrelevant points.

(b) Most answers explained what might increase aggregate demand and cause inflation in an economy and similarly how a fall in aggregate supply would also generate inflation. Marks were often missed out on because the second element of the question was ignored. It was necessary to explain why the rates had differed in the BRICS economies since 2012. This did not require a great deal of development. For example, if the answer suggested that in India a fall in the interest rate had stimulated consumption expenditure and aggregate demand, causing inflation, it was then sufficient to suggest that the rate of interest could possibly have been increased in China, leading to a lower rate of inflation there.

(c) (i) Most answers scored a mark here, but some did not go beyond the simple statement that the terms of trade fell after the high point in 2015 and so missed the second mark. In order to score the second mark it was necessary to express the change using appropriate terms. For example, some manipulated the data and calculated that the terms of trade index had fallen by 21 per cent. Others stated that the terms of trade had deteriorated by 24.5 index points.

(ii) A single mark was awarded to answers that clearly explained that a fall or deterioration in the terms of trade means a fall in export prices relative to import prices. For the second mark it was necessary to explain any possible reason that might lead to this. These included a fall in the demand for China's exports, the increased price of raw materials imported by China and a rate of inflation that was higher than that of China's rivals in international trade. This question was generally well done with a wide range of possible reasons identified and explained.

(d) Answers were expected to use the information to explain the relative importance of factors that would determine whether India would be able to compete with China. This meant focus upon the relative rates of inflation in the two countries and changes in China's terms of trade and to consider how these would be influential in determining the ability of India to compete with China. Other factors could be referred to, but these were expected to elaborate the influence of the two key factors. Many responses discussed the significance of the relative rates of inflation and the fall in China's terms of trade, but many did not effectively develop their analysis to answer this question. Often the quality of the analysis was limited and this also undermined the ability to exercise evaluative judgement.

Section B: Essay

Question 2

(a) Most candidates displayed sound knowledge and understanding of the determination of equilibrium price and quantity and how these would be affected by the changes stated in the question. Some good, accurate diagrams were produced to show a shift to the left of the supply curve and the shift to the right of the demand curve and the effect of each of these changes upon the market for chocolate. Some missed out on marks however because they did not consider the changes together. A shift to the left of the supply curve will raise equilibrium price and reduce equilibrium quantity. A shift to the right of the demand curve will also increase price, but it will increase equilibrium quantity. The net effect on equilibrium quantity can only be ascertained by considering the changes of both changes together to see whether equilibrium quantity will rise or fall. Many candidates did not explain this element.

(b) This question was done well and some high marks were awarded. The most popular policies assessed were indirect taxes on chocolate and campaigns designed to remove information failure in the market for chocolate. The advantages and disadvantages of each approach were assessed and a conclusion reached on which policy was most likely to be effective. It was pleasing to see that this area of the syllabus is well understood by most candidates.

Question 3

(a) Many candidates showed good knowledge and understanding of the impact of an increase in investment upon aggregate demand and aggregate supply and were able to explain that equilibrium national income would increase and that employment would also rise. When assessing the impact upon the general price level, however, fewer explained that any change depended upon whether the shift in aggregate demand was greater, equal to, or less than than the shift in aggregate supply so that demand-pull inflation might result. This omission from the analysis meant that marks were not awarded for this element of the question.

(b) It was necessary to understand arguments in favour of creating a more contestable market – in this case, for rail travel. These arguments were to be compared with the benefits of keeping rail travel in public ownership. Good answers argued that increased competition in this market might lead to lower prices and better service. They went on to consider the advantages and disadvantages of keeping rail travel in public ownership. A number of answers identified relevant issues, but gave them only superficial development, which failed to answer the question set fully. A balanced assessment allowed candidates to go on to reach a conclusion of the two approaches to rail travel.

Question 4

(a) Candidates generally showed good understanding of the meaning of a deficit in the current account of the balance of payments and were able to suggest likely causes of a deficit. These causes included a higher rate of inflation in an economy than in competitor economies, an increase in trade barriers that restrict the exports of that economy and changes in that economy's exchange rate with due reference to price elasticities in the case of agricultural products. This was generally done well.

(b) Some good answers were provided here with the most popular approach being a comparison of the advantages and disadvantages of expenditure-reducing policies with expenditure-switching policies. Most candidates understood the broad approach of each and the measures that might be adopted in each case. There was some variation in the extent to which the analysis of each approach was developed. Good evaluation was provided by those candidates who gave a full explanation of each approach.

ECONOMICS

Paper 9708/31
Multiple Choice

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

General comments

The questions for which most candidates selected the correct answer were **1**, **2**, **9**, **11**, **12**, **18**, **19**, **20**, **21** and **23**. These questions were answered correctly by 60 per cent or more of the candidates. They 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 **10**, **17**, **22**, **26**, **28** and **29**. These questions were answered correctly by 30 per cent or fewer of the candidates.

Comments on specific questions

Question 10 was answered correctly by 28 per cent of the candidates, who chose the key **C**. 23 per cent chose option **A**, 26 per cent chose option **B** and 23 per cent chose option **D**. When the percentages for each of options are similar it may indicate that the candidates are guessing. Alternatively, it may be that, apart from those who chose the correct option, the candidates did not notice that the question asked which statement was incorrect and picked one that was correct.

Question 17 was answered correctly by 30 per cent of the candidates, who chose the key **D**, 10 per cent chose option **A**, 56 per cent chose option **B** and 4 per cent chose option **C**. It could be that candidates who chose option **B** did not notice that the question asked only about the unit of labour L.

Question 22 was answered correctly by 30 per cent of the candidates, who chose the key **B**, 13 per cent chose option **A**, 32 per cent chose option **C** and 25 per cent chose option **D**. Only **B** is an option that is not made as an assumption. It may be that, as with **Question 10**, candidates did not notice that the question asked for an assumption that was not true.

Question 26 was answered correctly by 25 per cent of the candidates, who chose the key **B**. 10 per cent chose option **A**, 29 per cent chose option **C** and 36 per cent chose option **D**. Imports M are already included in the equation so **A** and **D** are not correct.

Question 28 was answered correctly by 18 per cent, who chose the key **D**. 37 per cent chose option **A**, 15 per cent chose option **B** and 30 per cent chose option **C**. Option **C** was the most popular of the alternatives. If the government sells securities the result will be that the cash to purchase them will be removed from the economy.

Question 29 was answered correctly by 13 per cent of the candidates, who chose the key **D**. 47 per cent chose option **A**, 30 per cent chose option **B** and 10 per cent chose option **C**. The bank would have more control if there were no restrictions on its ability to intervene in the market such as the rules of a monetary union or a fixed exchange rate.

ECONOMICS

Paper 9708/32
Multiple Choice

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

General comments

The questions for which most candidates selected the correct answer were **1**, **2**, **3**, **4**, **5**, **11**, **14**, **16**, **17**, **19**, **20**, **21** and **30**.. They 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 **7**, **23**, **26**, and **28**.

Comments on specific questions

Question 7 was answered correctly by 38 per cent of the candidates, who chose the key **A**. 14 per cent chose option **B**, 35 per cent chose option **C** and 13 per cent chose option **D**. The movement from S to Z represents the price effect. The movement from X to Y is a substitution effect and from Y to Z is an income effect. The fact that Z is to the left of Y indicates an inferior good. The most popular alternative answer was **C**. For a normal good Z would be to the right of Y.

Question 23 was answered correctly by 38 per cent of the candidates, who chose the key **A**. 11 per cent chose option **B**, 13 per cent chose option **C** and 38 per cent chose option **D**. To be recorded as unemployed (option **D**) a person must be available for work and seeking work. The dependency ratio relates those who are under or over the working age to those who are working. An increase in the numbers under or over the working age does not mean that the number of unemployed will increase.

Question 26 was answered correctly by 40 per cent of the candidates, who chose the key **B**, 18 per cent chose option **A**, 22 per cent chose option **C** and 20 per cent chose option **D**. The percentage choices of the alternative options are very similar. This may indicate guessing on the part of the candidates particularly as the question is near the end of the paper.

Question 28 was answered correctly by 35 per cent, who chose the key **A**, 12 per cent chose option **B**, 43 per cent chose option **C** and 10 per cent chose option **D**. The bank would have greater ability to pursue an independent policy if it were not constrained by a system where it had to sell foreign currency at a fixed rate (option **C**).

ECONOMICS

Paper 9708/33
Multiple Choice

General comments

Most of the questions were answered correctly by more than 70% of the candidates. 11 questions were answered correctly by between 51% and 70% of the candidates and only **Questions 3** and **30** were answered correctly by 55% or fewer of the candidates. The candidates are to be congratulated on their achievement.

Comments on specific questions

Question 3 was answered correctly by 46% of the candidates who chose the key C. 19% chose option A, 7% chose option B and 28% chose option D. The more elastic the demand curve the greater will be the difference in the output between the equilibrium without the externality and with the externality.

Question 30 was answered correctly by 52% of the candidates who chose option D. 36% chose option A, 1% chose option B and 52% chose option D. The most popular choice for those who did not answer this correctly was option A. If it is assumed that governments would prefer a higher growth in GDP, a lower rate of inflation and unemployment and a balance of payments surplus then three of the indicators in option A are worse than those in option D.

ECONOMICS

Paper 9708/41
Data Response and Essays

Key messages

- Diagrams should be labelled clearly and explained in the accompanying written answer – not squashed into a corner of the page.
- 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 paper and those candidates are to be congratulated on the use of their studies to achieve such marks. They presented well-balanced and clearly structured answers, accurately directed to the question and enhanced by relevant examples and applications where appropriate.

The weakness in some of the other answers was that the response was not precisely directed to the question asked. For example, in **Question 2(a)** candidates wrote about equilibrium but concentrated on market equilibrium; in 2**(b)** they omitted to consider the influence of a price change on the manufacturer; in 4**(b)** they explained the point of maximum profits but did not consider the second sentence in the question.

Most of the diagrams were presented in a clear manner but there were many diagrams, particularly with reference to **Question 3(b)**, that were small and squashed into a corner making them difficult to decipher.

Comments on specific questions

Section A: Data Response

Question 1

(a) It was expected that candidates would give a definition that included a reference to the growth in output during a time period. Many candidates omitted to include a reference to time. The comments on poverty and equality were usually accurate, with recognition that, while increased growth may reduce poverty, it did not necessarily mean that equality had been achieved. If there was a weakness it was that answers made a general assumption that economic growth necessarily meant a decrease in inequality.

(b) The article gave the information that fiscal policy was constrained by high government debt that meant increased government spending was not possible. Interest rates were already low so there was a need for an alternative way to boost demand. A lower exchange rate might decrease the volume of imports and increase exports with a positive effect on employment and output.

(c) The monetary policy referred to in the article was the existence of low interest rates. Despite these low interest rates there was still a loss of employment, low growth/output, low demand, a misunderstanding of how economy works with shaken confidence and high government debt. The weakness of the answers to this question was that candidates described what was meant by monetary policy but did not use the evidence in the article to illustrate why the monetary policy had not been successful.

(d) Although it was apparent that some candidates found the prisoner's dilemma difficult, many were able to explain that there was a dilemma because there was a need to rely on others for co-operation for the best outcome. There was no guarantee, however, that others might behave in a

mutually beneficial manner. This leads to an uncertainty. In the case of the article the economic system is uncertain. Changing interest rates might benefit one country but would not do so if others did not do the same. For example, if the home country increased its interest rates then firms might prefer to invest in an alternative country that kept interest rates low.

Section B: Essays

Question 2

This question required an evaluation and discussion of an argument. Candidates should have considered the conclusion in the question.

An explanation of the meaning of efficiency was expected along with the analysis of how an efficient optimum may be reached. Productive efficiency makes the best use of resources and allocative efficiency ensures that no one can be made better off without someone being worse off. Candidates should have commented on whether this necessarily occurs in a market economy where monopoly exists.

Candidates could also have mentioned that in a market economy there may be monopolies in some industries but not others and some monopolies might promote research and achieve economies of scale which might create dynamic efficiency so the effect is not uniform throughout the economy. Further, there may be government regulation or ownership of monopolies, particularly natural monopolies, which might reduce or prevent inefficiencies.

Some weaker answers gave a description of pricing and output in a monopoly compared with a perfectly competitive industry but did not consider whether the economy as a whole was then necessarily inefficient. Others did not mention any positive elements of dynamic efficiency or economies of scale.

Question 3

(a) This question required that candidates explain that equilibrium is a relationship 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 relating equilibrium to a demand curve was less developed or not attempted. Candidates could have mentioned the assumptions of rationality, sovereignty and the presumption that utility can be measured. Sadly, many candidates confused consumer equilibrium with market equilibrium and wrote about the intersection of demand and supply curves.

(b) This question required an explanation of indifference curves with an understanding of the meaning of income and substitution effects. 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 changes in demand as a result of a price change. This would be useful for a company to know, but as well as that change, the knowledge of elasticity would also be useful. Income elasticity and price elasticity of demand would affect the change in revenue; knowledge of cross elasticity of demand and the range of substitutes could also guide decisions. A considerable number of answers omitted to discuss the link to the manufacturer and concentrated on explaining the income and substitution effects of different types of good – normal, inferior, Giffen. Diagrams were usually clearly presented, although not always accurately labelled, but some candidates presented diagrams that were small and did not distinguish clearly between the income and substitution effects.

Question 4

(a) This question presented a challenge to many candidates. There was confusion in the explanation of the two terms. Some referred to diminishing returns in the context of diminishing utility and wrote about the consumer. Others described diminishing returns as synonymous with diseconomies of scale. The better answers explained that diminishing returns occur in the short run with at least one factor of production fixed and economies of scale occur in the long run. If a long-run average cost curve is drawn then diminishing returns can occur on each of the curves representing different scales of output. The distinction between internal and external economies of scale was more clearly understood.

(b) It was expected that candidates would explain the analysis of profit maximisation and consider both of the assertions in the question that this occurs where marginal cost equals average revenue and

also that it is a general rule that firms wish to maximise profits. In fact, the assertion concerning profit maximisation only occurs by default in perfect competition. This is because profit maximisation is where marginal cost equals marginal revenue and in perfect competition marginal revenue equals average revenue. It does not occur in other market structures. Many candidates did not consider the other assertion about the general rule of profit maximisation. Firms may not maximise profits; they may have alternative aims. It is not a general rule.

Question 5

(a) Candidates were able to explain the Lorenz curve which shows the distribution of income in a country and comment that the Gini co-efficient is a measure of the inequality of distribution. The co-efficient ranges between 0 and 1; the higher the figure the more unequal the distribution. Weaker answers concentrated on this aspect of the question and did not develop the answer to consider the second part of the question on policy implications. A rise in the Gini co-efficient, as mentioned in the question, would indicate an increase in inequality. This might lead to the conclusion that the government needs to take corrective policy action for example by means of progressive taxes, transfer payments or tax relief.

(b) Candidates understood the difference between economic rent and transfer earnings and were able to present diagrams or explanations to illustrate the difference. It is likely that the replacement of a perfectly competitive labour market by a monopsony would result in a fall in numbers employed, a fall in the wage rate and a fall in both transfer earnings and economic rent.

Question 6

Many candidates answered this question and wrote clear decisive comments on the difference between economic growth and the standard of living. They stated that GDP measures economic growth and that it is related to a particular time period. The weakness of the measure was mentioned, for example that it needed to allow for changes in the price level or changes in the population, or that it omitted the informal economy. They also mentioned that the standard of living is a much wider term and explained how the Human Development Index might be a better measure of the standard of living as it includes aspects other than an increase in the output of the economy. Better answers mentioned other key factors which are not covered by either of these indicators such as income distribution; negative externalities and working hours/leisure time. The answers also referred to other indicators such as the Multi-dimensional Poverty Index or the Measurement of Economic Welfare.

Question 7

(a) It was hoped that candidates would explain that expansionary monetary policy relates to the use of changes (increases) in the money supply and changes (decreases) in interest rates. These changes would be expected to have a positive effect on aggregate demand that might increase output and employment. Each of the three motives for the demand for money would be affected by changes in income and changes in interest rates.

(b) In the short run expansionary fiscal policy by increasing government spending and/or reducing the level of taxation will increase aggregate demand. With zero price expectations in the short run, this will decrease unemployment whilst also creating non-accelerating inflation. Monetarists suggest that in the long run, once price expectations are built into wage bargaining, wages will rise, unemployment will then also rise, and this process will continue as long as governments attempt to create jobs using deficit financing. The many answers to this question explained the meaning of expansionary fiscal policy and were clear on the short run changes that this might cause. The answers were less clear on the long run changes.

ECONOMICS

Paper 9708/42
Data Response and Essays

Key messages

- Many questions contain command words requiring evaluation, such as 'discuss' or 'consider'. This requires an argument or debate within the answer and the drawing of a conclusion to access the higher levels in the mark scheme.
- Responses must be directed towards the precise question set. A thorough reading of the question is necessary to pick out the full breadth. This is especially true of the questions without sub-divisions.

General comments

The standard of English shown by candidates was of its usual high standard. Many answers were again of a high standard in response to the questions.

Candidates generally demonstrated that they understood the relevant theory and the best scripts articulated the analytical aspects within the context of the question. Others did not fully develop the analytical aspects of the answer or to apply it to the context of the question.

However as in previous years there was use of badly drawn or inaccurately labelled diagrams, or even perfectly presented diagrams but without any reference to them in the essay. Also seen was the use of rehearsed answers that did not match the question which had been set. These comments, however, should not detract from the impression that the standard of response was high.

A number of candidates wrote at great length but did not direct their answer to the precise 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) The vast majority of candidates were able to identify two examples from the number in the text.

(b) Candidates struggled with this element. The better answers identified the change in money supply in two different time periods and compared those changes with the change in prices in the comparable period. Some candidates recognised that the money supply was always rising even when prices were falling. This enabled them to draw the conclusion that Friedman's view is not always supported by these data.

(c) A large number of candidates had a good grasp of quantitative easing and were able to explain the consequences for the Japanese economy showing an analytical approach through the monetary transmission mechanism and its impact on aggregate demand. Some, however, concentrated on the mechanism of quantitative easing rather than its impact.

(d) The best responses tackled both elements of the question and were able to explain the consequences for the Japanese economy, showing an analytical approach through AD/AS or production possibility curve (PPC) and Keynesian AMD. Some omitted part of the analytical process or ignored the international element of the question.

Section B – Essays

Question 2

This was the most popular question and was answered well. The initial focus of the question was on economic efficiency which most candidates answered thoroughly and analytically. The second element of the question addressed the ability of free markets to achieve efficient production. Two different forms of market failure were required and again most candidates demonstrated a sound level of analysis. Some concentrated entirely on an extensive explanation of the different forms of externality which are regarded as variations on a single concept. The best candidates came to a conclusion which reflected the question set.

Question 3

(a) Candidates who explained the three terms correctly and then went on to use the concept of marginal utility to derive the demand curve scored highly. Deriving the demand curve consideration of an increase and decrease in the price of a good, its implications for the equi-marginal rule $MU_x/P_x = MU_y/P_y$ and hence on the demand as equilibrium is restored. The better candidates did this.

(b) Candidates drew on a wide range of policies regarding income and wealth distribution. Good responses showed a depth of analysis as they made the link to demand of normal and inferior goods. Many candidates discussed the effects in general terms rather than analytically. An approach based on indifference curve analysis would have led candidates in the right direction.

Question 4

(a) Candidates who recognised that this question required a response that focussed on 'how a firm maximises its profit' within the context of perfect competition scored well. Many candidates stated the rule MC = MR but did not explain why this gave maximum profit, while others wrote all they knew about perfect competition without relating it to the precise question set.

(b) The question asked for the 'best strategy' and candidates who analysed profit maximisation and an alternative objective of the firm e.g. sales revenue maximisation in the context of two different forms of market structure scored highly. Many candidates analysed only profit maximisation in the context of different market structures and thus limited their mark.

Question 5

(a) Most candidates were able to explain the relevance of economic rent and transfer payments. The better candidates then developed their explanation in terms of differing elasticities of supply and demand in labour markets. Many candidates scored well on this question.

(b) Many candidates produced competent analyses of two different scenarios of trade unions affecting wage levels. The best responses used well explained and often complex diagrams as the basis for their discussion, and responded to the 'always' element of the question. Others unfortunately drew the diagrams but were unable to explain them fully or reach a conclusion.

Question 6

This was the least popular question on the paper. Some candidates identified a number of government aims, and then analysed the effects of injections > leakages and/or injection < leakages on those aims. This was a logical approach to the question and such responses scored well especially if they reached the conclusion that the aims were sometimes in conflict. Often candidates only attempted part of this process stating one or two aims and one of the imbalances.

Question 7

7 Few candidates got to the heart of this question which concerned the appropriateness of a single measure of living standards for countries at different stages of development. Many analysed a single measure of living standards (usually gross domestic product (GDP)) but often the criticism of this measure was general rather than in the context of stages of development. Better candidates

did offer an alternative measure to GDP but the stages of development aspect of the question was still not addressed.

ECONOMICS

Paper 9708/43
Data Response and Essays

Key messages

- Diagrams should be labelled clearly and explained in the accompanying written answer – not squashed into a corner of the page.
- 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, as last year, some excellent answers to this paper and those candidates are to be congratulated on the use of their studies to achieve such marks. They presented well-balanced and clearly structured answers, accurately directed to the question and enhanced by relevant examples and applications where appropriate. The weakness in some of the other answers was that the response was not precisely directed to the whole of the question asked. For example, in **Question 3(a)** candidates wrote about consumer choice using either utility theory or indifference analysis but they did not always show the link between an initial equilibrium and the demand curve. In **Question 7**, good criticisms were given of one or more measures of changes in the standard of living but the comparison between countries or a comment on the assertion in the statement was sometimes lacking.

Most of the diagrams were presented in a clear manner but there were a number of diagrams, particularly with reference to **Question 3(b)**, that were small and squashed into a corner making them difficult to decipher.

Comments on specific questions

Section A: Data Response

Question 1

(a) It was expected that candidates would provide a comment on the link between savings and production. Increased saving might mean less consumption which would reduce demand and not necessarily increase production. However, savings might enable banks to lend money for investment which could increase production. This was well answered and candidates generally picked up the majority of the marks available.

(b) The question required an explanation of market failure and an application from the information provided of the idea of market failure. Candidates could have mentioned the monopoly over gene diagnosis, the lack of investment in formal education, and carbon emissions. This question was usually answered very competently.

(c) Candidates were expected to explain what was meant by the prisoners' dilemma and comment on why it was referred to in the article. The essential part of the dilemma is that there is a need to rely on others for co-operation. The most beneficial outcome depends on what others might do and this is uncertain – hence, in the article, there is the suggestion of the need for intervention to influence incentives/disincentives. But even this is uncertain as the article claims that the lessons of the dilemma only 'might' be relevant.

(d) There were some good comments on the article for this question. Candidates mentioned that the information is not per capita, that it does not deal with relative income distribution and that there

was no information about inflation. Many referred to the table provided in the article and noted that it showed an increase in GDP but that this did not necessarily mean that the average person was living better than they did 50 years ago. Some also commented that, although there have been improvements in technology, the benefits have not necessarily been evenly distributed. The conclusion is that the evidence is questionable about whether the average person lives better than they did 50 years ago.

Section B: Essays

Question 2

(a) Most candidates who answered this question could explain what was meant by Pareto optimality and what was meant by equality. The answers were not always accurate about the possibility of a link. Pareto optimality does not necessarily produce equality. The answers were also clear about the meaning of free markets and equity – although some confused equity and equality. Free markets sometimes result in outcomes that are thought not to be fair (equitable).

(b) It was expected that candidates would give an explanation of the meaning of efficiency and that there may be a lack of efficiency due to overproduction or under production. The discussion of the methods a government could use to increase efficiency could have included some of the following; taxes, subsidies, licences, regulation, information, permits, 'nudge' incentives, granting property rights, privatisation, nationalisation. There were many good answers to this question. The main weakness, where there was one, was the imbalance between the sections. Too much time was spent on explaining the meaning of the different types of efficiency.

Question 3

(a) This question required that candidates explain that the theory analyses a rational consumer's choice as a relation between the marginal utility and the price. It could be considered using either marginal utility or indifference curves – marginal rate of substitution equal to the price ratio. Most candidates dealt competently with this part of the question but the consideration of the second part relating equilibrium to a demand curve was less developed or not attempted.

(b) This question required an explanation of the meaning of income and substitution effects to distinguish between the different types of good. This could best be achieved by using indifference analysis. Many candidates answered this question and produced an accurate analysis of the types of good, clearly distinguishing between the different relationships of the income and substitution effects that occur with different types of good. There were more diagrams that were accurately drawn and explained than in previous examinations and fewer that were too small to enable the different changes to be seen.

Question 4

(a) It was expected that candidates would give an explanation in terms of the criteria for perfect competition and the similarities/differences that occur between that and oligopoly. Better answers discussed the size and number of firms, the type of goods, the level of profits, the likely aims and the possibility of collusion. This question was answered by many candidates who gave well-structured and informed responses.

(b) It was necessary to explain the analysis of profit maximisation and consider what would happen to both profit and output if perfect competition were replaced by a monopoly. As with ***Section (a)*** many answers gave a good analysis of the determination of price and output both for the market price takers in perfect competition and the price makers in monopoly. They compared the levels of output, price and profit in the short run and long run. Better answers also considered whether the conventional criticisms of monopoly – that it causes a disadvantage to consumers because prices are higher and output lower than perfect competition – could be mitigated by the existence of economies of scale and the ability of a monopoly to undertake research.

Question 5

An analysis of the theoretical determination of wages was required by this question. Candidates needed to explain the theoretical analysis and discuss the reason for higher wages and inequality in wage rates. These inequalities could occur not only in different occupations but within the same occupation.

Better answers included reference as to how the theoretical analysis accommodates the market forces of supply and demand but can be moderated by the influence of trade unions and government policy with possible influences on inequalities in wage rates.

Question 6

(a) This question was answered by relatively few candidates. The speculative demand for money is determined by an individual's view of what will happen to future rates of return on long term government securities. There is an inverse relationship between the price of bonds and the rate of return on these bonds. Investors will hold cash if they think interest rates are likely to rise in the future and hold bonds if they think interest rates will fall in the future. At very low rates of interest the speculative demand for money might become perfectly elastic. This creates a liquidity trap and makes it very difficult for monetary policy to have a significant impact on real variables.

(b) Candidates explained that monetary policy might use changes in the money supply, changes in interest rates and changes in exchange rates. They were able to analyse how changes in all three of these variables might have an impact on demand-pull inflation. For example, a decrease in interest rates might stimulate consumption spending or cause a fall in exchange rates which should increase aggregate monetary demand. Alternatively, a fall in exchange rates would increase the price of imported raw materials which could cause cost-push inflation, contrary to the assertion in the statement.

Question 7

Many candidates answered this question and wrote clear decisive comments on the indicators that have been constructed to assess the changes in living standards.

Most answers began with a consideration of the use of GDP, stating that this is suitable to measure economic growth and is related to a particular time period. The weakness of the using GDP was mentioned, for example that it needed to allow for changes in the price level or changes in the population, or that it omitted the informal economy. Some answers concentrated too much on the aspect of the weakness of measuring economic growth before assessing the relevance to the standard of living.

Answers also stated that the standard of living is a much wider term than economic growth and explained how the Human Development Index might be a better measure of the standard of living as it includes aspects other than an increase in the output of the economy. Better answers mentioned other key factors which are not covered by either of these indicators such as income distribution; negative externalities and working hours/leisure time. The answers then also referred to other indicators such as the Multi-dimensional Poverty Index or the Measurement of Economic Welfare.