ECONOMICS

Paper 0455/11
Multiple Choice

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

General comments

The questions for which most candidates selected the correct answer were **1**, **5**, **11**, **13**, **16**, **20** and **24**. These questions were answered correctly by 70% 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 **4**, **17**, **27** and **29**. These questions were answered correctly by 35% or fewer candidates. 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% who chose option **D**. 8% chose option **A**, 29% chose option **B** and 28% chose option **C**. The question asked about the demand for wheat. As wheat is a single product, it would be a topic for microeconomics. The demand for labour is for a single product so that would also be a microeconomic topic (option **D**)

Question 17 was answered correctly by 12% who chose option **C**. 64% chose option **A**, 10% chose option **B** and 14% chose option **D**. A budget deficit means that the government is spending more than it is receiving in revenue. Government expenditure is likely to increase output, increase employment and possibly increase inflation as there is extra demand. Option **C** mentions an increase in employment. The other options give the opposite movement in output, inflation and employment to that expected.

Question 27 was answered correctly by 35% who chose option **A**. 46% chose option **B**, 14% chose option **C** and 5% chose option **D**. Specialisation is likely to increase efficiency and result in lower prices. It will mean that the country will concentrate on the production of certain goods and rely on international trade for the

goods that it does not produce. Option **B**, the most popular option, is the opposite of what might be expected about the dependency on international trade.

Question 29 was answered correctly by 32% who chose option **C**. 48% chose option **A**, 12% chose option **B** and 8% chose option **D**. If a product is price-inelastic and its price falls the resulting proportionate rise in demand is not as great as the proportionate fall in price. If the demand does not rise as much but the price has fallen there will be less demand for the dollars to pay for the good (option **C**).

ECONOMICS

Paper 0455/12
Multiple Choice

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

General comments

The questions for which most candidates selected the correct answer were **1**, **2**, **5**, **10**, **11**, **12** and **25**. These questions were answered correctly by more than 75% 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 **3**, **4**, **7** and **24**. These questions were answered correctly by fewer than 40% of the candidates. The rest of the questions gave results which were well within the levels expected.

Comments on specific questions

Question 3 was answered correctly by 33% of the candidates who chose option **C**. 4% chose option **A**, 3% chose option **B** and 60% chose option **D**. The term capital in economics refers to a factor of production. It is attributed to anything that is used as an input for further production, for example a piece of machinery. In this question, capital would refer to the factory (option **C**).

Question 6 was answered correctly by 20% of the candidates who chose option **A**. 23% chose option **B**, 12% chose option **C** and 45% chose option **D**. The lower the price elasticity of supply, the harder it is for the producer to change the supply on the market. If demand for a good increases, then the price on the market will rise. It will rise the most when the supply cannot be increased quickly. Those who chose option **D** may have confused the meaning of inelastic and elastic price elasticity of supply.

Question 7 was answered correctly by 20% of the candidates who chose option **D**. 35% chose option **A**, 26% chose option **B** and 19% chose option **C**. When the total revenue a firm receives remains the same

even though the price of the product has been reduced, it means that the proportionate change in the price is matched by the proportionate change in demand. This occurs when price elasticity of demand is unitary. (option **D**).

Question 22 was answered correctly by 25% of the candidates who chose option **B**. 19% chose option **A**, 31% chose option **C** and 25% chose option **D**. This distribution of responses could well mean that some candidates were guessing, particularly as the question occurs towards the end of the paper. To reduce cyclical unemployment, there needs to be some increase in production. This would occur if the government increased its expenditure. An increase in a budget deficit would mean that the amount that the government spends, in excess of the amount it receives in revenue, has increased. The expenditure would be likely to increase economic activity and reduce cyclical unemployment (option **B**).

ECONOMICS

Paper 0455/13
Multiple Choice

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

General comments

The questions for which most candidates selected the correct answer were **4**, **6**, **8**, **9**, **11**, **13**, **19**, **22** and **25**. These questions were answered correctly by 75% or more of the candidates. They covered different parts of the syllabus and were set to test different skills.

There were only two questions that were answered correctly by fewer than 50% of the candidates. These were **7** and **30**.

Comments on specific questions

For **Question 7**, 45% of the candidates chose the correct option **D**. 16% chose option **A**, 16% chose option **B** and 23% chose option **C**. An increase in the time a product can be stored would increase the flexibility of supply and thus increase the price elasticity.

Question 30 was answered correctly by 25% of the candidates who chose option **A**. 23% chose option **B**, 24% chose option **C** and 28% chose option **D**. The question asked what is measured in a country's secondary income of the balance of payments. Secondary income includes international redistribution of income by governments, multinational organisations and charities to other international and regional organisations (option A). It is similar to a transfer payment where there has not been an initial provision of a good or service. Primary income is the net inflow of income from factors of production abroad (option D). This is money earned from the provision of a good or service and is not a transfer payment, so is incorrect.

ECONOMICS

Paper 0455/21
Structured Questions 21

Key messages

There are two key messages to be considered from this examination and the candidate responses.

Firstly, the need to plan responses carefully, taking care to give sufficient time for the longer questions, whilst not spending too much time on the shorter questions. Many candidates simply ran out of time before attempting the number of responses required to complete the examination; others were unable to devote sufficient time to the longer, discursive **part D** questions and produced answers that were lacking in any development or depth of response. These answers were often Level One responses only, where some knowledge and understanding had been shown but little else was apparent from what had been written. It is important for candidates to appreciate that these 8-mark questions require a reasoned economic discussion, with depth in the answer, in order to reach a Level Three response.

Secondly if there is no response to a question, then no mark can be awarded to the candidate. It was noticeable in this examination that a considerable number of candidates made no attempt whatsoever to answer some of the questions. This was particularly evident for **Question 1** (calculation), **Question 1e** (diagram), and **Question 1f** (numerical data). The common theme here appears to be a 'fear of numbers' but the numeracy required is not of an advanced nature and, by making no attempt at these compulsory questions, candidates were putting themselves at a considerable disadvantage. Those who ignored the diagram **Question (1e)** in particular, were not be able to be awarded marks for the straightforward task of labelling the axes, and then labelling the original curves correctly; these marks can be gained before the correct shift of the curve is even drawn.

General comments

Whilst most candidates follow the examination instructions correctly, this year there was an increase in the number of those who did not. Those who answered all the questions, instead of choosing three questions from **Part B**, were at a disadvantage because of the time wasted on an extra question, time that could have been spent fully developing answers to just three questions rather than four. Those candidates who answered a random selection of the questions that they preferred to answer, often failed to answer sufficient questions. Those who answered questions in a random order were unable to follow the themes of the questions that are suggested by the short stem paragraphs at the start of each group of four questions.

Some candidates labelled questions incorrectly, or their handwriting was so poor that it was unclear which question was being answered. This does not usually present a problem when the questions are attempted in the correct order but can be problematic when they are not. Every attempt possible is made when marking to match the correct question to each answer and this is done by using the context of the question as a guide. This can become very difficult however when the context of the answer is not at all clear.

Comments on specific questions

Section A

Question 1

(a) Almost all candidates were able to perform a straightforward calculation to obtain the correct answer of 37,440 people in Cambridge aged 18 – 29. This was done by finding 30 per cent of 124,800.

(b) A considerable number of candidates gave 'high-tech manufacturing industry' as an example of the tertiary sector. They had correctly identified an industry from the source material but had not understood that manufacturing is in the secondary sector of the economy, not the tertiary sector. Healthcare and education were the most popular correct responses given to this question.

(c) A large majority of candidates were able to identify highly priced exports and price inelastic demand as benefits of having high-knowledge-intensive exports. Several candidates however identified increasing global incomes from the source material as a benefit, without indicating that the benefit is the resulting increased demand for exports.

(d) Good responses to this question explained why a more educated population can reduce poverty because of greater skills and productivity enabling them to earn higher wages. Weaker responses however only identified two reasons without explanations. Thus, higher wages were often identified by candidates but they did not follow this by explaining the link to poverty reduction because of the ability of higher wage recipients to afford more basic necessities. Similarly, information on health was identified as a reason without then explaining that better health would improve their ability to work.

(e) As noted in the key messages above, a considerable number of candidates made no attempt whatsoever to answer this question. Strong candidates however were able to label the axes, label the original curves, show the demand curve shifting to the right, and correctly label the new equilibriums for maximum marks. A surprising number of candidates incorrectly labelled the axes, with education in Cambridge on one axis and global income on the other. Demand and supply diagrams always have price on the vertical axis and quantity on the horizontal axis.

(f) This year more candidates were able to adopt a clear structure to their answers to this data response question than had been the case last year. In particular, it was noticeable that candidates used the figures in the source material more effectively. Good candidates could identify a positive relationship, explaining that the higher percentage with a university degree, the higher the GDP per head; they then used supporting evidence to illustrate this pattern e.g. Indonesia has the lowest percentage with a university degree and the lowest GDP per head in the table; an exception (Switzerland) was identified and the table used to explain the exception, i.e. Switzerland is the highest in terms of GDP per head but only third in terms of percentage with a university degree. This is illustrated by the following example answer that gained maximum marks:

'It is a positive relationship, most of the time at the percentage of population aged 25 – 64 with a university degree decreases so does the GDP per head decrease, except in Switzerland. Canada has the highest per cent of population with a degree with 57 per cent but Switzerland has the highest GDP per head with $81, 994. Indonesia has the lowest per ent of population with 12per ent and the lowest in GDP per head with $4136.'

A number of candidates gave the relationship between percentage of population with a degree and GDP per head as proportional, but this is not correct. Proportionality implies that the two variables increase or decrease at a constant rate, i.e., there is a constant ratio between GDP per head and the percentage with a university degree. This is not the case here and this answer could not be credited. The relationship in the table is direct (positive) but not proportional.

Some candidates tried to explain the exception (Switzerland) in terms of its relatively small population. It is not necessary for candidates to have any knowledge of external factors to be able to answer this question, but these candidates had not thought clearly about the meaning of GDP **per head**, the population figures for which will have already been incorporated into the data.

(g) There were very few responses of a high standard for this question and there were many candidates whose answer did not address the question at all. The biggest obstacle faced by these candidates was lack of understanding about the subject matter of the question, i.e., free trade. Candidates often answered a completely different question rather than the benefits of free trade to a city (in this example Cambridge).

Good answers were therefore rare but those who showed a clear understanding of the question's theme were able to examine how exports could create more profits and jobs, whilst imports could create more consumer choice and provide cheaper products; on the other side of the response, good answers discussed the problems of overdependence on foreign markets and the problems that more imports could bring to the city, such as job losses and falling revenues for local firms.

(h) In contrast to responses to **Question 1g**, there was a large number of excellent, concise answers to this question that addressed both sides. Candidates were able to use the source material to extract reasons why firms in Cambridge would continue to grow: the most popular approach was to explain the significance of the skilled and educated workforce, the good infrastructure and excellent transport links. This could then be contrasted with the high land and office costs and the high house prices that might deter skilled workers from living in the city.

In both **Question 1g** and **Question 1h**, many candidates discussed the balance of payments and growth in GDP. Both of these however are national concepts that refer to a country. This illustrates the importance of sticking closely to the topic of the question, which in both questions is clearly indicated to be the **city** of Cambridge rather than the country (UK).

Section B

Question 2

(a) There were very few candidates who answered this question successfully and many made no attempt at all. This appeared to be because they had no understanding of the concept of average revenue. Many candidates introduced costs into the formula, e.g. 'the difference between costs and profit', but a definition of average revenue does not require the concept of costs to be introduced. Those candidates who understood that total revenue must be divided by something were given some credit here, but for both marks it was necessary to state that total revenue must be divided by quantity sold.

(b) Candidates who understood that this question referred to economies of scale were usually successful with their answers. Economies of scale provide firms with the advantage of lower average cost and an explanation plus an example, such as financial economies of scale, was then sufficient to complete the response in full. Those candidates who did not understand the importance of economies of scale found it difficult to provide a comprehensive answer.

(c) Good answers to this question had a clear structure that used demand and supply as a basis for the responses. It was then a straightforward task to analyse how higher demand for ski holidays could cause prices to rise because of higher incomes or the rise in price of substitute holidays; lower supply could be explained by a lack of suitable accommodation, due to hotel closures in the pandemic for example. Better answers also explained the importance of higher production costs.

Many candidates, however, wrote long discussions about the importance of the weather, the snow in the mountains, Switzerland, and the seasonal nature of the ski holiday industry without linking this to economic analysis. It is important for candidates to focus on the economic aspects of the questions rather than the geographical aspects, knowledge of which will not be required.

(d) The following is an excellent response to this question that covers both sides of the discussion in some depth, making clear use of economic analysis to focus clearly on the benefits or disadvantages to firms of government intervention:

'Government intervention might be beneficial for firms in various ways. For example, if the government gives them subsidies, costs of production will fall **(L1),** *allowing companies to lower prices, increasing sales and, most likely, revenue and profits* **(L2).** *Moreover if costs of production are lower, firms might be able to produce larger quantities and enjoy the benefits of economies of scale like bulk buying discounts. It might also be beneficial if the government removes trading barriers because it would allow them to import capital and machinery to increase efficiency and productivity and to export, increasing the market size and making more profits.*

However, it might not be beneficial if, for example, the government applies taxes, which would raise the costs of production and force firms to raise prices **(L3)***, which might lead to less sales. It might not be beneficial if they set a maximum price, which might be below the minimum price needed to generate enough profit. Another way it might not benefit firms is if they put regulations on the good or service, such as minimum age of consumption, which limits the amount of supply and reduces profits.'*

Question 3

(a) It was a straightforward task for candidates to identify two types of tax from the large number of potential options, e.g., direct and indirect taxes. Some candidates however spent time unnecessarily explaining the taxes when the answer only required two words.

(b) This question was well-answered on the whole, with candidates able to identify two functions of money, e.g., medium of exchange and store of value, and then to explain them. There were however candidates who confused these functions of money with the characteristics of money, e.g., portability and divisibility, and this approach could not be credited.

(c) As noted above in the key messages, many candidates completely misunderstood this question and were therefore unable to gain any marks. Many candidates provided an answer about business failure rather than market failure. Even more surprisingly, some candidates correctly explained that market failure refers to inefficient allocation of resources but then went on to analyse the loss of revenue or bankruptcy that might be caused by businesses failing.

A small number of good answers addressed the consumption of public goods, merit goods, and demerit goods in a market economy. These answers analysed the consequences of their inefficient allocation, such as overconsumption of fossil fuels or under-consumption of healthcare. There were very few candidates who analysed the role of monopoly in market failure, but this approach was usually very rewarding.

(d) The following is a strong answer to this question that is a reasoned discussion of both sides of the question. One side of the argument has slightly more depth than the other, but overall this response is a very good Level Three response:

'Taxing the product can reduce the external costs as the demand for the good/service will decrease and therefore the consumption of other goods/services which generate the cost will decrease as well **(L1)***. In this case a tax on the electronic devices will reduce the high energy usage* **(L2)***. Furthermore the taxation on a product can reduce external costs as government will increase their revenue and be able to invest the money to generate further actions and services which are able to decrease the external costs. In the case of the smart phones, an investment in renewable energy, will decrease the consumption of non-renewable energy and therefore decrease external costs. However a taxation might not decrease the external costs since the good might be inelastic, meaning that if it's addictive or a need* **(L3)***, even though taxation is implied the reduction on demand of the good is going to be insignificant and external costs will remain the same. Finally, an increase in taxation on a good can cause more external costs as firms might aim to lower costs of production to lower the price of a good and might resort to environmental damaging but cheaper production methods that have a negative effect on the environment and generate further external costs.'*

Question 4

(a) There was a wide range of possible answers given to this question, some of them rather unusual, but most answers clearly identified products from the extractive sector. There were however many candidates who did not fully understand the nature of a primary product and answers such as plastic and gasoline were regularly seen. Both of these products however have been processed from the primary product (oil) and are therefore in the secondary, not the primary, sector.

(b) Most of the answers to this question were of a good standard and the most popular approach was to explain a country changing its specialisation in terms of finding new resources or running out of existing resources. There were also some very good responses that explained the change in terms of changes in demand for the product caused by changes in consumer behaviour, either at home or in other countries (demand for exports).

(c) There was a clear distinction in answers to this question between candidates who stuck to the question, and therefore scored well, and those candidates who digressed into answering a different question. There was a widespread assumption from some candidates that the question was about labour intensive products (primary) versus capital intensive products (secondary) but this was an over-simplification and is not established. It is possible for primary products to be produced by heavily capital-intensive methods (e.g. oil extraction from the ocean or combine harvesters of wheat) and it is also the case that many manufacturing processes are labour-intensive (e.g. hand-made pottery). Candidates adopting this approach therefore were not able to answer the question satisfactorily.

The best approach to this question was to explain the economic benefits of manufactured goods in terms of the financial rewards. Manufactured goods generally sell for higher prices, generating higher revenues and higher profits for firms and more demand for workers, generating lower unemployment and higher living standards.

(d) The following is a basic Level Two response because it covers both sides of the argument and uses economic analysis to develop the ideas. It does not reach Level Three, however, because the discussion lacks depth and some of it is not really relevant (e.g. 'buy it once' does not explain profitability and the 'tax on importation' is irrelevant because imports are made abroad). The points made are developed, but in a limited way, and there are a limited number of discussion points covered:

'Labour intensive production will harm an economy because the productivity might be lower than in capital intensive production **(L1)***. This is because machinery can be set to work all day, while people might get ill and complain about the rules or the working conditions in the firm* **(L2).** *In addition, the use of machinery might be more profitable in the long term for firms because you buy it once, while in a labour intensive production firms have to pay a wage or a salary weekly or monthly to workers.*

However, having a labour-intensive production will reduce unemployment because a lot of people is required to work and it will also help to reduce poverty due to the fact that all the people employed earn a wage. Moreover, most of the manufacture good are expensive so the government may earn a lot of money if they set a tax on importation of these goods.'

Question 5

(a) Most candidates could successfully identify two monetary policy measures, usually changes in interest rates and changes in money supply. There was, however. a significant minority who identified various tax changes, not appreciating that taxation is a fiscal policy measure. Those candidates who identified an increase in interest rates and also a decrease in interest rates could only be awarded one mark because it was repetition of the same concept.

(b) The most successful approach to this question was to explain that government subsidies would lower the cost of production for a firm and therefore lower the price of the product subsidised. Good answers also explained maximum prices, lower sales taxes and regulation as methods to reduce product prices. Some candidates however confused macroeconomic policies with microeconomic policies, suggesting for example that higher taxes would reduce aggregate demand and therefore reduce inflation but inflation refers to prices in **general**, not the price of a **specific** product.

(c) Very few candidates answered this question successfully. This was due to a lack of basic understanding of the concept of price elasticity of supply (PES) and because of a lot of confusion with price elasticity of demand (PED). In fact, far more candidates analysed the determinants of PED than analysed the determinants of PES. Even most of the candidates who wrote about supply did not develop their analysis sufficiently into the responsiveness of supply to a change in price. Instead, candidates usually limited their analysis to explaining that the price of factors of production affects a firm's costs and therefore the amount supplied, without linking the responsiveness of quantity supplied to price changes and the steepness of the supply curve.

In the few good answers to this question, candidates explained that the responsiveness of quantity supplied to price changes (PES) is determined by factors such as spare capacity, availability of stocks and the time period under consideration, explaining that supply is more elastic in the long run than in the short run.

(d) The following answer is a good example of a Level One response that is not developed beyond simple attempts at the use of economic ideas, with some understanding shown. Basic points are made by the candidate on each side of the question but the answer has not progressed into a discussion where the economic ideas have been developed. For example, there is no explanation of how collective bargaining can achieve better pay and conditions; there is also no explanation of why paying fees can be problematic for workers because the benefits of membership might not be worth the high cost. The conclusion adds nothing to the answer because it merely repeats points made earlier about fees, salary and working conditions:

'Trade unions benefit workers as they protect them from being underpaid and trade unions make sure that their members are working on good conditions **(L1)**. *Also they help workers to claim more benefits.*

On the other hand, members pay to be a member of a trade union and may not want to do so **(L1)**.

In conclusion, although a fee has to be paid to be a member, trade unions benefits workers as they help them to claim fair treatment, salary and working conditions.'

ECONOMICS

Paper 0455/22
Structured Questions 22

Key messages

- Candidates need to answer 3 optional questions – see General comments.
- As in some previous sessions, some candidates needed to provide more precision on the **(a)** parts of the optional questions. Long answers are not required but accuracy is needed.
- Candidates should recognise that **Question 1** is a data response question and they should draw on the source material in their answers.
- Candidates need to answer the **(d)** parts of the optional questions in depth. To gain the high marks, they have to achieve Level 3. To show the difference between Levels 1, 2 and 3, possible answers to **Question 5d** (Discuss whether or not an increase in exports will benefit an economy) answers at these different levels may be considered:

Level 1
Answers in this level are those which define key terms in the question and/or make statements which are not supported by relevant explanation. In the context of **Question 5(d)**, a Level 1 answer would be:

More exports would mean more employment. But more exports can cause inflation. There is both cost-push and demand-pull inflation. Prices of products will rise. There are products produced by the primary sector, the secondary sector and the tertiary sector. Primary sector includes farming. Countries grow crops and keep livestock.

The answer identifies two possible effects of an increase in exports – more employment and inflation. However, the answer does not explain why these effects may occur or why the effects may be beneficial or harmful. The rest of the answer does not add anything directly to examining the effect of an increase in exports.

Level 2
Answers at this level do explain some of the relevant points. The answer may be one-sided or, more commonly, the explanation may be somewhat limited.

A Level 2 answer would be:
More exports may mean that firms will increase their output. They may employ more workers. This would reduce unemployment. More exports may mean more export revenue. This could reduce a current account deficit as the current account balance is the difference between export revenue and import expenditure.

However, more exports may mean that the higher demand causes firms to raise their prices. More exports may mean that the higher demand causes firms to raise their prices. More exports may also increase demand for the currency. A higher value currency could reduce exports.

In this answer, some links are provided. It is explained why unemployment and a current account deficit may be reduced and why prices may rise. However, a link is needed between a higher value of the currency and lower exports and more effects might have been considered.

Level 3
At this level, answers will be two-sided and will have depth and width of explanation. A Level 3 answer would be:

More exports may mean that there will be higher demand for the country's products. This can increase output and the economic growth rate may be higher. The higher output may reduce unemployment. Higher output is likely to increase incomes which can raise living standards.

More exports may raise tax revenue. If export revenue rises above import expenditure, a current account deficit will be reduced. Governments aim for its export revenue to equal import expenditure in the long run.

However, the higher total demand, caused by more exports, could result in demand-pull inflation. Total demand may increase by more than total supply, if the economy is approaching full employment. As more workers are employed, the increased competition for workers may push up wages. In turn, higher wages could increase costs and result in cost-push inflation.

It is possible that an increase in exports may involve an increase in the export of non-renewable resources. If a country, for example, sells a large amount of its copper now, it will not be able to sell it in the future.

More exports would increase demand for the currency. This may cause the currency to rise in value. A higher currency will increase export prices. This may mean that again, in the long run, the rise in exports may be short-lived.

This answer does provide good explanatory links and is a well = thought out, two-sided answer.

General comments

There did appear to be an increase in the proportion of candidates who attempted all the optional questions. This is not a good strategy as it means they cannot spend sufficient time on the three required questions.

Of those who did select three of the optional questions, **Question 3** and **Question 4** were the two most popular questions. They were very few unanswered questions. Most candidates answered **Question 1** first and then the optional questions. As in previous sessions, there were a small number of candidates who misnumbered their answers, It is important that candidates correctly identify the questions they are answering.

There was less confusion on economic terms this session than in some previous sessions. For example, only a small proportion of candidates confused a current account deficit and a government budget deficit in their answers to **Question 5(d)**.

Comments on specific questions

Section A

Question 1

As in previous sessions, the overall performance on this compulsory question was good.

(a) Most candidates answered this question accurately. However, a small proportion ignored the word ‘percentage’ in the question and some gave the answer as 8.3m. Some even gave an answer of 83m, a figure larger than the total size of Honduras’s population as given in the fact file in the question paper.

(b) Most candidates answered this well. The most common benefits identified were an increase in exports sold to the US and more money sent back to relatives by Honduran workers employed in the US.

(c) Not all candidates paid attention to the command word ‘Explain’. As a result they identified two advantages. A number of other candidates wrote about the advantages of specialisation in general rather than in the context of the information provided. Most of those candidates that did take into account the information provided, focused on the greater skills that may arise from specialisation. A number of these provided good explanations of how this could be beneficial.

(d) There was a full range of responses to this question. The strongest answers recognised that a progressive income tax system takes not just a larger amount of the income of the rich but more significantly a higher proportion of the income of the rich. It is important that candidates are aware that not only a progressive income tax system but also proportional income tax and regressive income tax systems will take a larger amount of the income of the rich.

The explanation of the provision of unemployment benefit tended to be stronger with some good links as to how this could improve the position of those with lower incomes.

(e) Some candidates wrote long explanations of the diagram they had drawn. No explanation was needed. The instruction to 'Draw a demand and supply diagram to show…' should indicate to a candidate that they just need to draw a relevant diagram.

The diagrams provided varied in accuracy. A disappointing number of candidates confused the demand and supply curves. Other candidates did not accurately show the original and the new equilibriums. Some candidates did, however, provide clear, well-labelled and accurate diagrams.

(f) Over time, the quality of numerical data interpretation has improved. There were some strong answers which recognised that the main relationship was an inverse one with the higher the level of poverty, the lower the life expectancy. These answers provided supporting evidence, explained reasons for the negative relationship and recognised there was an exception. Some candidates, however, just reproduced the data without any interpretation. For example, just stating that Sweden had 0.2 per cent of its population living in poverty and a life expectancy of 83 does not involve any analysis. In contrast, comparing the information for the other countries and recognising that Sweden had the lowest percentage of population in poverty and the highest life expectancy involves analysis. A small proportion of candidates did not look at the data carefully enough and wrote about population sizes.

(g) This was quite well answered. A relatively high proportion of candidates developed points from the source material, making good use of relevant economics. There were some particularly good comments about the effects of increased training, more use of capital and lower unemployment. An example of a strong response:

If the training of workers increases, they will be more skilful, effective, and productive. Hence production costs are reduced. If their working conditions are improved, they may put more effort into their work and may not demand higher wages. The use of more capital goods should make production faster and reduce human errors. This would increase the output of clothes and expand their production scale, allowing the clothes industry to enjoy economies of scale, like financial and marketing economies.

However, cotton is an agricultural product with an inelastic supply. Weather conditions could reduce the supply of cotton and so increase raw material costs. The investment in capital goods may make it difficult to immediately cut costs. This is because capital goods are expensive, so there may be a short run increase in average costs of production.

A small proportion of candidates wrote about whether the price, rather than the cost, of producing clothes would fall in the future. A number also just stated points rather than explaining them.

(h) This was generally well-answered. There was particularly good explanation of how demand-pull inflation could arise from a fall in unemployment in Honduras. Most of those candidates who did well, tended to be stronger on the why the fall in unemployment may cause inflation. An example of a strong response:

On the one hand, a fall in unemployment will lead to increased incomes. The increased incomes will lead to increased consumer expenditure and aggregate demand will increase, Firms will be encouraged to increase their prices as a result and that will lead to demand-pull inflation. Additionally, the greater difficulty of finding new workers may increase wages. This will increase firms' costs of production and there may also be cost-push inflation.

On the other hand, a fall in unemployment may be caused by the emigration of unemployed workers as aggregate demand may not increase. Also, if the rate of interest is high, aggregate demand may not increase as the workers may prefer to save rather than expand.

Section B

Question 2

This optional question was selection by a slightly smaller percentage of candidates than the other optional questions. Some of those who selected this question struggled somewhat with the **(b)** question, but a relatively high number did well on the **(d)** part.

(a) Most candidates were able to give a relevant example but not all were able to give a relevant definition and some confusion was shown between a capital and a consumer good.

(b) As in some previous sessions, several candidates showed a confusion between a low inflation rate and a fall in prices. These candidates tended to run into difficulties. There were, however, some strong answers which examined, most commonly, the possible effects on international competitiveness and the willingness to invest.

(c) Most candidates were able to describe some methods of protection. The strongest answers directly addressed the question by analysing how, for example, the removal or reduction of a tariff, could reduce the price of imports which could result in a rise in the exchange of imports and exports.

(d) There were some pleasingly strong answers to this question. These explored a range of possible effects on macroeconomic performance and on working conditions, pollution and on the ability to mine diamonds over time. An example of a Level 3 answer:

An increase in diamond mining is likely to increase output and so result in economic growth. Higher output will increase tax revenue and this can be spent to improve the quality of people's lives by improving education and healthcare. Some of the diamonds mined could be exported. A rise in export revenue will help to correct a deficit on the balance of payments.

Increased jobs in the primary sector (diamond mining), secondary sector (manufacturing diamond products) and tertiary sector (selling the products) would decease unemployment due to the creation of jobs. Higher employment can increase incomes and living standards.

However, workers in the diamond mining industry may be exposed to harsh working conditions. This would decrease the quality of their health and cause the government to spend more on healthcare provision.

In order to maximise profits, diamond firms may pay workers low wages and decrease their working conditions. As a result, their standards of living may be low. Furthermore, mining diamonds now may deplete the diamonds, so that they cannot be mined in the future.

Question 3

This was the most popular optional question. Candidates did particularly well on **Question 3(b)**. There were also strong answers to **Question 3(c)**. Candidates tended to find **Question 3(d)** relatively challenging and there was a wide spread of quality of answers on this question.

(a) As with **Question 2(a)** most candidates were able to give a relevant example. In this case, it was usually rent. Some candidates, however, provided an imprecise definition of a fixed cost. A number of these stated it is a cost which does not change without recognising that it does not change with output (in the short run).

(b) This was extremely well answered. Most candidates showed a strong awareness of different types of unemployment. There were only a small proportion who either confused the different types or who seemed to be unaware of the different types. The most common confusion shown was that cyclical unemployment is caused by a fall in demand for one product rather than a fall in total demand.

(c) A few candidates showed confusion over the meaning of supply-side policy measures. However, most candidates did analyse some relevant policy measures. These candidates tended to be strongest on education, training, lower personal income tax and subsidies where some good analytical links were provided.

(d) There was a full range of responses to this question. A proportion of candidates just made unsupported statements. Others provided some relevant explanation but did not go into any depth. Some candidates produced a rather narrow answer, concentrating just on, for example, prices. A small number of candidates did not consider the impact of fewer firms on consumers. These examined the effects on the firms themselves but did not go on to consider how, for example, the greater opportunity for the firms to take advantage of economies of scale might benefit consumers. An example of a Level 3 answer:

Having fewer firms may not benefit consumers as there may be lower competition due to which firms charge higher prices as there may be less substitutes which may lead to higher prices and reduce the living standards of consumers.

Moreover, the firms may end up being complacent and produce a low quality product with little or no innovation which may lead to deteriorating consumer satisfaction which may lead to higher imports.

However, as the firms would not have to worry about competition, they may be able to expand and benefit from economies of scale, getting bulk buying discounts. Furthermore, the higher revenue gained may be used for research to improve the quality of retraining staff. This may lead to increased production costs with less wastage of resources. Allowing firms to sell the product at lower costs adding to consumer benefit while still maintaining their revenue.

Therefore, as long as firms may be under supervision of governments to stop exploitation, they may benefit the consumer.

Question 4

This was quite a popular question. Candidates were able to answer all the question parts but some of the answers lacked precision.

(a) Several candidates provided an accurate definition. However, some did not recognise that it is not just the change in supply which is greater than the change in price but the percentage change in supply which is greater. A small proportion of candidates sought to define elastic demand.

(b) The strongest answers here tended to be focused on lowering the price of food and reducing imports of food. A proportion of candidates only explained one of the reasons they identified.

(c) There were some good answers to this question. A number of these explained well the derived demand nature of a farmer's demand for labour and a number of other influences, including the relative cost of labour and the impact of subsidies. Some candidates, however, produced rather confused answers with a number writing about why someone would want to become a farmer.

(d) Most of those candidates who answered this question were able to identify several reasons why living standards may differ in cities and rural areas. Most were also able to provide some explanation of the points they made but the analysis tended to be rather limited and some answers were over descriptive.

An example of an L2 answer:

When looking at who has the better living standards between people living in the city and people living in rural areas you have to look at a number of things. People living in cities have better access to healthcare and emergency services. Their better jobs give people more freedom. The costs of living is high because in a city there is expensive housing. But living in rural areas means that you have poor healthcare, more physically demanding jobs and do not access to things like running water and power. In the end, I think people living in cities have better living standards as they have access to more even though it may be more expensive.

Question 5

This was not as popular a question as **Question 3** and **Question 4**. There were some strong answers but also some that seemed rather uncertain as to what to include particularly in terms of **Question 5b** and **Question 5b**.

(a) The two most popular benefits identified were less pollution and a reduction in the amount the government might have to spend on education. There were also a pleasing number that stated it might move the population towards the optimum level. However, some candidates thought that a decrease in a country's population would result in more resources in total rather than less pressure on resources or more resources per head.

(b) There were some excellent answers. These gave a precise and accurate explanation of how a market may move from equilibrium to disequilibrium. Some candidates, however, appeared confused as to how to answer this question and wrote about, for example, a government setting a maximum and minimum price.

(c) Over time, the quality of production possibility curves drawn by candidates has improved. The diagrams drawn in response to this question were generally good. Most were labelled accurately although a few candidates labelled them as price and quantity or labour and capital. The written analysis tended not to be as strong. A relatively high proportion of candidates showed a confusion between a decrease in the amount that could be produced with a decrease in actual output.

(d) There were some rather brief answers to this question. A relatively high proportion either did not explain the points they made or only explained the points in a limited way. There were, however, some perceptive answers which explained points in depth.

An example of a Level 1 answer:

Exports are the selling of goods made in the country to another country. An increase in exports may benefit a country. They will bring income to improve the current account. It can also lead to the creation of jobs.

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Key messages

Overall, many candidates were able to show a sound knowledge, understanding and ability to analyse. However, **Questions 1(g), 1(h), 2(d)**, **3(d)**, **4(d)** and **5(d)** in ***Section B*** also require candidates to evaluate both sides of the discussion to gain the highest marks.

Candidates need to take into account the context of the question in determining the content of their answer. For example, **Question 1(g)** relates to consumers in Montenegro and whether or not they benefitted from privatisation. This required candidates to only look at privatisation from the point of view of the consumer, not the firm or the economy. Most candidates did this but there was a small minority that only wrote about the impact of privatisation of firms on the economy which did not answer the question. A second example relates to **Question 3(c)** which asks candidates to analyse the advantages of a young population. Again, most candidates provided a good answer to this question, but some also raised points which were about disadvantages of a young population. For example, a rising dependency ratio and where the birth rate was high, the significant demand on the government for provision of extra schools which had an opportunity cost of not spending on other areas e.g. healthcare and infrastructure. This meant candidates did not develop their answer on the advantages as fully as they could, as well as using valuable time that could have been spent on other questions.

General comments

Once again, most candidates have shown good time management and answered questions in sequence. For this exam, many candidate answers in ***Section A*** showed high level skills in extracting source material to form the basis of answers. Candidates need to be careful when answering the question based on a table or figure. The data is chosen to test the skill of recognising the relationship using knowledge and understanding of the syllabus. There will always be a relationship and candidates need to provide the evidence that supports this as well as an explanation as to why there would be such a relationship. Some candidates spent a large proportion of their answer giving several examples of the relationship but then did not give an explanation for it. The data analysis is important but so too is the explanation, even for any identified exception.

Comments on specific questions

Section A

Question 1

(a) This was a simple calculation and most candidates correctly divided – $0.6bn by $4.8bn to get the answer of 12.5%.

(b) The source material gave two examples of capital goods relating to the banking sector, which were computers and office buildings. Most candidates selected at least one of these. Some candidates selected telecommunications and aluminium production from the source material which was incorrect as these are industries. Examples of capital goods within those two industries e.g. phones and factories were accepted, even though they were not named in the source material. This is because they showed evidence of understanding of a relevant capital good for these two industries.

(c) Few answered this correctly. The example in the source material was elastic demand within the tourist industry. If the product is elastic in demand, firms would lower the price to increase revenue. Higher demand is not sufficient. A common answer of higher profits is incorrect as without knowing the change in costs, it would not be possible to calculate profits. A typical answer which did not answer the question was 'an increase in price for a good with an elastic demand would result in less demand.'

(d) There were two ways in which the pattern of employment changed in Montenegro. Firstly, more workers within the tourist industry (tertiary sector) due to an increase in tourism. Secondly, more workers employed in the private sector, with many firms being privatised. The question was about change in employment, rather than the level of employment, so an answer which stated, 'In 2020 75% of Montenegro's labour force were employed in the tertiary sector', taken from the source material, was incorrect as it did not explain what the change was or what caused it.

(e) The key point to understand here is that applying a minimum price creates disequilibrium in the market. Many candidates drew a correct diagram showing a minimum price above the original equilibrium price and showed the surplus supply over demand at that higher price. A common error was to add either a shift in the demand curve to the right or a shift of the supply curve to the left to get a higher price, but this simply creates a new equilibrium price. Another common error was not labelling the minimum price and just showing a second price e.g. P2, which is insufficient. Some candidates explained that P2 was the minimum price in additional text. This could not be accepted as the question only required a diagram.

(f) Table 1 was in a slightly different format than usual. There was a wide variation in how well candidates answered this question. There were two approaches candidates could take. Firstly, to show a direct relationship between the trade in goods and services and the current account e.g. both positive or both negative. Secondly, that the current account balance was normally higher than the trade in goods and services balance. Strong answers were able to explain one of these relationships and identify an exception e.g. Croatia in the first case and Slovenia in the second case. Weaker responses often did not identify either relationship or tended to rank countries, for example, highlighting countries where their rank changed, but then not providing an explanation.

(g) Many candidates found this a straightforward question to answer and there was usually a good balance in identifying the benefits and drawbacks of privatisation for consumers. Typically, the benefits included lower prices, better quality, and a greater choice. The drawbacks often identified the creation of monopolies charging higher prices for goods of lower quality and private firms not considering external costs such as pollution. A few candidates seemed to misunderstand the question as, instead of relating privatisation to consumers, they wrote about the impact upon the economy e.g. level of employment and inflation.

(h) Most candidates understood what deflation in an economy meant. Strong answers tended to be better at explaining the drawbacks e.g. the greater uncertainty about prices, firms cutting output due to less profits and an increase in unemployment. Some correctly identified that lower prices made goods cheaper to export and more expensive to import and could improve the balance of payments. Weaker answers asserted that lower prices meant an increase in consumer purchasing power which led to an increase in total demand which led to economic growth, which is incorrect. The strongest answers recognised that if lower prices were caused by improved productivity, this could lead to economic growth and a higher standard of living. A typical acceptable comment was that 'deflation, if left unchecked, could lead to a recession.'

Section B

Question 2

(a) The key word in the question was 'absolute'. Some answers would have been acceptable as a reason for poverty e.g. low income/minimum wage but were not a clear reason for absolute poverty, where income was too low even for basic necessities of life like food, water and shelter. Common correct answers given included unemployment, old age, war, and famine. Some weak answers attempted to explain what absolute poverty was rather than what caused it.

(b) This question proved difficult for candidates, with most responses explaining short-term causes of a change e.g. lower government taxation leading to higher incomes. Essentially, economic development arises from improvements in any of the four factors of production. An example of a

strong answer would be where the discovery of new resources enables greater production and the government spending on better infrastructure e.g. trunk roads which raises labour mobility and assists exports.

(c) Many candidates drew an accurate PPC diagram showing a shift to the left in the PPC. Many also were able to explain that the serious storm would have reduced the level of resources available and reduced the capacity of the economy. Common errors were to not draw the curves to the axes, making them look more like demand curves, and to refer to lower output rather than lower capacity. Lower output would simply mean a movement to a point within the existing PPC. Weak answers tended to write out the text from the source material without explaining the impact on resources e.g. 'the serious storm destroyed bridges, factories, roads and electricity lines'.

(d) This question was generally answered well. Most candidates were able to explain how imposing tariffs led to an increase in the price of imports and fewer imports with domestic firms, increasing output as consumers switched demand. They also included comments such as domestic goods were now cheaper, especially if using imported raw materials. Strong answers also made reference to governments using tax revenue from tariffs to subsidise domestic goods, further improving output. Retaliation by other countries was a common theme on why output might not increase, as exports would be negatively affected. Weaker answers had less depth to the reasons why imposing tariffs might not increase output. A few were confused with other trade restrictions such as quotas.

Question 3

(a) Mixed and market economic systems should be understood by most candidates. Planned or command economies was an acceptable alternative. A few responses included incorrect terms such as free market or controlled market systems. A very small number of candidates referred to microeconomics and macroeconomics which are terms that relate to studying part or all of the economy.

(b) The majority of candidates provided strong answers by identifying and then explaining two functions of a central bank. Most correct answers made reference to the control of inflation or the issuing of notes and coins. Weaker responses only correctly identified and explained one function or only identified functions. Common errors related to being unclear what was meant by 'lender of last resort', the reason for holding foreign currency, or in some cases, the ability of the central bank to raise taxes.

(c) Candidates did well on this question. Stronger responses recognised that the young person would be physically fitter, more productive, more innovative and work well with technology. With a larger workforce, this would mean higher output and more government tax revenue which could then be used to increase expenditure on healthcare or infrastructure. Weaker answers tended to focus on the impact on the dependency ratio and birth rates rather than the impact on the effectiveness of the younger workforce.

(d) The effect of a ban on cars in a city was understood, to different degrees, by most candidates. Answers were stronger on the benefits of a ban e.g. reduced air pollution and improvement in quality of life in a city with car free zones. Stronger responses discussed more complex issues such as the quality and availability of public transport and other forms of transport e.g. bicycles. On issues where a ban would not be beneficial, a common theme was the inconvenience on social life and extra time taken to get to work and delivery of products to a city centre, although it was only a ban on cars and not on commercial vans and lorries. It was important that candidates recognised that this was about a ban in a city. A few wrote about the impact on employment if car production reduced but this was unlikely to have much impact on the city itself. Weak answers tended to give one-sided answers or not relate their answer specifically to a city.

Question 4

(a) Generally, candidates correctly identified two characteristics of money. A typical answer was 'durable and easy to recognise.' Divisible and portable were also common answers. A few confused characteristics with functions and wrote about it being a medium of exchange. Some gave an example of a characteristic and an example of a function, suggesting a lack of understanding of the term characteristics.

(b) This question was not well answered by some candidates and one reason maybe a lack of understanding of the difference between the nature of jobs in the public sector and private sectors. Strong answers explained the benefits of working fewer hours in terms of less stress and more time for leisure and family life. Another common response was to explain that working conditions and fringe benefits might be better in the public sector. For example, 'workers would stay in the public sector despite a pay cut because fringe benefits were more attractive to them.' Weak answers were simply critical of working in the private sector or suggested that public servants would not have the skills to work in the private sector, making almost subjective judgements.

(c) There were a wide range of answers to this question. Weak answers tended to interpret technology as being capital and therefore answers related to the benefits or otherwise of becoming more capital intensive. Strong responses focused on how advances in technology led to greater productivity and output and providing new products, both contributing to greater sales and to higher profits. The strongest answers were also able to highlight that profits could fall; in the short run, if implementing new technology was expensive or in the long run, if new technology meant your product became out of date and/or too expensive to make. Weak responses often only gave one example of how advances in technology affected profits.

(d) This question required a discussion on the link between government spending and employment. Most candidates were able to explain how a reduction in government spending in general would reduce total demand and, therefore, employment levels in an economy. Stronger answers examined how different types of government spending e.g. education and training and subsidies to firms had an impact on different types of unemployment. The majority of candidates were able to give the counter argument that a decrease in government spending e.g. on welfare benefits would incentivise the unemployed to seek work. Stronger responses also explained that lower government expenditure could mean lower taxes, also encouraging work over unemployment. Most candidates only referred to unemployment in general terms rather than how specific changes in government expenditure could affect types of unemployment e.g. frictional, structural and cyclical.

Question 5

(a) Some candidates were unclear about what a consumer price index (CPI) was, with some weak answers comparing it to a list of prices in a supermarket. Some knew an aspect of CPI e.g. it was a basket of goods or that it measures prices, but few were able to give a full answer. A typical response was 'the proportion of income that consumers spend on a good' which hints at the basket element of the CPI but lacks accuracy.

(b) Market failure is well understood by most candidates. Where it is not, it is usually confused with the failure of firms to make profits. Weak answers lacked specifics in the action taken by the government e.g. referring to placing a tax on goods but not stating an indirect tax on a demerit good. In other cases, candidates stated this successfully but did not then mention that the impact was to reduce demand. Most answers related to overproduction and overconsumption of demerit goods, but a few also explained ways in which the government could encourage production and consumption of merit and public goods. For example, 'the government could increase education to reduce imperfect information so that more merit goods and fewer demerit goods are consumed.' Strong answers were able to identify two ways and explain how this would reduce market failure.

(c) Most candidates knew what a foreign exchange rate was and how its appreciation affected import and export prices. Fewer were able to explain how this reduced demand-pull and cost-push inflation through reducing demand for exports and increasing imports of lower priced goods. Weaker answers only referred to lower inflation in general or stated that appreciation would increase import prices and lower exports. Some incorrectly stated that increased demand for the lower priced exports would increase total demand in the economy, causing demand-pull inflation.

(d) Most candidates were able to explain how economic growth would lead to less emigration. Reasons given included a higher standard of living and more job opportunities, reducing the push factor. Fewer candidates could explain why people would still emigrate even if there was economic growth in the country. Strong answers commented that growth might be higher in other countries and people might leave to go and live with relatives abroad. A few referred to the fact that economic growth could bring external costs like greater pollution and increased stress at work. Weak answers were often able to explain economic growth but could not make a link to emigration. In some cases, they confused immigration with emigration.