

ECONOMICS

Paper 0455/11
Multiple Choice

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

General comments

The questions for which most candidates selected the correct answer were **11, 18, 19, 20, 25** and **27**. These questions were answered correctly by 80 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 **6, 7, 14** and **21**. These questions were answered correctly by fewer than 50 per cent of the candidates.

Comments on specific questions

Question 6

Question 6 was answered correctly by 47 per cent of the candidates who chose option **D**. 14 per cent chose option **A**, 17 per cent chose option **B** and 22 per cent chose option **C**. At a price of \$2.50 per kilo the demand is shown as 400 000 tonnes and the supply is shown as 800 000 tonnes. Supply exceeds demand by 400 000 tonnes. (option **D**)

Question 7

Question 7 was answered correctly by 36 per cent of the candidates who chose option **D**. 22 per cent chose option **A**, 10 per cent chose option **B** and 32 per cent chose option **C**. The question shows a diagram indicating total fixed cost, total variable cost and total cost. The fixed cost is represented by the horizontal line, or RS. Above that is added the variable cost of PR. However, with no fixed cost the variable cost would start at zero and is shown as the upward sloping line from O to Q. At output S, the variable cost is, thus, QS. PQ (option **A**) is the fixed cost; PS (option **B**) is the total cost.

Question 14

Question 14 was answered correctly by 48 per cent of the candidates who chose option **B**. 27 per cent chose option **A**, 11 per cent chose option **C** and 14 per cent chose option **D**. A consumer prices index shows how prices change so they do not have to be stable. This eliminates options **A** and **D**, leaving a choice of **B** or **C**. There has to be a comparison with a base year and weights are used to reflect the relative importance of the expenditure patterns covered by the index. Option **C** states that weights are not necessary. The correct option is **B**.

Question 21

Question 21 was answered correctly by 37 per cent of the candidates who chose option **A**. 47 per cent chose option **B**, 10 per cent chose option **C** and 6 per cent chose option **D**. The economy in the question could achieve point X if all its resources were used. Point Y in option **A** represents a situation where some of the resources, in this case labour, are not fully used. Point Y in option **B** represents a different economy where all the resources are completely used and point X is not attainable.

ECONOMICS

Paper 0455/12
Multiple Choice

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

General comments

The questions for which most candidates selected the correct answer were **1, 2, 4, 8, 20** and **30**. These questions were answered correctly by 80 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 **3, 6, 9, 13** and **16**. These questions were answered correctly by fewer than 50 per cent of the candidates.

Comments on specific questions

Question 3

Question 3 was answered correctly by 38 per cent of the candidates who chose option **C**. 22 per cent chose option **A**, 6 per cent chose option **B** and 34 per cent chose option **D**. The boundary of the production possibility curve shows the maximum amount of production available to an economy using all its resources. The boundary would not change simply because consumers changed their buying preferences (option **A**). If resources were previously unused, the original position of point K would be inside the production possibility curve, the use of those resources would move K nearer to, or on to, the curve, not beyond it. (option **D**).

Question 6

Question 6 was answered correctly by 47 per cent of the candidates who chose option **B**. 6 per cent chose option **A**, 8 per cent chose option **C** and 39 per cent chose option **D**. Those who chose option **D** confused

the reason for a movement along the demand curve and a reason for a complete shift of the curve. A price change for the good would cause a movement along the curve. (option **D**). A decrease in the price of a complementary good would cause more of that good to be demanded and thus more of its complementary good but with no change in the price of that complementary good. Thus, it would cause a shift in the curve not a movement along the curve of the complement. (option **B**).

Question 9

Question 9 was answered correctly by 46 per cent of the candidates who chose option **D**. 19 per cent chose option **A**, 7 per cent chose option **B** and 28 per cent chose option **C**. The question shows a diagram indicating total fixed cost, total variable cost and total cost. The fixed cost is represented by the horizontal line, or RS. Above that is added the variable cost of PR. However, with no fixed cost the variable cost would start at zero and is shown as the upward sloping line from O to Q. At output S, the variable cost is, thus, QS. PQ (option **A**) is the fixed cost; PS (option **B**) is the total cost.

Question 13

Question 13 was answered correctly by 47 per cent of the candidates who chose option **D**. 23 per cent chose option **A**, 9 per cent chose option **B** and 21 per cent chose option **C**. Operating a loss-making business would not be compatible with the aims listed in options **A**, **B** and **C**. It would not be efficient, it would not be likely to lead to a growth in the business and it would not be making profits.

Question 16

Question 16 was answered correctly by 35 per cent of the candidates who chose option **C**. 10 per cent chose option **A**, 4 per cent chose option **B** and 51 per cent chose option **D**. To answer this question candidates had to determine which of the spending by the government was on public goods. Of those listed only law and order and defence are classed as public goods. Option **D**, the most popular option is calculated by adding the expenditures on health and education. These may be provided by the public sector but they are usually classed as merit goods, not public goods.

ECONOMICS

Paper 0455/13
Multiple Choice

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

General comments

The questions for which most candidates selected the correct answer were **2, 7, 11, 12, 23** and **30**. These questions were answered correctly by 85 per cent or more of the candidates. They covered different parts of the syllabus and were set to test different skills.

The questions that candidates found the most challenging were **9, 10, 22** and **29**. These questions were answered correctly by fewer than 40 per cent of the candidates.

Comments on specific questions

Question 9

Question 9 was answered correctly by 30 per cent of the candidates who chose option **D**. 21 per cent chose option **A**, 10 per cent chose option **B** and 39 per cent chose option **C**. The question shows a diagram indicating total fixed cost, total variable cost and total cost. The fixed cost is represented by the horizontal line, or RS. Above that is added the variable cost of PR. However, with no fixed cost the variable cost would start at zero and is shown as the upward sloping line from O to Q. At output S, the variable cost is, thus, QS. PQ (option **A**) is the fixed cost; PS (option **B**) is the total cost.

Question 10

Question 10 was answered correctly by 29 per cent of the candidates who chose option **C**. 34 per cent chose option **A**, 9 per cent chose option **B** and 28 per cent chose option **D**. If there was a price elasticity of demand that was elastic, the total revenue to the cinema would go down if it raised the price as the question states that total revenue increased. Option **A** is, therefore, incorrect. The cinema has a fixed number of seats. Supply of seats cannot be changed so option **B** is incorrect. There is no information about cost so it is not possible to conclude anything about profits (option **D**).

Question 22

Question 22 was answered correctly by 37 per cent of the candidates who chose option **A**. 4 per cent chose option **B**, 31 per cent chose option **C** and 28 per cent chose option **D**. The question describes a situation where prices are rising by 10 per cent but the interest rate remains at 7 per cent. Those who lent money or saved money would find that the value of their money has declined as the return on the money is now lower than the rate of inflation. Employers would find that they would have to pay more for their inputs. They may be able to raise the price of their products but this is not certain so it cannot be concluded that they would necessarily be likely to benefit. The group most likely to benefit are borrowers.

Question 29

Question 29 was answered correctly by 33 per cent of the candidates who chose option **C**. 51 per cent chose option **A**, 9 per cent chose option **B** and 7 per cent chose option **D**. If the country experiences a devaluation of its currency, if the government subsidises its exporters or if productivity in export industries increases, the country's exports will become cheaper for other countries to buy and this would be likely to increase demand and the surplus on current account would increase, not decrease (option **A**, option **B** and option **D**). Improved technology in other countries would most likely mean that the other countries would not buy as many exports from the exporting country which would worsen the current account (option **C**).

ECONOMICS

Paper 0455/21 Structured Questions

Key messages

Command words matter as they help candidates to know what is expected from them in their answer. For example, in **Section B**, the key command words are usually explain, analyse and discuss and they require different types of responses. Often candidates are asked to define a term for 2 marks. All that is required is a precise meaning but sometimes candidate give a lengthier explanation which is not needed. Questions starting with 'discuss' will often require a balanced and structured answer whereas 'analyse' may well not and may simply require an explanation of a relationship e.g. **Question 2(c)** the relationship between an increase in income tax and the rate of inflation. The meaning of command words used in the exam is set out on page 23 of the syllabus.

General comments

Generally speaking, candidates used the source material well in answering the questions in **Section 1**. The only issue was with **Question 1(f)** as the majority of candidates did not understand that in figure 1.1 the size of a country's current account balance was expressed as a percentage of GDP. This was because the countries were of different size and expressing the balance in \$m would have given a misleading comparison. Too many candidates did not analyse whether or not the inflation rate affected the size and direction of the current account balance. The data showed that only 2 countries have a current account balance surplus, but this was rarely picked up by candidates. Instead, many just described the percentages for the inflation rate and current account balance without identifying the relationship.

Candidates should spend a few minutes at the start of the exam, or after they have completed **Question 1**, determining which three questions to answer in **Section B**. They should look carefully at the **part (d)** questions as they carry the most marks. There were quite a few cases of candidates answering **parts (a), (b)** and sometimes **(c)** before deciding to start another question when presumably they realised they could not give a good answer to **part (d)**. It is also important that candidates do not cross out any work if they do attempt all four questions in **Section B** as the examiner will mark all their work and the three questions with the highest marks will count. There were a limited number of candidates where the answer they had crossed out actually gained more marks than the replacement question.

Comments on specific questions

Section A

Question 1

- (a) Less than half the candidates got this question right. With a population of 1.2 m and a birth rate of 10.2 per cent, the correct calculation was $1.2 \text{ m} \times 10.2 / 1000 = 12\,240$, as the birth rate is calculated as the number of births per 1000 of the population. Quite a few candidates arrived at an answer of 10 200 as they simply multiplied 10.2 by 1000. In quite a few cases the answer given was 122 240 as candidates divided by 100 and not 1000.
- (b) The most common correct answers given were GDP per head and HDI. Life expectancy and education which were also mentioned in the source material were also frequently identified by candidates. A few incorrectly stated GDP which is not an indicator of living standards unless expressed as per head (or per capita). Some candidates selected terms in the source material that are not used as indicators of living standards, e.g., income and highly qualified workers.

- (c) It was common for candidates to write out in full the two sentences in the source material that stated that the bad weather had led to global grape production falling by 35 per cent resulting in a shortage. Some candidates correctly wrote about the bad weather but then did not explain why this caused disequilibrium in the market. In many cases they just stated that production had fallen by 35 per cent. A few did not mention bad weather but did show some understanding by stating that disequilibrium was caused by a fall in supply without a change in demand which was an acceptable answer to give.
- (d) There were three possible reasons in the extract material for why well-educated workers tend to work past retirement age. First, they were well paid and therefore motivated to continue working. Second, their income enabled them to be healthy and therefore were fit to continue to work. Third, their jobs did not require physical strength which lessens with age. Most candidates did identify two reasons but often only gave one explanation, e.g., did not explain why remaining healthy enabled them to continue working. A few approached it from the angle of why low-educated workers tend not to work past retirement age, e.g., *'their health would be affected by things such as machines and pollution'* and this approach was also acceptable.
- (e) A rise in the retirement age usually increasing the size of the labour force and reducing the numbers receiving a pension. Thus, the government benefits from extra tax revenue, e.g., from income tax or sales tax as people remain at work. The government also spends less on pensions as fewer people have retired. The majority of candidates demonstrated they understood at least one of those effects. A small minority of candidates mistakenly believed that raising the retirement age would lead to the government having to pay out more in pensions or benefits. Others wrote about the effect on younger workers being unable to find jobs as they were still filled by older workers. This might be an outcome, but the question was about the impact on the government's budget. Others expressed the view that the government would have to spend more on healthcare, hospitals and homes for old people which again is an incorrect analysis of people working beyond retirement age and more to do with an aging population.
- (f) In general, there were few strong answers to this question. Overall, answers were weak with many not even identifying the inverse relationship. Many candidates simply described the differences in the percentages between inflation and balance of payments. They did not appear to understand that a negative percentage for current account balances meant that the country had a deficit, and a positive percentage meant a current account balance surplus. The question requires candidates to analyse the data and look for a trend and any exceptions. Few managed to do this but many did correctly identify that the relationship was inverse, e.g., that the higher the rate of inflation, the higher the current account deficit. A common error was to describe the data, e.g. *'In Iceland, the inflation rate was 3 per cent and the current account balance was 6 per cent which is 3 per cent higher'* or *'Mongolia has a high rate of inflation, and the current account balance is -16 per cent'* whereas the correct analysis would be *'Mongolia has the highest rate of inflation and the highest current account balance deficit at -16 per cent of GDP.'* Quite a few correctly explained that Iceland/Slovenia were different, e.g. *'The inverse relationship applies for all countries except for Iceland and Slovenia because both their inflation rate and current account balance were positive.'* Surprisingly, quite a few candidates wrote about the relationship between interest rates and current account balance.
- (g) Most candidates showed in their answer that they understood what caused a PPC to shift to the right or to the left. Candidates needed to identify, from the source material, factors that affected the level of resources in Cyprus, e.g., land, labour, capital, or enterprise. Generally speaking, candidates were better at explaining what would cause the PPC to shift to the left, e.g., the emigration of entrepreneurs and that the quality of agricultural land was decreasing. The shift to the right could be caused by lower rates of interest leading to more investment and the rise in retirement age and population leading to a larger workforce. Weaker answers tended to discuss changes in the level of production and the effect of the bad weather on grape production which shows a misunderstanding of what causes a shift in the PPC. A PPC shows the productive capacity rather than actual output of a country.

- (h) What was meant by capital-intensive production was understood by most candidates. Candidates generally did better on the benefits stating lower costs and prices, better quality goods, faster and more efficient production. Answers for why it might not be beneficial were less well done although good answers described less variety of goods, higher maintenance costs, and equipment might break down. Quite a few candidates assumed consumers were also employees and wrote about being replaced by capital equipment and losing their jobs. This approach would not gain marks as it falls outside of the scope of the question.

Question 2

- (a) This was correctly answered by many candidates as they understood that the foreign exchange rate was the price or value of a currency in terms of another currency. Some gave examples, e.g., £1 = \$1.2. Weaker answers got the idea of the comparison with another currency, without stating price or value. Very weak answers confused this term with the balance in value between total imports and total exports, e.g., *'it's when a country exchanges goods and services with another country at a particular rate.'*
- (b) This question was not well answered as candidates struggled to identify causes; often explaining why exports were more expensive than imports rather than the total value of exports was greater than imports. Good answers explained the impact of higher demand for exports arising from better quality goods or cheaper goods due to low inflation or weaker currency or specialisation. They also commented on imports being low because of recession in the home economy or protective measures in place. Some mentioned high value exports such as oil and gas not unexpected given the current high world market prices of energy. Weak answers used incorrect analysis, e.g., that a high rate of inflation led to exports having a higher value leading to the value of exports being higher than imports.
- (c) Most candidates showed a good understanding of both income tax and inflation rate. Good answers simply stated that higher income tax reduced disposable income, reducing consumer spending and total demand which led to lower prices and lower inflation. A few stated lower demand-pull inflation. The strongest answers also commented that if workers asked for pay rises to offset lower disposable income. This would lead to firms putting up prices as their costs had risen causing cost-push inflation. Quite a few candidates mistakenly only referred to changes in demand for a good - a microeconomic term - whereas the question was about macroeconomics. A few confused income taxes with taxes on goods and wrote about it leading to higher prices and increasing the inflation rate.
- (d) The term economic growth was understood by most candidates. Good answers were well balanced with reasons for why the government should aim for it and why it should not. Answers tended to be stronger on the reasons for economic growth. These included higher output, more employment, better standard of living and more tax revenue to develop the economy and help reduce poverty. Common answers for why it should not include depletion of resources, environmental issues such as pollution and inflation. Weak answers tended to pick up one or two points without developing them whereas strong answers covered more points with greater depth.

Question 3

- (a) A wide range of answers were possible for this question and many candidates correctly identified two influences. Common influences given were price, quality, and advertising of the goods; plus, the income and tastes/habits of consumers. There were a few wrong answers which for some reason did not relate to what a person may buy but why demand for a product may be high.
- (b) Candidates showed a good understanding of what was a demerit good. Good answers explained two ways of reducing consumption such as tax on the good making it more expensive and less affordable to buy and a government advertising campaign to provide information on the harmful effects of consuming the good. Weaker answers tended to identify a way without explaining the impact, e.g., *'government should place quotas on imports of demerit goods.'* In some cases this simply meant that they stated that imposing a tax would lead to lower consumption which was in the question. A few mistakenly referred to giving subsidies to merit goods in the belief that merit goods were an alternative to demerit goods, which is usually not the case.

- (c) Most candidates were able to analyse at least one reason why a worker would want to join a trade union. The most common reasons given were greater bargaining power for higher wages and better working conditions. Strong answers were able to give depth to their answers citing other reasons such as protecting rights, increasing job security and service provided by trade unions to their members. Weak answers often only gave one reason and, in some cases, believed that the trade union was the employer.
- (d) Strongest answers were from candidates who were able to discuss both why tertiary workers would normally receive higher pay than primary sector workers, but also why in some cases primary workers may get paid more. Common reasons given were that of higher demand and lower supply of tertiary workers due to skill levels and value added to the product or service they provided. For primary workers, reasons why some might be paid more included dangerous occupations e.g., gold mining or working with high value-added product, e.g., oil. A few noted that cleaners were usually low-paid and worked in the tertiary sector. Weaker answers tended to be one-sided or simply reversed the argument for tertiary workers when explaining why primary workers got paid less. A few confused primary workers with the secondary sector. A few made the valid point that a primary worker in a developed country might be paid more than a tertiary worker in a developing country.

Question 4

- (a) The majority of candidates understood that privatisation was 'the selling of firms in the public sector to the private sector.' A few mistakenly referred to a public company becoming a private company which is not the same thing as both are in the private sector.
- (b) Most candidates understood that absolute poverty meant a lack of necessities and/or low income. A few gave an example of under \$2 a day or referred to lack of housing, food, or clothing. Relative poverty was less understood. Most knew that those with relative poverty had less income than others but were unable to explain how this relativity was measured. A typical answer was 'Relative poverty is when a person can afford their basic needs but compared to another person cannot afford all their wants.'
- (c) The term specialisation was understood by most candidates although a few did not apply their analysis to firms but to individual workers which resulted in weak answers. For most, the benefits for firms were explained well. Quality and lower prices led to higher demand, higher sales /revenue for firms and therefore higher profits. It led to good brand image and reputation. Strong answers also often explained how such firms benefited from economies of scale. Weak answers often lacked depth and, in some case, included disadvantages of specialisation which was not required by the question being asked.
- (d) Supply-side policies were not understood by many candidates. Instead, weak answers often referred to other policy measures such as fiscal and monetary policies which affected the level of unemployment. Answers often concentrated on how government could reduce unemployment, and, in some cases, no supply side measures were mentioned. Strong answers were well balanced with a discussion on how actions such as education and training for workers and subsidies and grants for firms would encourage more employment of workers. The reasons why not were less well discussed. The most common reasons given was that it took longer to implement than other policies and that firms might not use any subsidies given to them to employ more workers but keep it as profit or invest in capital equipment instead.

Question 5

- (a) This question was well answered with most candidates identifying that the reward for labour was wages and for land it was rent. Weak answers instead referred to other features such as profit or having a job for labour and building premises or 'plants and crops' for land.
- (b) Answers to this question were poor as many candidates were unable to relate earning higher income to mobility of labour. Some thought it simply meant working faster or greater job satisfaction. Others explained that higher income meant that they would simply move to jobs with higher pay. Good answers explained that higher income meant that workers could afford to move other areas for jobs increasing geographical mobility or use the income to get better qualifications or skills which would improve their occupational mobility.

- (c) Most candidates were able to draw an accurate diagram showing how greater awareness of the benefits of eating fruit would lead to an increase in demand and higher prices. There were some errors such as wrong labelling of the demand and supply curves, the shifting of the supply curve rather than the demand curve and mixing up the price and quantity labelling of the axis. A few also did not show the change in equilibrium in the market for fruit but got everything else right!
- (d) Some candidates did not understand that a market economic system did not include government intervention, so they often discussed involvement of the government in applying taxes and providing public goods. Better answers concentrated on the benefits of competition both for firms and consumers based upon the profit motive for firms. Strong answers looked at the impact on economic growth and ability to compete internationally. Strong answers also mentioned that the profit motive led to the provision of demerit goods and lack of public and merit goods. This could lead to market failure and the creation of monopolies if there was no government intervention.

ECONOMICS

Paper 0455/22 Structured Questions

Key messages

The performance on **Section A** was generally strong. Candidates made good use of the source material. The exceptions to this were the answers to **Question 1(c)** and **Question 1(f)** where a proportion of candidates did not make use of the fact file, in the case of **Question 1(c)**, and did not refer to the evidence in Table 1.1 in the case of **Question 1(f)**. In terms of **Question 1(f)**, it was important that candidates analysed the data provided. They should have explained the expected relationship between the two sets of economic variables, considered what evidence in the data supported this and whether there was an exception.

A relatively high proportion of candidates could have improved their performance on the **(d)** questions in **Section B** by explaining the points they made and by examining the questions in more depth. For example, in their answers to **Question 5(d)**, some candidates wrote that an increase in output would benefit firms as it would increase their profits. They did not, however, explain how higher output might affect both revenue and costs.

A small proportion of candidates answered all four optional questions rather than the three required. As mentioned in previous reports, this is not a good use of time.

This session, there was an increase in the number of candidates adding additional points at the end of their papers. It is more straightforward for Examiners to consider these if they are identified as e.g. **Question 2(d)**, **Question 4(c)** and **Question 5(d)** rather than 1, 2 and 3.

It is important that candidates understand key economic concepts. As mentioned in previous PERTS, candidates need to know the difference between productivity and production. A high proportion of candidates this session showed a confusion between the two in their answers to **Question 1(e)**, **Question 2(c)**, **Question 4(c)** and **Question 5(d)**. A relatively high number of candidates, in their answers to **Question 4(c)**, also did not seem to understand that the unemployed are included in the labour force.

General comments

There were some excellent answers produced. A relatively high proportion of the answers to the **(c)** question parts in **Section B** were impressive. These provided relevant links and were logically structured. As indicated in Key messages, the main area for improvement needs to be in the quality of answers to the **(d)** questions in **Section B**. Candidates need to explore answers in detail, considering both sides and making use of relevant economic concepts. Candidates should devote approximately twelve minutes each to answering these questions.

There was little evidence of candidates running out of time. There was, however, evidence that some candidates did not use their time appropriately. Some answered the **(a)** questions in **Section B** in more detail than required and some repeated points in their answers to the **(d)** parts.

It appeared that candidates took care in reading the questions carefully this session. There was little misinterpretation of the questions.

Comments on specific questions

Section A

Question 1

This was generally well answered with some particularly strong answers to **Question 1(g)** and **Question 1(h)**.

- (a) The key issue here was that a number of candidates did not take care about the size of Bhutan's GDP. For example, some candidates multiplied \$3,259 by 0.8 (rather than 0.8m) and arrived at a figure of \$2,600 rather than \$2,600m (\$2.6 bn).
- (b) Most candidates did identify life expectancy and GDP per head. Some, however, referred to just GDP and others quoted 'life expectancy, freedom, social support, trust, generosity and GDP per head' without selecting the relevant time.
- (c) A number of candidates wrote about a high level of government spending without considering the relationship between government spending and taxation. Those candidates, however, who did look at the fact file recognised that Bhutan's government spending exceed its tax revenue and that there was a budget deficit of \$70m.
- (d) Some candidates wasted time by describing, in some depth, the primary and tertiary sectors before starting to answer the specific question. However, the question was generally well answered. Many candidates identified higher pay as a possible reason and linked this to the possible high skills of workers in the tertiary sector. A high proportion of candidates wrote about better working conditions, often on the form of, for example, a cleaner and safer environment.
- (e) A number of candidates confused productivity with production and concentrated on more machines producing more goods and services. Those candidates who did link to productivity, did this by explaining how new capital goods may incorporate advances in technology and how more skilled workers could speed up the production process and result in higher output per resource unit.
- (f) A number of candidates provided strong analysis. They started by explaining that higher GDP per head would be expected to be associated with higher net immigration. They then provided evidence from Table 1.1 to support the positive relationship. They recognised that Kenya/Mozambique was an exception as Kenya had the second lowest GDP per head (Mozambique had the lowest GDP per head) but the highest net emigration (Mozambique the second highest net emigration). A number of the strong answers explained how a high GDP per head would attract migrants who move in search of higher living standards.

Some candidates, however, were confused and wrote about some countries, GDP per head exceeding their net immigration figure while others had a lower figure for GDP per head than the figure it had for net immigration. A number of candidates, in their explanation, wrote about the relationship between GDP rather than GDP per head and net migration. What was disappointing, was the number of candidates who answered the question without any reference to the evidence provided.

- (g) Most candidates revealed a good understanding of the nature of enterprise. Many drew on the source material in an intelligent way and examined a number of reasons both why enterprise may have increased in New Zealand after 2019 and why it might not have done so. There were some particularly good comments linked to changes in government spending, possible tax changes, improvement in education and immigration. An example of a strong answer:

Yes, to an extent, it is likely that enterprise would have increased after 2019. This is because the increased government spending on mental health, child poverty and pollution is an instrument of expansionary fiscal policy. This means it would boost total demand, raise productivity and encourage investment. Moreover, as New Zealand experiences inward net migration, it is highly likely that some of these immigrants would set up new enterprises and increase the customer base. However, perhaps due to an increase in corporation taxes to earn revenue and spend on welfare, it may serve as a disincentive for starting enterprises in New Zealand. Furthermore, if the consumer confidence is low and the public is uncertain about future finances, saving is likely to increase,

reducing economic activity. Total demand and GDP could fall, stopping firms being set up and expanding.

- (h) This was well answered. Many candidates showed a good awareness of the likely impact on living standards of higher consumer expenditure and higher government spending. An example of a good answer is:

A cut in income tax rates would increase living standards. Lower income tax rate means more disposable income, which increases consumer spending. Consumers can buy more of their wants, increasing satisfaction and living standards. As consumer spending increases, demand for products will rise, so will the demand for workers. This will increase employment, and hence income. This will reduce poverty.

A cut in income tax rates, however, may not increase living standards. Lower income tax rate means less tax revenue for the government. This will reduce government spending on other areas such as health care, education and infrastructure. As the spending on healthcare decreases, the quality will decrease as well. This may decrease life expectancy and hence lower living standards. Lower spending on education decreases the literacy rate, so people may only be able to get low-paid jobs, which also lowers living standards.

Some candidates, however, wrote about people's income rather than their disposable income rising and a number appeared to think that an increase in the ability to save would be a disadvantage.

Section B

Question 2

The strongest performance was on **Question 2(c)** with most candidates doing well.

- (a) Candidates identified a variety of forms of money. A proportion of candidates identified ways of transferring money, such as cheques, rather than the form of money itself.
- (b) The most common functions explained were acting as banker to the government, issuing bank notes and operating monetary policy. A number of candidates confused the functions of a central bank with those of a commercial bank. These candidates wrote about providing loans to households and firms.
- (c) A high proportion of candidates analysed a number of connected reasons why a government might want to have lower unemployment as its main aim. A good starting point was to mention that unemployment might be at a high rate. Candidates made some good points about the impact on economic growth, government spending and tax revenue and living standards. In analysing the impact on economic growth, however, some candidates confused productivity and production. These candidates wrote that lower unemployment would increase productivity. The impact on productivity is uncertain and if more low-skilled workers are employed, production may rise but productivity may fall. A number of candidates, having analysed why a government may have it as its main aim, then analysed why it might not have it as an aim. This was not required.
- (d) The strong answers to this question contrasted how demand-pull inflation and cost-push inflation may affect producers. A number also distinguished between creeping inflation and hyperinflation, the effects on planning, borrowing and international competitiveness and the different impact on producers making products with elastic and inelastic demand. However, a number of candidates just stated points. For example, some wrote that inflation would reduce demand for producers' products without considering what might have caused the inflation.

An example of a Level 4 answer which provides good coverage of the possible effects of inflation on producers with some depth:

Inflation is a sustained increase in price levels over time.

Inflation is very beneficial to producers as it increases their profits. As prices rise, if the demand is inelastic, revenue will increase. They may be able to expand and grow as a result. It might increase investment which will increase productivity and output. It will also reduce the real value of their debts, allowing them to pay it off easily and get rid of the burden. This would allow them to expand

as they would have more money available to spend as they would not have to use money to pay back the debt.

The inflation rate may be lower than the inflation rate of other places, thus the firms would be able to export their goods as there would be a high international market for them. This would increase profits and would be beneficial for producers.

However, because of the inflation, labourers would demand higher wages, If the trade unions are strong, they may succeed. This would increase the total cost of production and thus the price of the good, causing cost-push inflation. This could cause a wage-price spiral with a reduction in output and profits. The cost of raw materials may also be the cause of inflation and this would not be beneficial. Producers may also face menu costs. Lastly, due to an increase in profits, they might be pushed into a higher tax bracket, increasing the tax paid. This reduces the profits and is not good for producers.

Question 3

The performance on this was question was evenly spread over the question parts.

- (a) Most candidates were able to define a production possibility curve. Some just drew a diagram. A diagram was not asked for and does not provide a definition.
- (b) This was quite well answered. Many candidates wrote about the difference in the extent to which the two products were necessities and the proportion of income that their purchase takes. A smaller proportion wrote about the possible difference in the availability of substitutes and whether the purchase could be postponed.
- (c) Most candidates drew an accurate diagram and analysed the impact on quantity and price. A small proportion of candidates mislabelled the axes. They labelled them as demand and supply or the vertical axis as income. A number of candidates labelled the demand curves as supply curves and the supply curve as a demand curve.
- (d) The majority of candidates recognised the difference between the public and private sectors. Many wrote about the difference in the objectives of the two sectors. Some candidates made good use of economic theory in their answers. A number of candidates, however, seemed to think that because the public sector would be unlikely to charge a high price, it must not be a monopoly. Some other candidates assumed that the government would make a loss without mentioning the relationship between revenue and cost.

An example of a Level 2 answer which is reasonable on both sides, but which lacks depth:

The public sector should be responsible for all internet services as the public sector is controlled by the government, and the government would take into account the standard of living of individuals in an economy. The public sector aims to improve welfare and would try to ensure that all individuals have access to the internet by charging a low price. This can reduce poverty and may increase the productive capacity of the economy as it could improve the quality of labour.

However, the public sector is not profit-motivated. It may be providing service that are not of good quality. It may also be placing restrictions on certain websites that speak ill of the government in order to prevent citizens from bad-mouthing the government. Private sector firms, on the other hand, would have a profit incentive. They may provide better quality services to consumers to receive greater sales and, in turn, a higher profit.

Question 4

This was the least popular question. Some candidates struggled with **Questions 4(a)** and **4(b)** but there were some strong answers to **Questions 4(c)** and **4(d)**.

- (a) A number of candidates who answered this question seemed unaware of the meaning of dumping. Some candidates were, however, able to give a clear definition of the term.
- (b) There were some good answers to this question which linked, for example, lower demand for exports with lower demand for the currency. A number of candidates, however, showed confusion

between a depreciation and an appreciation in a foreign exchange rate. Even more candidates wrote about a fall in the internal value of the currency without providing a link with the external value.

- (c) What largely distinguished the quality of the answers to this question was the extent to which they focused on the specific question. Some candidates wrote about the benefits of an MNC to a host country without linking them to a reduction in poverty. For example, some candidates wrote about the effect an MNC may have on the host country's balance of payments without examining what effect this might have on poverty. There were, nevertheless, some good analysis of the possible effect of an MNC on employment, tax revenue and government spending to reduce poverty. As with **Question 2(c)**, some candidates approached this as a discuss question, examining both why an MNC might reduce poverty in a host country and why it might not. Candidates were not required to examine why an MNC might not reduce poverty.
- (d) Most candidates mentioned that a very low birth rate might result in a fall in population size. A number recognised that it would reduce the size of the labour force and increase the average age of the labour force. Stronger answers explained the impact of a smaller population on total demand and total output. Some candidates made unsupported statements. For example, some candidates wrote that a smaller labour force would reduce the unemployment rate. Such a statement on its own, does not take into account both the supply and demand for labour.

An example of a Level 4 answer which provides a well-thought-out examination of the question:

Birth rate is the number of births per 1,000 of a population in a given period of time. It could mean that the labour force in a country could fall in the long run. This will mean the country may produce less output in the future, which may reduce GDP of a country as well as income. With fewer young workers, the labour force will be older. Older workers may be less mobile and less up to date with advances in technology. If a fall in the birth rate coincides with no change in the death rate, there may be a fall in the population size, and this could reduce total demand.

However, a low birth rate may be good for a government and country. If a low birth rate is accompanied by a fall in the death rate, then there would be no major change in population size and could be a sign of economic development. Older workers may be more skilled as they will be more experienced. A low birth rate also lowers the dependency ratio in a country. This will reduce pressure on resources and reduce poverty. Similarly, a fall in births will reduce the pressure on a country's resources, allowing more to be conserved and the amount of resources per person will rise. A fall in the birth rate could not only signify development and medical advances but could be offset by immigration into the country. If immigration is high, then a country's population can keep growing, while the country has gained skilled workers, increasing productivity and living standards.

In conclusion, a fall in the birth rate could only be a concern to a government if it is not accompanied by other factors to offset it, or a symptom of a problem such as lack of confidence in the future. The government should work towards an optimum population to ensure all resources are used to their fullest. This will benefit a government and an economy.

Question 5

This was the most popular question with a wide range of responses.

- (a) The strongest answers recognised that supply involves the willingness and ability to sell or provide products.
- (b) The two most common ways that candidates explored were giving subsidies to producers of merit goods and providing information about the benefits of merit goods. Some candidates wrote about ways to reduce the consumption of demerit goods and just stated these would result in the consumption of merit goods. They did not establish why this might occur. These candidates seemed to think that all products could be divided into demerit and merit goods and that if demand for one type fell, the other would rise. An increase in the tax on cigarettes, for example, may reduce demand for cigarettes but there is no guarantee that it would increase demand for merit goods.

- (c) Some answers were limited to explaining that household income would be likely to fall and so they would spend less. The stronger answers also explored the likely change in the pattern of household spending. There was some good analysis linked to necessities, luxuries and the influence on the motives for saving and borrowing.
- (d) The strong answers to this question made good use of economic theory. As well as economies and diseconomies of scale, candidates wrote about the advantages and disadvantages of gaining greater market power, elasticity of demand and the difference between what is produced and what is sold. In contrast, some answers just stated that a firm would benefit from an increase in its output as revenue and profit would rise. Such answers did not take into account what would happen to costs of production. A number of candidates who did discuss costs, wrote that higher output must increase total costs and so reduce profits. These candidates did not compare the impact on both total or average revenue and total or average cost.

An example of a Level 1 answer that stated points rather than explaining them is shown below. For example, it states that if demand is high, a rise in output would increase profits. It does not, however, explain the relationship between higher output, revenue and costs. There is also some confusion about productivity.

It depends on the demand of the product that the company is producing. If it is high then the company will profit, if it is low, then they will face losses. Generally higher output means higher productivity, so having more products and selling it in batches is easier than making a product constantly when it is demand. High output could lead to bankruptcy in some cases. This is because you could have a large stock of products and not be able to sell them leading to giant losses.

ECONOMICS

Paper 0455/23 Structured Questions

Key messages

There are two key messages to emerge from candidate responses in this examination: the requirement to read and consider the wording of the questions very carefully and the need to give sufficient time and consideration to the long **part (d)** (**Section B**) questions that are each worth eight marks.

In **Question 1(f)** the requirement is for candidates to analyse a relationship between two variables that have been presented in a table in the source material: GDP per head and proportion of females in the labour force. The instructions on the question paper clearly state that the source material should be used in answers but many candidates made little use of the data provided, whilst some ignored it completely. This led to answers that contained only general comments about labour as a factor of production rather than comprehensive answers that referred to the data in the table throughout, in order to provide supporting evidence and exceptions for the observed relationship in the data. In **Question 1(g)** the focus was specialisation at a national level but some candidates wrote about specialisation in a firm, and in **Question 2(c)** a large number of candidates ignored the word 'few' in the question: 'Analyse why so few MNCs may choose to locate in a particular region'.

In order to provide a comprehensive answer to **part (d)** questions in **Section B**, it is important that candidates produce a 'reasoned discussion' of both sides of the economic argument. Very short answers are unlikely to achieve the depth of response required here, especially answers that are shorter than those for **part (b)** questions (4 marks). Many candidates wrote discursive answers for the shorter questions, such as **Question 3(a)**, when two words e.g. purchasing and managerial, were all that was required to in order to identify two of the economies of scale. It is a basic principle that answers to **part (d)** questions should be longer and have more depth than answers to the other parts of the question.

General comments

Rubric errors were less frequent than in recent examinations but there is still a small minority of candidates who answer all of the questions rather than choosing three questions from **Part B**, and there are others who only answer three in total rather than all of **Question 1** in **Part A** plus three from **Part B**.

Sometimes the candidate neglects to label the question correctly or does not label a question at all. This difficulty may be compounded by poor handwriting too. Every attempt is made to link the question to the answer written by the candidate by looking at the context of the answer, but evidence may not be apparent from the candidate's answer if there is incorrect labelling, or if the question is not labelled at all.

Comments on specific questions

Section A

Question 1

- (a) This question proved straightforward for most candidates, with simple arithmetic (300 m divided 1000 m multiplied by 100) providing the answer of 30 per cent. Some candidates gave no response to this question at all however, whilst others tried to do the sum 'upside down', producing an incorrect answer of 3.3 per cent.
- (b) Most candidates could find the two conditions of increased incomes and decrease in technology prices from the source material.

- (c) Some candidates misread this question as 'greater participation by women in eSports' rather than participation the labour force, as indicated in the wording of the question. This made a correct answer difficult for these candidates. On the other hand, good answers were able to point to increased wages and education as reasons why more women might participate in the labour force.
- (d) There was good understanding of the difference between the public sector and the private sector displayed in answers to this question. Not all candidates considered the investment featured in the question however. The best answers commented that public sector investment aims to benefit society whilst the chief aim of private sector investment is to make a profit.
- (e) Good responses to this question were ones where a clear structure for an answer was provided by the candidate. This involved identifying the 'macroeconomic aims' outlined in the question and then analysing in turn how the development of eSports could achieve those aims. Having, for example, identified economic growth and full employment as aims, it was then straightforward to refer to the 1 per cent of Malta's GDP and the 3000 jobs created in Malta, as outlined in the source material.
- (f) The key to a good answer for this question was to refer to the data provided using a structured approach. The best responses started with a simple overview of the data, concluding that there is a positive relationship (higher GDP per head/higher female participation rate) shown in the table of countries. The next step was to look for supporting evidence, and this is clearly observed in the highest country for both (Luxembourg) and the lowest country for both (Yemen). There is however an exception in the positive trend, and the next step was to identify this exception. Bangladesh and Saudi Arabia are 4th and 5th in the female participation table respectively but 5th and 4th in the table for GDP per head. Answers that did not use the data to draw conclusions, but simply transcribed figures from the table however, could not be rewarded here. For example, candidates who pointed out that Yemen had only 6 per cent female participation rate and only \$710 GDP per head, rather than explaining that these are the lowest figures, did not analyse these figures at all.
- (g) Most candidates could identify overdependence or over-specialisation as a reason why a country could find specialisation harmful. Better responses then used examples to illustrate this, with dependence upon food imports, potentially leading to starvation, being the most popular approach. Other candidates then explored the problem of resource exhaustion to complete that side of the discussion. Good answers to the other side of the answer explained that efficiency could improve if countries focused on what they do best economically. There were however candidates who concentrated incorrectly on specialisation of workers (division of labour) but that was not the focus of the question. Therefore, points about workers being bored on a production line were not really appropriate for this question.
- (h) The following is response is from a candidate who scored maximum marks for this question. Despite its relative brevity, it is a comprehensive answer:

'Education and training would be very beneficial to the Maltese economy because it will give workers more skills and they will become more productive. This allows workers to produce at a good quality and with low costs of production, which would decrease prices and increase consumption.'

However, it might not benefit the economy because it would significantly increase government spending. Without an increase in tax revenue, this would significantly create a budget deficit. The country would be in a deficit for too much time waiting for education to have its effect. To support the government's spending they might raise taxes. This would decrease living standards and discourage investment and MNCs. Finally, it creates an opportunity cost because that money could be spent on healthcare and infrastructure.'

This candidate has produced a relatively short answer, but it contains analysis that covers both sides of the question in sufficient depth.

Section B

Question 2

- (a) Answers to this question generally showed understanding of the nature of free trade but some candidates merely defined free trade as 'trade without restrictions' and did not specify exports and imports, or an exchange of goods and services, and so could not achieve full marks.
- (b) Those candidates who looked carefully at the wording of the question (causes of better healthcare) tended to do well on this question, with analysis of high incomes and better training for doctors proving most successful here. On the other hand, those candidates who misread the question as consequences rather than causes of better healthcare, tended to analyse the issue in terms of higher productivity and this approach could not be rewarded.
- (c) As noted above, a large number of candidates read this question as 'why MNCs may choose to locate' rather than 'why few MNCs may choose to locate' and so it was answered from the opposite point of view. Answers that had misinterpreted the question in this way were accepted but it was difficult for them to analyse the question in the way that had been intended.

Good candidates tended to identify three reasons for not locating in a particular location, e.g. high taxation, lack of resources, lack of demand, and then develop these points by explaining how they affected firms' decisions.

- (d) The following answer is an excellent Level 3 response that comprehensively discusses both sides of the economic argument, in this case whether or not inflation is always a disadvantage to an economy:

Inflation is not always a disadvantage to an economy. This is because countries want inflation to happen at a low and stable rate (L1) of no more than 2 per cent. Inflation is the general rise of price level in an economy. With low inflation it leads to economic growth and economic activity, so GDP of a country rises. This is because demand –pull inflation could occur which means that there is high consumer demand. This means that consumer spending will increase (L2) and firms would experience higher sales and increased profit which they could then re-invest and expand creating more jobs for people and lower income employment. Low inflation is also good because it means that government can get more tax revenue. This is because prices rise so tax revenue will also rise as consumers and firms have to pay more money for taxes. This is good because it can increase government expenditure which they can provide welfare benefits to help the dependent population and the unemployed who inflation will affect the most.

However, inflation is a disadvantage to an economy as if it becomes too high it will hurt the economy and consumers and firms. This is because hyperinflation means the price of goods dramatically increase. This means that your currency depreciates in value and it is worth less and has less buying power. Therefore creditors, people that are owed money after lending it, will lose money (L3) as debtors have to work less to pay back the same amount if inflation was not accounted for. Since your money has less buying power it means that importing goods into your country are more expensive. This is cost-push inflation. This means that firms' costs increase so prices rise. Therefore there will be people who can not afford goods and will have a decreased standard of living. (L3) overall.

Question 3

- (a) As noted in the key messages, most candidates could identify two economies of scale e.g. purchasing and financial, and this was all that was required for this question. Many candidates however were determined to develop this answer, some of them much further, by writing a short essay on these economies of scale that they had prepared before the examination. This however merely wasted time that could have been spent developing answers to the longer questions that come later, especially the discussion question in **part d**.
- (b) Most candidates who attempted this question could score well on it. It was a straightforward process to identify two methods of protection, such as tariffs and quotas, and then explain how they worked. The main weakness in some answers was to identify the methods and stop, without going on to explain the methods identified.

- (c) The key to a good answer in diagram questions is clarity. Those candidates who label the diagram accurately tend to score highly but those who are careless with labelling, or who leave areas of the diagram unlabelled, will not do so. Common errors here included putting price and quantity on the wrong axes and not indicating the shift of the demand curve clearly. In addition there were those who labelled the axes capital goods and consumer goods, confusing PPC diagrams with supply and demand diagrams, whilst others put supply on one axis and demand on the other. It is also important to include written comments in answers, in this case indicating that more jewellery would be bought because of higher quality and that price will be higher. Simply describing the diagram however (e.g. price goes from P1 to P2), is not sufficient.

- (d) The following answer is an L1 response that has simple attempts at using economic concepts, but there is little depth and it does not produce a sufficiently reasoned discussion in order to develop and evaluate the arguments about whether or not protection benefits an economy:

Protection in international trade benefits and economy as people will have less incentive to buy products from other countries and would buy locally sourced goods (L1) meaning higher economic growth within a country for a time.

Protection in international trade would not benefit an economy as trade allows countries to export goods from their own country and protectionism can deter other countries from exporting needed goods (L1) to your country as well as stopping goods from that country importing to theirs. (L1) overall.

Question 4

- (a) Most candidates could provide a satisfactory definition of GDP per head. The answer required more than Gross Domestic Product divided by population however, because it is taken as read that candidates will know the meaning of the abbreviation GDP. Therefore, it was necessary to explain that GDP is total output/income/expenditure to answer the question in full.
- (b) Very few candidates understood the reasoning behind this question. The basis of a good answer was to identify the composition of the current account of the balance of payments: trade in goods, trade in services, primary income and secondary income. Understanding the contribution of the last two components enabled a candidate to see that a surplus could still be achieved, even if exports of goods and services were less than imports. Thus, primary income (e.g. profits from foreign investments) and secondary income (e.g. income from development aid) could offset the deficit of trade in goods and services. Explanations that focused on high export prices/low import prices were however able to gain some credit in this question, although not sufficient to obtain maximum marks.
- (c) Good answers to this question began with a clear definition of market failure in terms of inefficient resource allocation and then considered examples such as merit goods, demerit goods and monopolies to illustrate the concept. Weaker candidates however, often confused market failure with business failure, and answers such as this: ‘if the government does not give subsidies, there will be market failure because there will be less income for companies’ completely misunderstood the terms of the question.
- (d) The following answer is an L2 response but it is imbalanced, with a reasonable analysis of the advantages of a large primary sector but only a limited discussion of the disadvantages.

Having a large primary sector can be a disadvantage to an economy because the primary sector consists of the use of raw materials and extraction (L1). It can be a disadvantage because the primary sector does not always provide final consumer goods which means that firms can not charge as high a price and revenue will be low (L2). Although it can be argued that having a large primary sector is an advantage. This is because the primary sector is very important for all other sectors of the economy and the secondary sector is heavily reliant on it; having a large secondary sector would allow the other sectors to expand and new industry within the economy meaning economic growth. The primary sector does not require very skilled workers so it can become productive faster and provide jobs for a lot of the population without good education. Similarly, many countries that lack natural resources may rely on importing resources like Nauru’s phosphate and would pay lots for it. This could improve places like Nauru’s balance of trade and allow for a steady surplus.

Overall, although the primary sector has lots of advantages, having it as a large part of the economy is a disadvantage because the labour force will be less skilled and therefore less experienced and occupationally mobile as well as taking longer to train in different growing industries – which affects profits, GDP and economic development of an economy negatively as lots of other economies develop into tertiary and quaternary sectors. (L2) overall.

Question 5

- (a) In answers to this question, there was a clear divide here between candidates who had a clear understanding of monetary policy, in term of supply of money, interest rates and the exchange rate, and those who had very little understanding of the concept, or who offered no response at all.
- (b) Candidates who began their answers to this question by giving a clear definition of opportunity cost were usually successful in developing a comprehensive answer. The best approach was then to give an example of the way in which governments might use the concept of opportunity cost in their decision-making, the most popular being choosing between a new school and a new hospital. Candidates who used examples from their own experiences however, such as choosing between a cup of coffee and a cup of tea, were ignoring the context of the question (governments), and these types of examples could not gain reward.
- (c) This question produced some very good answers, with candidates producing a comprehensive analysis of reasons why trade union membership had decreased in some countries. The most popular approaches were to discuss improved pay and working conditions, along with government restrictions imposed on trade unions in some countries. The main weakness in the answers of candidates was lack of depth and it was not unusual to see only one reason analysed when several were required for a comprehensive answer.
- (d) The following answer is a good Level 3 response to this question:

Supply side policies promote economic growth. For instance, greater education and training (L1) will increase the productivity of workers, so they can produce more and produce higher quality output (L2). This will decrease unit costs of production for firms, who can export a part of the output at low prices and increase export earnings.

Furthermore, higher availability of quality healthcare will also increase productivity (as workers are healthier), and increase the amount of goods and services produced per head of the population in a given year. In addition, more capital will imply that scale of production will increase leading to economic growth.

Nevertheless, supply side policies can take a long time to be implemented (L3), and are also costly to apply. For instance, a reduction in direct taxation (to encourage work) may lead to budget deficit and national debt. Government may borrow and take money away from firms, which may decrease the productive capacity of an economy and prevent economic growth, as there is less financial capital to produce more goods and services. (L3) overall.

There is clear discussion of both sides of the argument. It is not a long answer, and the economic analysis is not always accurate, but economic concepts are used throughout in order to explain how supply-side policies can lead to growth and alternatively how they might not be effective. The candidate identifies education and training as a supply-side policy and then explains how this leads to more output, following this with more analysis of potential policies. The possible ineffectiveness of supply-side policies is then examined, first by outlining how they can take a long time, and then by explaining other factors that might prevent economic growth. The key feature of this answer is that it maintains its focus on the aim of the question, economic growth, throughout.