ECONOMICS

Paper 0455/12
Multiple Choice

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

General comments

The questions for which most candidates selected the correct answer were **8**, **9**, **11**, **12** and **24**. 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 were answered correctly by fewer than 60 per cent of the candidates were **Questions 1**, **5**, **14**, **16**, **23** and **28**.

Comments on specific questions

Question 1

Question 1 was answered correctly by 39 per cent of the candidates who chose option **A**. 16 per cent chose option **B**, 5 per cent chose option **C** and 40 per cent chose option **D**. The café would count as capital. Those who chose option **D** did not include the capital of the enterprise.

Question 5

Question 5 was answered correctly by 51 per cent of the candidates who chose option **D**. 23 per cent chose option **A**, 13 per cent chose option **B** and 13 per cent chose option **C**. Those who chose option **A** recognised that the demand curve was likely to be price-elastic but the question asked for the curve that was perfectly price-elastic. This is represented by curve **D**.

Question 14

Question 14 was answered correctly by 46 per cent of the candidates who chose option **C**. 12 per cent chose option **A**, 16 per cent chose option **B** and 26 per cent chose option **D**. Both options **C** and **D** show a shift in supply that could represent a subsidy to the industry. The question asked about the market position after a subsidy but before any adjustment in the market equilibrium. This is shown in option **C** with an increase in supply from 100 m to 300 m and an excess of 200 m as specified in the question.

Question 16

Question 16 as answered correctly by 44 per cent of the candidates who chose option **C**. 25 per cent chose option **A**, 14 per cent chose option **B** and 17 per cent chose option **D**. The question asked when it was **not** likely that there would be a conflict between government economic aims. Economic growth can lead to an increase in demand for imports that would not help balance of payments stability (option **A**). Full employment can lead to an increase in demand that could have an effect on prices and not help the aim of low inflation (option **B**). Redistributing income to achieve greater equality could lead to increased consumption that would **not** be a conflict with the aim of full employment (Option **C**).

Question 23

Question 23 was answered correctly by 14 per cent of the candidates who chose option **C**. 18 per cent chose option **A**, 8 per cent chose option **B** and 60 per cent chose option **D**. This was the most challenging question on the paper. There are often questions concerning the rate of inflation and such graphs do cause candidates difficulty. It is useful to encourage candidates to recognise that if there is a positive rate of inflation in one month of, say, 2.7 per cent and then the same positive rate of inflation in the following month, it still means that prices will be rising. They will not be unchanged (option **D**). Similarly, when there is a negative rate of inflation of, say, –3 per cent in one month and, say, –2 per cent in a subsequent month, prices will still be falling. They will be falling at a slower rate but they will not be rising. On the graph prices were falling for the whole period when a negative rate of inflation is shown. Thus, they will be at their lowest at the end of the period of negative rate of inflation (option **C**).

Question 28

Question 28 was answered correctly by 31 per cent of the candidates who chose option **A**. 54 per cent chose option **B**, 7 per cent chose option **C** and 8 per cent chose option **D**. Primary income (option **A**) includes interest, profits, dividends from foreign investments and also migrant remittances – payments from people living and working overseas. The question asked about dividend payments on shares which would be part of primary income.

*Please note that due to an issue with **Question 22**, this question has been discounted. Candidates' marks have been multiplied by a weighting factor so that the maximum mark for the question paper remains unchanged.

ECONOMICS

Paper 0455/22
Structured Questions

Key messages

Some candidates' performance would have been improved by:

- avoiding exaggerations. For example, in their answer to **Question 4(d)**, a number of candidates wrote that if people save more, they will not spend anything. This is clearly not the case and such an exaggeration affected the strength of the comments that built on it.
- answering questions which have the command words 'identify', 'state', 'define' briefly. For example, in their answer to **Question 1(c)**, candidates could have gained the full 2 marks by writing, e.g. 'high literacy rate' and 'tax haven'. A number of candidates, however, explained at some length why having a high literacy rate and being a tax haven would attract a foreign MNC. The command word 'State' should have made clear that this was not required.
- recognising that **Question 1(d)** is a data response question. Candidates must make use of the source material in their answers.
- avoiding errors of analysis. For instance, in their answers to **Question 2(d)**, some candidates wrote that a reduction in income tax would increase demand for goods and services which would lower prices. This confusion about what is likely to happen to the price level resulted in them writing that deflation would occur and that firms would reduce their output.
- answering the specific question set. In this examination, some candidates wandered off the focus of **Question 4(d)** into a discussion of how a higher interest rate could affect the foreign exchange rate and, essentially, answered a question on the advantages and disadvantages of a higher foreign exchange rate.
- explaining the points made in the answers to the **(b)**, **(c)** and **(d)** parts of the optional questions. For example, a high proportion of candidates in their answers to **Question 5(d)** wrote that a monopoly could benefit consumers by charging low prices. Some explained that a monopoly may be able to do so if it had low costs arising from taking advantage of economies of scale. Others wrote that a state monopoly may charge a low price as its objective may be consumer welfare. However, a relatively high number of candidates just stated that price may be low and did not establish why this may be the case.
- exploring the **(d)** part of the optional questions in depth. For example, some candidates in their answers to **Question 3(d)** wrote that the introduction of a national minimum wage may result in higher wages and more spending. They did not, however, go on to examine how higher spending may affect total demand, employment and so poverty. Some candidates in their answers to **Question 4(d)** made some interesting comments about how higher saving may provide finance that households in the future could be used to cope with unexpected events and to cover the costs of their children's education. Not all, however, explained the impact that higher saving could have on the macroeconomy.

General comments

There was a wide range of performance this session. There were some excellent answers which revealed an ability to apply relevant economic concepts to current economic issues. Many of the answers which were not so strong showed confusion over economic concepts and a lack of focus.

It was pleasing to see that the vast majority of candidates showed an awareness of the need to explore both sides of the question when answering the **(d)** part of the optional questions.

The least popular question this session was **Question 3**. This might have been because **Question 3(c)** asked candidates to draw a cost diagram. This has not been asked before. The most popular questions were **Question 4** and **Question 5**.

A small proportion of candidates answered all four of the optional questions. This is not good use of time and candidates are strongly urged to follow the instruction to answer three questions.

As in previous sessions, a small proportion of candidates misnumbered their answers It is important that candidates identify their answers clearly and accurately.

Comments on specific questions

Section A

Question 1

Most candidates answered this question first. The strongest answers came for candidates who allocated their time well, made good use of the source material and provided well-thought answers to **Question 1(f)** and **Question 1(g)**.

(a) Most candidates calculated the number of unemployed Bermudian workers accurately. However, some candidates revealed a confusion about the unemployment rate. These candidates calculated 7 per cent of the population instead of the labour force.

(b) This question could be answered briefly by identifying two reasons from the source why demand for holidays in Bermuda may be price-elastic. Some candidates, however, identified one or two reasons that were not based on the evidence provided.

(c) This was generally well-answered with the two main reasons being no corporation tax and a high GDP per head.

(d) The source material provided a number of reasons why Bermuda may be considered to have a higher level of economic development than many other countries. There were some particularly good explanations of how a high literacy rate and a high life expectancy can indicate and promote economic development. Some candidates, however, did not read the source material carefully enough and, as a result, referred to low population rather than low population growth and high GDP rather than high GDP per head.

(e) Most candidates were able to draw on relevant information from the source material but not all developed this. For example, most answers recognised that the Bermudian Monetary Authority carries out the government's monetary policy. The stronger answers analysed this in terms of what monetary policy measures it might use.

(f) This was generally well-answered with a relatively high proportion of candidates recognising that there is a largely positive relationship between GDP per head and life expectancy. These answers provided relevant supporting evidence of the relationship and explained that not all of the evidence was consistent with this relationship. A number also provided clear comments on why the relationship is the expected one. However, some candidates seemed uncertain about the meaning of GDP per head and this resulted in some confused thinking.

(g) Some candidates wrote about government policy measures not intended to reduce unemployment, most commonly the imposition of a tax on demerit goods. A number of those who did discuss relevant policy measures did provide strong answers. An example of a strong answer:

Governments may use expansionary fiscal policies to reduce unemployment by, for example, cutting income tax rates. This would increase disposable income which could, in turn, increase total demand. Demand for products would rise, so firms may employ more workers to meet this higher total demand which will reduce unemployment. But if total demand rises by more than total supply, then this measure can lead to demand-pull inflation.

By lowering interest rates through expansionary monetary policy, total demand would again rise. But this method may increase the money supply in the economy due to more borrowing which could lead to monetary inflation. Increased government spending could also lead to more money supply in the economy.

Governments may also increase a national minimum wage to avoid effects of unemployment such as poverty but this could increase labour cost for firms, which could lead to cost-push inflation, On the other hand, if total supply rises in line with total demand, then inflation will be avoided. If the government uses supply-side policy measures to increase the productive potential of the economy, *then prices can remain at the same level or fall. Increased labour costs can be avoided if firms shift to a more capital-intensive production process, thus avoiding cost-push inflation.*

In some answers, there was confused analysis. There was, for example, confusion shown about how higher total demand may affect the price level and the difference between an increase in production and an increase in productivity.

(h) There were some excellent answers to this question. These showed a good understanding of the nature of demerit goods and the effectiveness of higher indirect taxes in reducing the market failure they cause. An example of a strong answer:

Market failure is where market forces fail to allocate resources efficiently. The right products are not made in the right quantities and at the lowest possible costs. Demerit goods have negative externalities and consumers don't realise their harmful effects. So if left to market forces, demerit goods will be overproduced.

To discourage the consumption of demerit goods, the government may impose an excise duty on it to reduce consumption. Imposing indirect taxes will raise the product's price, making it more expensive. Consumers may refrain from purchasing the product due to the rise in price.

However, if the demerit good has inelastic demand, the demand may only fall a little. Demand may inelastic because demerit goods such as tobacco may be addictive. The higher tax will have a higher impact on price but market failure won't fall much.

If demerit goods such as tobacco are sold on illegal markets, there may be little change in demand and the demerit goods may still be overconsumed and overproduced.

Some candidates showed confusion about market failure. These candidates wrote that market failure occurs when prices rise and/or firms go out of business. They did not seem to understand that such changes can be the result of market forces responding efficiently to changes in market conditions. A number of candidates also showed a confusion between external and social costs.

Section B

Question 2

This was the third most popular optional question. Candidates did particularly well on **Question 2(b)** and **Question 2(c)**.

(a) Most candidates were able to define frictional unemployment accurately. A number, however, confused frictional unemployment with structural and cyclical unemployment.

(b) This was generally well-answered. There were some interesting comments on how infant industries are likely to be at a competitive disadvantage and how established foreign industries may drive the new domestic industries out of business.

(c) This was also well-answered. A high proportion of candidates showed a strong understanding of the effects that a change in the value of the foreign exchange rate may have on the current account of the balance of payments. These candidates linked changes in the price of exports and imports to demand for exports and imports and then to export revenue and import expenditure. It was pleasing to note an improvement in candidates' understanding of this aspect of international trade compared with recent sessions.

(d) Most of the strongest answers started by explaining what is meant by a recession. A number of these explored how a reduction in income tax could affect both consumer expenditure and investment. These answers made a clear link to higher GDP and examined why, even with higher disposable income, it may be difficult to end a recession. An example of a strong L3 answer:

Income tax is a direct tax imposed on income and profit. A recession is when there is a fall in GDP for two consecutive questions.
Lower income tax may end a recession as it leads to higher disposable income levels, so there is greater demand for goods and services. This means there is more consumption which is likely to increase output. GDP will increase.

More consumption means that there is greater profit for firms, which may be used to invest. Investment will also increase total demand and will increase the productive capacity of the economy, leading to economic growth. The higher total demand can reduce cyclical unemployment. With more people in work, there will be higher total demand which can further increase output.

Lower income tax may encourage immigration, leading to an increase in the supply of labour. Labour is a factor of production and an increase in any factor of production can increase productive capacity and GDP.

However, it may not end a recession as there may be low confidence in the economy, which means consumption may not increase. Households and firms may save the higher disposable income and so GDP may not rise. Furthermore, people may want to save their disposable income in order to earn interest. Additionally, they may import goods and services instead, which means domestic firms may not have higher profits.

Question 3

This was the least popular question. There was quite a wide spread of performance on this question.

(a) It was important here for candidates to recognise that diseconomies of scale involve an increase in average costs of production. Reference to higher costs of production was too imprecise.

(b) Some candidates struggled with this question. A number of these candidates wrote that a high - income household may borrow more than a low-income household because they have a higher income. This was not an explanation. Others wrote that high-income households may spend more than low-income households but did not explain why some of that spending may be financed by borrowing. There were, nevertheless, some good answers which explained how high-income, for example, may be more confident about their ability to repay loans and may be able to offer more collateral.

(c) Some candidates drew a clear and accurate diagram, or two separate diagrams, showing total fixed cost and average fixed cost. These candidates also provided relevant written analysis. Some candidates drew inaccurate diagrams. Some of these showed total fixed cost rising and average fixed costs remaining unchanged. Others confused average fixed costs and average variable costs. A number of other candidates drew production possibility curve or demand and supply diagrams.

(d) The vast majority of candidates who answered this question showed an understanding of the meaning of a national minimum wage (NMW). The strongest answers recognised the possible greater ability to buy basic necessities of those low-paid workers who receive a wage rise as a result of the NMW. These also explored how higher incomes may result in higher spending and higher productivity and, as a result, the creation of more jobs. These answers also considered how unemployment might rise and one or more other reasons why poverty may not be reduced. An example of a strong L3 answer:

The introduction of a national minimum wage (NMW) may or may not reduce poverty. NMW is the minimum wage set by a government which every firm has to give to its workers irrespective of the output produced.

It may reduce poverty as this will ensure that no firm is able to exploit workers by not paying them for their hard work especially in industries like construction where many manual workers are hired on a day basis or a short period of time. Also, this will mean that labour can afford basic necessities like food, water, clothes and shelter and so get out of absolute poverty. Also, more workers may start working harder as they can now earn better so this will improve their skills and expertise. Also, workers will be able to send their children to school where they develop skills and so get better jobs and afford necessities which are fundamental to life, thus reducing absolute poverty. They may also afford better healthcare, so be able to work and earn more.

On the other hand, this may not happen if at the NMW which is set above the equilibrium price, there are more labour available and willing to work than are demanded by firms. This will lead to unemployment which may result in people not being able to afford basic needs and so increase poverty. Also, a large number of poor people work in informal industries where these NMW regulations may not apply.

In conclusion, the result of the NMW policy depends on many factors including the relative strength of the government in implementing and regulating the policy and the proportion of workers employed in the informal sector of the economy which is not regulated by the government.

Question 4

This was the second most popular question. There were some particularly strong answers to **Question 4(c)**.

(a) The two most common reasons identified were higher wages and better job opportunities. A number of candidates focused on reasons why emigration rather than immigration may increase.

(b) There were some strong answers to this question particularly in terms of lower living standards and inefficient use of resources. There were some interesting comments about the possible effects of unemployment on skills and the government's budget position. However, a number of candidates wrote about the causes rather than the consequences of unemployment.

(c) This was generally well-answered. There was some interesting analysis about, for example, changes in social attitudes, changes in women's pay and education. A small proportion of candidates did not develop the points they made. For example, some candidates wrote that more women may join the labour force because of a fall in the birth rate without analysing why.

(d) There were some strong answers which explored both the macro and micro effects of an increase in saving. These examined how an increase in saving could affect total demand and economic activity as well as how it could promote security for households.

Some candidates, however, turned the question into one on the effects of a higher interest rate. These concentrated on a how a higher interest rate could raise the exchange rate and how an appreciation in the exchange rate could affect international trade.

An example of a strong L3 answer:

Saving is disposable income which is not spent. Saving is done in contractual (mutual funds) and non-contractual (bank account) forms. The government may want to reduce demand for goods and services to reduce demand-pull inflation. If people save more, they spend less. If spending rises less, price increases may be reduced.

Also, a government may want people to get more self-sufficient and prepare for the future. Saving allows people to prepare for a 'rainy day' and decreases the likelihood of them plunging into poverty into the future. The government may encourage saving for retirement, hence it may need to spend less on pensions in the future. It may also reduce debt as people can use their savings to pay for, e.g. education rather than borrowing.

On the other hand, if the government wants to increase total demand to improve economic growth, it may encourage people to spend more and firms to invest so that more output is produced. More saving can cause deflation and unemployment. It can also reduce the tax revenue earned on the purchase of goods and services.

In conclusion, a government may encourage an increase in saving when it wants to accomplish other macroeconomic aims other than economic growth and low unemployment. It depends on the situation of the economy and future prospects. The opportunity cost will have to be considered.

Question 5

This was the most popular question. **Parts (a)** and **(b)** were generally well-answered. There was more variation in the quality of the answers to **(c)** and **(d)**.

(a) It was pleasing to see how high a proportion of candidates were able to provide an accurate definition of the economic problem. A number of candidates, however, identified the key resources allocation decisions that arise from the economic problem rather than the economic problem itself.

(b) The majority of candidates were able to explain how some land is occupationally mobile but geographically immobile. Some candidates distinguished between the geographical mobility of different forms of land.

(c) The strong answers here recognised that an increase in supply means more is supplied at each and every price. These answers analysed a number of reasons why firms may supply more. The most common reasons were a good harvest of cocoa, subsidies and advances in technology. Some candidates, however, drew a diagram showing the demand curve shifting to the right and then analysed reasons why demand, rather than supply, of chocolate may increase.

(d) There were some strong answers which explored the question in depth. A number of these examined how consumers may experience changes in prices resulting from changes in costs arising from economies of scale and diseconomies of scale. They also explored how quality may be affected by the amount spent on research and development and how quantity, price and choice can be influenced by how a monopoly may use its monopoly power. A number contrasted how consumers may be affected by a state monopoly and a private-sector monopoly. However, some candidates stated points without explaining them. For example, one candidate wrote: *Having a monopoly would allow them to produce products at good quality as they have no competitors.* This candidate did not make clear why lack of competitors would allow a monopoly to produce good quality products. An example of a strong L3 answer:

A monopoly is able to supply the whole market and restrict supply to control the market price of the good or service. Due to large scale of production, their costs are spread out over a large output, reducing their average cost. They can therefore take advantage of economies of scale, such as technical economies and can offer low prices to consumers. They can also earn high profits to reinvest in the business, which enables them to invest in new technology and capital to raise productivity and offer consumers low prices and new, better quality goods. They may also face competition from overseas firms, so they have to keep their costs of production low and supply better quality products to consumers, allowing them to benefit from lower prices.

However, monopolies have the power to restrict supply to a market and raise prices to earn excessive profits which may not be reinvested into the business. If the product they supply is inelastic in demand or a basic necessity like electricity, then consumers have no choice but to continue buying the product. Many people on low incomes may be unable to continue affording it, and cannot switch to other substitutes because there aren't any. Monopolies, therefore, restrict consumer choice. To add, since monopolies may not face competition from other firms, they have no incentive or reason to reduce prices or cut their costs of production. They may not try to use their resources efficiently or improve the quality of their products because, either way, consumers would have to buy it. This could cause them to become inefficient, and consumers would have to put up with lower quality, expensive products.