Cambridge Assessment International Education

Cambridge International AS & A Level

ECONOMICS **9708/41**

Paper 4 Data Response and Essays **October/November 2022**

MARK SCHEME

Maximum Mark: 70

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

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Social Science-Specific Marking Principles (for point-based marking)

1 Components using point-based marking:

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

a DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)

b DO credit alternative answers/examples which are not written in the mark scheme if they are correct

c DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons …).

d DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)

e DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities

f DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).

g DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Calculation questions:

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

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4 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

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Question	Answer	Marks
1(a)	**Use the information to indicate how Romania's economy performed in 2017 compared with the European Union as a whole.** Faster growth rate: GDP grew at more than twice the rate of the EU as a whole according to diagram 1. (1) Lower unemployment: 5.9% compared with 8.6% average for the EU, (1) but poor infrastructure, low ranking (1) Double NMW-increasing consumer spending and boosting the economy (1m)	**3**
1(b)	**Use the information to explain the reasons for Romania's rapid economic growth.** Increased earnings from high-tech sector; low labour costs an attraction for foreign companies (2) Multiplier effect due to increase in foreign investment (1) Tax concessions – reduction in VAT from 24% to 19% has stimulated private consumption(1)	**4**
1(c)	**Describe the changes in Romanian's workforce mentioned and consider whether they have been a benefit to Romania.** *In 2008, 600 000 left to seek work in higher income countries in the EU. Trend continues to deplete labour force creating shortages in Romania as the economy expands. Total population still lower today than 2008 as migrants fail to return due to lower wage levels. (2)* Benefit: Government has doubled minimum national wage to reward labour's share of increased economic growth. (1) Benefit: Cost to Romania may be offset partly by greater productivity in high tech and manufacturing. (1) Benefit: Also possible repatriation of funds from economic migrants.(1) Benefit: Lower welfare payments/greater tax revenue. (1m) Cost: Economic migrants have failed to return to overcome labour shortages. (1) Cost: Wage rates still relatively low (1)	**6**

Question	Answer	Marks
1(d)	**The information states that Romania had a budget deficit. Explain what is meant by a budget deficit and discuss whether the measures taken by the government in 2015 were likely to reduce this deficit.** Explanation of the term (2) Reduced taxes would be no help initially but extra spending may increase revenue in longer term. Depends on elasticity of demand for products. Likely to reduce deficit. (3) Minimum wage may increase spending; government doesn't have to pay for the increased wage in private industry. But they do have to pay for minimum wage in public sector. Increased income/consumer spending raises tax revenue. In the short run this would be likely to increase the deficit. In the long run the change in deficit is more uncertain. (2)	**7**

Question	Answer	Marks
2	**Explain what is meant by cost benefit analysis and consider how it might be used by a government to decide whether a new hospital should be built.** *The use of cost benefit analysis enables a government to consider all the costs and all the benefits and then make a rational decision based on maximising net benefit. Identification of all costs would be more accurate because it would attempt to consider negative externalities i.e. the negative impact on third parties. The same approach would identify positive externalities. In both cases an attempt would be made to put a monetary value on these additional costs/benefits. In many cases the provision of certain types of good will take a long time, therefore an attempt has to be made to decide the present value of benefits that might be gained from a project that will not be completed for many years. Thus although it is important to use cost benefit analysis, it is also extremely important to recognise the difficulties involved when putting this analysis into practice.* *The type of analysis outlined above would be particularly useful when considering whether to build a new hospital. Hospitals are huge capital projects; they are extremely costly and the associated benefits are only likely to be gained over a long time period. As well as private costs there are likely to be negative externalities, for example, effect on the local wildlife, increased traffic congestion around the hospital. Also there will be positive externalities, for example easier access to health care for local residents, more jobs for doctors and nurses, local multiplier effects associated with building and maintaining the hospital. When all the costs and benefits have been considered, a government has to decide whether the net benefit justifies the decision by comparing this with the opportunity cost. It should be recognised that it is very difficult to put a monetary value on externalities and to estimate the future benefits in real terms i.e. allowing for inflation.* **L4 (18–25 marks)** For a reasoned and clear discussion which analyses and explains the key characteristics of cost benefit analysis. This analysis should then be applied to explain government decision making, in this case whether to build a new hospital. Evaluative comment should refer to at least two problems associated with using this type of decision making. **L3 (14–17 marks)** For a competent analysis which clearly explains how cost benefit can be used to aid a government when deciding whether to build a new hospital. At least one evaluative comment should be provided which illustrates a difficulty associated with the use of such analysis. **L2 (10–13 marks)** For a descriptive explanation of cost benefit analysis but there will be little attempt to link this analysis to consider the government's decision whether to build a new hospital. No specific problems associated with the use of this analysis will be identified. **L1 (1–9 marks)** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**25**

Question	Answer	Marks
3(a)	**Monopoly firms will always aim to maximise profits and limit pricing is the only way to ensure that these profits are maintained in the long run.** **Discuss the extent to which you agree with this statement.** *Monopoly producers might control all the market supply or sometimes the State might provide a legal definition of a monopoly, for example, a firm which controls at least 25% of the market share. Profit maximisation is generally considered to be one of the key aims of a monopoly firm. This would be achieved by producing a level of output where marginal costs (MC) = marginal revenue (MR). Limit pricing is a policy introduced to lower Monopoly prices to deter the entrance of new competitors into the market. Monopolies can do this because they can keep their average total costs lower than their competitors due to dynamic efficiency and economies of scale. In the short run however this means monopolies will not operate where MC = MR and therefore will not be able to maximise profits. Limit pricing recognises this but the main aim is to maintain/increase market share in the long run by preventing the entry of new firms. Once this has been achieved maximum profits can be attained. So it is possible to partially support the statement in the question.* *Limit pricing will not always support the view of monopoly profit maximisation. It will only do so in the long run. It should also be recognised that some monopolies will not necessarily wish to ensure maximum profits are maintained even in the long run. The Principal Agent theory suggests monopolies might prefer to aim for other long run goals such as, sales maximisation, revenue maximisation or growth of market share. In this case the statement in question would not always apply.* **L4 (9–12 marks)** For a clear, explanation of monopoly profit maximisation pricing and an analysis of why limit pricing could be used and the extent to which its use would support the statement in question. Evaluative comment should also be provided to question how far the statement in question can be supported. **L3 (7–8 marks)** For a clear analysis of how a profit maximising monopolist would choose its output and how limit pricing works and the extent to which its use supports the statement in question. No evaluative comment will be provided to question the extent to which the statement in question is correct. **L2 (5–6 marks)** For a more descriptive explanation that indicates knowledge of the profit maximising pricing strategy of a monopoly and also how limit pricing might work. However, the distinction between the short run and long run impact of limit pricing will not discussed and no analysis further analysis of the statement in question will be provided. **L1 (1–4 marks)** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**12**

Question	Answer	Marks
3(b)	**Explain what economists mean by collusion and consider the view that collusion will occur only in a certain type of market structure.** *Collusion takes place when firms find that it is in their interest to co-operate with their rivals to maximise profits. Usually this will mean that firms agree together to fix output or prices or both output and price. This is known as forming a cartel. It is also known as formal collusion and is usually illegal. Sometimes an informal agreement takes place (tacit collusion). In this a dominant firm will set the price/output and other firms will then do the same. It is possible to identify specific factors which would favour collusion. These might include firms are likely to produce similar products using similar production methods; firms will be large, often with a dominant firm; there are significant barriers to entry; the market they operate in is usually stable; governments do not interfere.* *Not all market structures are likely to fulfil these conditions. Firms operating in perfectly competitive markets are price takers and there are no barriers to entry. Firms operating in monopolistic competition are very small, they sell differentiated products and there are no barriers to entry. Monopoly firms, are large but by definition, do not face competition because they control all the market, so collusion would not be relevant. Oligopoly markets consist of a few large firms, which often produce similar types of goods and use barriers to entry. These factors would produce the ideal conditions to promote collusive behaviour. Therefore it is reasonable to agree with the view that collusion will only take place in an Oligopoly market.* *It should be noted that although collusion can take place it does not automatically ensure that it will. Also, Oligopoly firms will still compete with each other through alternative means such as advertising and/or product differentiation. It should also be recognised that many cartel agreements break down because of cheating or one or more firms not fully sticking to the agreed rules.* **L4 (9–13 marks)** For a clear explanation what is meant by collusion. The key characteristics of a market which are necessary to enable firms to collude successfully should be identified. Each of the market structures should be discussed in relation to the possibility of collusion taking place. A conclusion which addresses the specific question should then be provided. **L3 (7–8 marks)** For an accurate explanation of collusion and a more limited explanation with regard to the conditions necessary for it to take place. At least two types of market structures should be discussed in relation to the specific question and a brief conclusion should be provided. **L2 (5–6 marks)** For a briefer descriptive explanation of collusion and a reference to at least one condition necessary for it to take place. Reference to one type of market structure should be made but no conclusion will be provided in relation to the specific question. **L1 (1–4 marks)** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**13**

Question	Answer	Marks
4(a)	**Explain what is meant by the marginal revenue product theory and consider the relationship between this theory and a trades union's ability to gain higher wages for its members.** *Marginal revenue product theory is a theory which explains what determines the demand for labour. The value of an individual worker's marginal revenue product is made up of two parts. The marginal physical product of a worker multiplied by the marginal revenue gained by the firm when the product is sold will determine the worker's marginal revenue product. It is assumed that each firm in all labour markets are profit maximisers and will therefore employ workers up to the point where the worker's marginal product is equal to the marginal cost of employing this extra unit of labour. In this case, either an increase in worker productivity (increase in worker MPP) or an increase in the marginal revenue gained (MR) will increase MRP. This will shift the demand curve (MRP curve) to the right and indicate an increase in the demand for labour.* *The extent to which this increase in demand will enable Trades Unions to negotiate higher wages will be determined to some extent by the nature of the labour market in which they operate. In a perfectly competitive labour market analysis will focus on a situation where wage rates are determined by the supply of and the demand for labour. In this case trade unions can raise the demand for labour by increasing training and ultimately MRP.* *However wages will only rise if the MRP of all labour in all firms increase. If the increase is confined to one firm, wages will not rise. In a monopsony labour market unions might be able to achieve higher wages in a bilateral bargaining situation where unions negotiate with a monopsony buyer. The extent to which higher wages can be achieved in this situation without job losses will depend upon the relative strength of the union in relation to the employer*. **L4 (9–12 marks)** For a sound discussion that provides a clear explanation of the marginal revenue product theory and analyses the potential impact of a Trades Union's ability to change MRP in both a perfectly competitive labour market and an imperfect labour market. A conclusion should summarize the differences between the two markets. **L3 (7–8 marks)** For a competent comment with analysis that recognises the determinants of MRP, and how this relates to the demand for labour. Further analysis will establish the links between MRP, Trades Unions and higher wage rates. However the analysis will only be confined to one type of labour market. **L2 (5–6 marks)** For an attempt describes what is meant by the marginal revenue product and links this to the demand for labour. A limited attempt will be made to show how Trades Unions can bargain for higher wages but the analysis will not be fully developed. **L1 (1–4 marks)** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**12**

Question	Answer	Marks
4(b)	**Distinguish between economic rent and transfer earnings and with the help of diagrams discuss why famous sports people receive much higher pay than street cleaners.** *Transfer earning is the minimum payment to a worker to remain in their job. Economic rent is that payment beyond that necessary to keep a factor of production in its current use. A diagram can be used to identify this difference in the labour market. Links between the elasticity of supply of labour and transfer earnings and economic rent can be further established with the help of diagrams. Famous sports people have special talents which mean that the supply of such players is limited and very inelastic. Provided there is a strong demand to watch tennis, then it is likely that famous sports people will receive very high pay. Moreover, because their particular skill is not transferable, most of a sports person's high pay will in the form of economic rent.* *The supply of street cleaners is likely to be highly elastic because of the low skill levels required and the short training period necessary. Therefore, even if demand for street cleaners rose significantly, it is still unlikely that they would be able to gain a high pay rise. Also the combination of a high and elastic supply should lead to most of their pay consisting of transfer payments. It is possible for pay levels to fall for famous sports people if they fail to provide sufficient entertainment and the demand to watch an individual player falls or if there is a general decline in the demand to watch professional sports. It is also possible for pay levels of street cleaners to rise if they form part of a Trades Union or benefit from changes in government policy regarding the pay of workers in the public sector.* **L4 (9–13 marks)** For a response which uses diagrams to distinguish clearly between transfer earnings and economic rent. The links between these two concepts, the elasticity of supply of labour and the two types of labour will be then analysed. Some evaluative comment should be provided to discuss other factors than the elasticity of supply might influence the relative pay of each type of labour. A conclusion should be provided. **L3 (7–8 marks)** For competent analysis which links transfer earnings and economic rent to the elasticity of supply of labour. This analysis will then be extended to analyse why famous sports people are paid much higher than street cleaners. Alternative explanations relating to this pay difference will not be discussed and no conclusion will be provided. **L2 (5–6 marks)** For a brief and description of economic rent and transfer earnings. The links between elasticity of supply and different pay for tennis players and street cleaners will not be fully established. Supporting diagrams will not be clearly labelled and will not be used effectively to address the specific question. **L1 (1–4 marks)** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**13**

Question	Answer	Marks
5(a)	**Explain, with the help of a diagram, explain the Keynesian theory of the liquidity trap and consider the importance of the liquidity trap to government policy makers when an economy is in a recession.** *The Keynesian theory of the liquidity trap relies heavily upon the Keynesian theory of interest rate determination. This theory assumes that the interest rate is determined by the supply of and demand for money. It is also assumed that the demand for money becomes perfectly elastic when the rate of interest on securities becomes very low and that the supply of money is perfectly inelastic because it is determined solely by the Central Bank. This can be illustrated by a supply and demand diagram. When an economy is in a recession, GDP will be falling, incomes will be low and unemployment will be relatively high.* *Monetary policy such as lowering interest rates might be used to stimulate aggregate demand and move the economy out of a recession. However, according to Keynesian theory, when interest rates reach a very low level, an increase in the money supply to stimulate the economy will have no effect because this policy will have no further effect on interest rates. This form of monetary will no longer work. A diagram can support this conclusion by clearly identifying the liquidity trap. If policy makers recognise the existence of a liquidity trap, they might then choose to rely on alternative policies to move an economy out of a recession. Alternative measures might include: a devaluation of the domestic currency if is based on a fixed exchange rate; the use of expansionary fiscal policies such as increased government spending and/or tax reduction; or various supply side measures to increase productivity.* **L4 (9–12 marks)** For a sound analysis of the Keynesian theory of interest rate determination, supported by accurate, clearly labelled diagrams. A recession should be explained and the link between a recession and policies used to move out of a recession should be considered. A least one alternative policy approach should be explained and discussed and a conclusion provided. **L3 (7–8 marks)** For an analysis of the Keynesian theory of interest determination and an identification of the liquidity trap. Links between policies to move out of a recession and the liquidity trap will be established. No alternative policies which might be used because of the liquidity trap will be discussed and no conclusion will be provided. **L2 (5–6 marks)** For a response which is descriptive rather than analytical. Answers will explain Keynesian theory of interest rate determination but will not use this to analyse the link between the liquidity trap and the effectiveness of the use of monetary policy to move an economy out of a recession. **L1 (1–4 marks)** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**12**

Question	Answer	Marks
5(b)	**The most important aim of a central bank is to control the money supply while the most important aim of a commercial (retail) bank is to maximise profits.** **Discuss the extent to which these two aims can be achieved together.** *Central banks have a number of important roles. One of the most important roles is the use of monetary policy to try and ensure financial stability and help a government to meet its target rate of inflation. Monetary policy would include the use of interest rate changes, exchange rate changes and controlling the money supply. The need to control the money supply is strongly linked to the relationship between the amount of money in an economy can have an important impact on the rate of inflation. Different policy instruments are available to a central bank to enable control of the money supply, these might include changes in interest rates and/or the use of open market operations.* *Commercial banks are responsible for creating the largest proportion of the money supply, because banks grant loans which produce new bank deposits which automatically add to the money supply. Therefore, if a central bank increases interest rates, less borrowing from the commercial banks will take place, when bank lending falls bank deposits will fall. When this takes place, the central bank will have achieved its aim of decreasing the money supply. However, commercial bank lending is one of the main sources of commercial bank profits. On this basis one could argue that central bank policy is likely to lead to a fall in commercial bank profits. If this is true then it would seem that the two aims referred to in the statement in question are not compatible. But it could also be argued that the demand for bank loans might be interest inelastic. In this case higher interest rates are likely to lead to an increase in commercial bank profits and therefore the two aims might be compatible.* **L4 (9–13 marks)** For a response which explains why central banks would want to control the money supply and how commercial banks might maximise profits. Analysis of the impact of changes in the rate of interest on the money supply and also on commercial banks' profits should be provided. A discussion of the extent to which the two aims are compatible should then follow, supported by a conclusion. **L3 (7–8 marks)** For an explanation of both aims and the mechanisms through which each aim might be achieve. Accurate developed analysis based on both aims stated in the question will be provided but there will be a very limited attempt to establish the extent to which both aims might be compatible. A conclusion will not be provided. **L2 (5–6 marks)** For a mainly descriptive comment which demonstrates understanding of why control of the money supply is an important aim of a central bank and also explains what the main influence on commercial bank profitability is. Analysis of how these two aims might be achieved will not be provided. **L1 (1–4 marks)** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**13**

Question	Answer	Marks
6	**Explain what economists mean by an increase in real GDP per capita and discuss the extent to which an increase in real GDP per capita will have a positive impact on economic development.** *GDP is measured by the monetary value of all the goods and services produced in an economy in a particular time period, usually one year. To ensure that an accurate measure of the real output is attained with we have to take account of the price element of the change in value of goods. By taking inflation into account we can calculate the real value of GDP. It is also helpful to calculate the relationship between this increase in real value of GDP and any change in population. Economists will divide the real GDP by the total population to calculate the amount of GDP that is available per person. This would now allow economists to calculate real GDP per capita. An increase in real GDP per capita is consistent with the achievement of economic growth. This potentially allows the population access to more goods and services and this is often associated with an increase in living standards.* *However, economic development considers a much wider range of variables than economic growth and many of these variables are more difficult to measure accurately. Economic development attempts to measure the improvement in the overall quality of life enjoyed by the population. Key measures of development include access to education; access to health care; life expectancy; lower levels of poverty. An increase in real GDP per capita might have a positive impact on economic development because more resources will be available to provide better education, better access to health care and a subsequent increase in life expectancy. However, an increase in GDP per capita might a have a negative impact on economic development for reasons which might include negative effects on the environment; loss of leisure time; further inequalities in the distribution of wealth; unsustainable growth due to overuse of scare resources.* **L4 (18–25 marks)** For a clear explanation of real GDP per capita. Economic development will be clearly defined and at least two positive links between an increase in real GDP per capita and economic development established and analysed. At least two potential negative impacts on development will be identified and discussed and a conclusion will be provided. **L3 (14–17 marks)** For a limited explanation of real GDP per capita and analysis of at least one positive link between an increase in real GDP per capita and development plus a recognition of one potential negative impact on development. There will be no attempt to compare relative impacts to determine the overall extent of growth on economic development. **L2 (10–13 marks)** For a competent comment with the emphasis on describing real GDP per capita and what is meant by economic development. A limited attempt to identify links between growth and development will be made but responses will lack sufficient detail to address the specific question. **L1 (1–9 marks)** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**25**

Question	Answer	Marks
7	**A government's decision to increase its budget deficit as a proportion of the economy's GDP will depend significantly upon whether the economy's output gap is positive or negative.** **With the help of a diagram explain and evaluate this statement.** *Answers should explain that a budget deficit will occur when government total expenditure is greater than its total income. It should also be recognised that a decision to increase a budget deficit as a proportion of a country's GDP, is likely to inject additional expenditure into an economy. On this basis this policy would be expansionary, in that it has been introduced to increase expenditure, income, output and employment.* *An output gap will be positive can be explained in different ways. One approach states that a positive output gap will occur when actual output is above the level of the trend output. Alternative approaches might use production possibility curves or aggregate demand and aggregate supply analysis. Each of these approaches can be explained using a diagram. Each approach should recognise that a positive output gap is associated with an economy that is overheating or undergoing inflationary pressure. A negative output gap can be explained using the same three approaches outlined above. In each of these cases an economy will not be using all its resources and is likely to be in recession. Based on the above it is clear that a government is highly unlikely to increase its budget deficit if the economy is experiencing a positive output gap. Diagrams could be used to show that such a policy in such circumstances is highly likely to lead to high levels of inflation.* *However, an increase in a budget deficit is likely to stimulate the output and employment when the output gap is negative. A diagram could be used to show the potential impact of such a policy. Evaluative comment might note that the extent of positive effect of an increase budget deficit will depend upon the cause of the output gap. It will be less effective if the gap is caused by structural unemployment rather than cyclical unemployment. Also, the use of large budget deficits to close a negative income gap might create additional problems such as high interest rates (crowding out), high inflation in the long run, or negative effects on the balance of payments.* **L4 (18–25 marks)** For an answer which explains what is meant by a budget deficit and how an increase in this deficit might impact on key macroeconomic variables. A clear explanation of positive and negative output gaps with supporting diagrams should be provided. The impact of a deficit with respect to each gap should be analysed. The potential beneficial effects of an increase in the deficit on a negative output gap should then be evaluated.	**25**

Question	Answer	Marks
7	**L3 (14–17 marks)** For clear analysis which uses a diagram to explain each type of output gap. The focus will show how an increase in a budget deficit as a proportion of GDP might affect a negative output gap. There will be no attempt to evaluate the extent to which the negative output gap might be closed. **L2 (10–13 marks)** For a less well-developed comment which describes the meaning of a budget deficit and both types of output gap. Diagrams provided might not be clearly labelled and the link between a negative output gap and a budget deficit will not be analysed in detail. **L1 (1–9 marks)** For an answer that shows some knowledge but does not indicate that the question has been fully grasped or where the answer is mostly irrelevant.	

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