Cambridge Assessment International Education

Cambridge International AS & A Level

ECONOMICS **9708/41**

Paper 4 Data Response and Essays **October/November 2021**

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.

Question	Answer	Marks
1(a)	**Comment on the relative significance of the growth in the number of all-electric cars for 2010–2016 compared with annual sales of all cars in the world.** • over the period both show an increase in total growth (1) • but scale of all-electric is 2 million which is only a small fraction (2.9 %) of total car sales in 2016 (69 million) (1)	**2**
1(b)	**Use the information to discuss what might happen to the long-run average cost of producing batteries for all-electric cars.** • Falling LRAC depends on economies of scale. LRAC comprises AFC and AVC [2]. • Output of electric cars is expected to rise significantly in the long run. As output rises, AFC may well fall because of economies of scale in production [1] • However, unless battery technology changes, AVC are likely to rise eventually. Batteries are a large component of the cost, and their manufacture depends on finite supplies of component metals. As demand increases, prices will rise as mineral reserves become depleted. This could counteract possible reductions in AFC. [2]	**5**
1(c)	**Use the information to assess whether it is likely that the switch to all-electric cars will substantially reduce world demand for oil.** Evidence that there will be a substantial reduction in demand for oil • Forecasters predict ⅓ cars will be electric by 2040 it must reduce demand for oil as a fuel. [1] Evidence against a large reduction in demand for oil: • In 2016 only 20 % of world demand for oil was for use as a fuel for cars. Demand for the other 80 % of uses do not have easy non-oil alternatives. Demand is, thus, relatively price inelastic. [2] • Demand for oil in emerging economies is also expected to continue to rise. They also do not have the resources to change the infrastructure to install charging points. Their demand for oil is also relatively price inelastic. [2] On balance the evidence suggest that oil demand will not be reduced substantially. [1]	**6**

Question	Answer	Marks
1(d)	**Assess the effects on the social costs of transport of replacing diesel and petrol engine cars with all-electric cars.** • Some understanding required of private costs plus external costs = social costs: reward a definition and/or diagram [2] • Petrol and diesel engines emissions linked to negative externalities due to causing pollution of the atmosphere and health problems especially for those living in urban areas:MSC > MPC [1] • Electric car use will lower external costs through eliminating carbon pollution [1] but there may still be as many cars so problems of traffic congestion, especially in urban areas, will continue to get worse as demand for cars increases. [1] • Other transport – ships, planes, heavy goods vehicles – will still depend on oil and will probably increase as demand increases. External costs are likely to rise. [1] • Therefore, external costs will not be eliminated entirely. Some negative external costs will be associated also with increased mining of metal ores.[1] • However, the beneficial consumption externality of electric cars makes MSB > MPB so they will be promoted as a kind of merit good. Overall balance is uncertain. [1]	**7**

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Question	Answer	Marks
2	**'The cause and extent of market failure depends entirely upon the type of market structure under consideration.'** **Discuss this statement.** *Market failure can be divided into two main areas. One area would link market failure to the type of good in consideration. This would include: merit goods, demerit goods and public goods. Alternatively market failure can also be linked to different types of market structure which would include: monopolistic competition, oligopoly and monopoly. All cases of market failure will be closely related to allocative and productive inefficiency.* *Candidates should begin by attempting to discuss the extent to which market failure depends **entirely** upon the type of market structure. Evidence should be provided which shows that some market structures, for example Monopoly can clearly be associated with market failure, in that equilibrium output in this type of market frequently produces both allocative inefficiency and X inefficiency. Similar conclusions might also be linked to other types of imperfect markets. However, it should also be recognised that positive and negative externalities associated respectively with merit and demerit good will also produce allocatively inefficient outcomes.* *Public goods might also be discussed in that their unique characteristics will lead to non-provision in a free market due to the free rider problem. Based on the above, a conclusion should be provided which questions the validity of the statement in its entirety.* **L4 (18–25 marks):** For a reasoned and clear discussion that identifies at least two types of market failure and discusses this using at least two types of market structure and two types of good or service. Analysis of the links will be combined with some evaluative comment relating to whether the cause of market failure depends **entirely** upon the type of market structure under consideration. A reasoned conclusion should be provided. Must mention efficiency to access L4 21 maximum if no conclusion. **L3 (14–17 marks):** For a developed comment together with limited analysis of different market structures and different types of product. There should be some discussion but the evaluation will not focus on whether market failure depends entirely upon the type of market structure under consideration. **L2 (10–13 marks):** For a brief explanation but weak or ill-explained links. The explanation will be undeveloped with some attempt at analysis but the emphasis will be on descriptive comment and the key element of the question will not be addressed. **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)	**Explain the factors which determine the elasticity of demand for labour and discuss the importance of the elasticity of demand for labour in relation to the effectiveness of a government's minimum wage policy.** *Responses should identify and explain some key factors which might determine the elasticity of demand for labour. Candidates might refer to: the proportion of labour costs in relation to a firm's total cost; the ease with which labour can be substituted by capital; the elasticity of the demand for the product produced; the time period under consideration.* *An attempt should then be made to link these factors in relation to a government's minimum wage policy. For example, labour operating in a monopolistically competitive market is likely to be producing a product which has an elastic demand. This means that if the imposition of a minimum wage leads to higher prices, there will be a significant decrease in the demand for the product and subsequently, a significant rise in unemployment. This suggests that a government minimum wage policy will have a substantially negative effect on the labour market.* *A similar approach might be adopted in relation to other factors referred to above. A conclusion should comment that the effectiveness of policy will depend upon the factor under consideration but also other factors should be taken into account, for example, the elasticity of supply of labour.* **L4 (9–12 marks):** For a clear explanation and analysis of at least two factors which might determine the elasticity of the demand for labour. The link between each factor and the subsequent effectiveness of a government's minimum wage policy should be clearly established and the effectiveness of the policy in each case should be discussed. Effectiveness would be primarily determined by the trade-off between the benefit of higher wages and the loss of jobs. A conclusion based on the preceding discussion should be made. **L3 (7–8 marks):** For a fair but undeveloped analysis perhaps concentrating on two factors but not fully linking the factors to the effectiveness of a government's minimum wage policy. Evaluative comment which directly addresses the specific question will not be provided. **L2 (5–6 marks):** For a more descriptive explanation that explains some key determinants of the elasticity of demand for labour but does not analyse the links between these factors and a government's minimum wage policy and does not attempt to discuss the effectiveness of this policy. **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)	**'Monopsonist employers cause labour market failure while trade unions can solve this labour market failure.'** **To what extent do you agree that this view is accurate?** *There are two parts to this question. Each part should be addressed equally and a conclusion should then be provided which addresses the specific question.* *Market failure should be explained in relation to the monopsonist. This should include references to: labour exploitation in that the wage paid is significantly lower than the value added by labour; the level of employment is likely to be low; the wage level is likely to be low. The role of trade unions in the labour market should then be considered. Candidates might discuss how a trade union can help to correct market failure caused by monopsonist employers, through collective bargaining. Good responses will also recognise that trade unions can also cause market failure. For example by negotiating a minimum wage above the competitive market equilibrium wage rate or by restricting labour supply through the use of closed shop agreements.* *Based on the preceding analysis an attempt to assess the validity of the view in the question should then be made.* **L4 (9–13 marks):** For analysis which addresses both parts of the question. A clear attempt to evaluate the accuracy of the view under consideration should be demonstrated by comparing the type of market failure associated with monopsony with that of a trade union and recognising that in some circumstances, a trade union might help to correct market failure, while in other circumstances this might not be the case. This should be reflected by a conclusion which attempts to assess the validity of the view in question. **L3 (7–8 marks):** For an accurate reference to the question and clear analysis explaining the relationship between monopsony and market failure and also trade unions and market failure but with a more limited evaluation or limited attempt to discuss the validity of the view under consideration. **L2 (5–6 marks):** For a briefer analysis that examines two causes of labour market failure but does not use these differences to discuss the validity of the view under consideration. **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 economists mean by the marginal propensity to consume and consider the importance of this concept in relation to government macroeconomic policy.** *An individual's marginal propensity to consume (MPC) is the proportion of any additional income received by the individual which is spent on consumption. Basic Keynesian economic theory assumes that the marginal propensity to consume remains constant regardless of the level of an individual's level of income. It is more realistic to assume that the marginal propensity to consume will fall as individual income increases.* *Government macroeconomic policy focuses on key goals, including: high employment; high growth; low/stable inflation; stable balance of payments/exchange rate; re-distributing income. It is possible to link the concept of marginal propensity to consume to each of these key goals. For example, a government may increase expenditure to increase aggregate demand to increase output and employment. The ultimate impact of this additional expenditure will be determined by the multiplier effect which in turn, will be determined by the value of the marginal propensity to consume.* *Also, due to this multiplier effect, some of the subsequent further increase in income might be spent on purchasing imports and this is likely to have a negative impact on the balance of payments.* **L4 (9–12 marks):** For a response which clearly explains the concept of the marginal propensity to consume. An attempt should be made to analyse the importance of the MPC in relation to the use of government policy to achieve at least three macroeconomic goals. Also, also some attempt to evaluate whether the importance of the MPC might be different, depending upon the type of macroeconomic policy under consideration. An explanation of the multiplier should be provided. **L3 (7–8 marks):** For a competent analysis of the importance of the MPC in relation to two government policies relating to two macroeconomic goals but no attempt made to evaluate whether the importance of the concept might be different depending upon the macroeconomic policy under consideration. **L2 (5–6 marks):** For a descriptive comment on the meaning of marginal propensity to consume but only a very brief attempt to analyse the links between macroeconomic goals, macroeconomic policy and MPC. **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)	**Discuss what determines the level of savings in an economy and assess the impact of an increase in the level of savings upon economic growth and employment.** *The level of savings in an economy will be determined by a number of factors, including income levels; rate of interest on savings; expectations of changes in inflation; expectations relating to employment and economic growth; attitudes to thrift; availability of government savings schemes. Some attempt should be made to discuss relative importance of an increase in the level of savings and growth and employment.* *The impact of an increase upon key macroeconomic indicators such as growth and employment, should be discussed. Different models might be used to assess the impact of an increase in savings. For example, a circular flow model using withdrawals and injections could be used in conjunction with appropriate diagrams to illustrate the potential impact of an increase in savings on the level of employment.* *Discussion relating to the extent of the impact should be provided and supported by a relevant conclusion.* **L4 (9–13 marks):** For a discussion that analyses at least two determinants of the level of savings in an economy plus evaluative comment which discusses the relative importance of these factors. Further analysis should be provided to link these determinants to growth and employment. An assessment of the strength of the impact in both cases should be made and supported by a conclusion. **L3 (7–8 marks):** For a less detailed analysis of one determinant with limited development that recognises and analyses the impact of this determinant on either growth or employment. However, there will be only a limited attempt to assess the impact of this change on the chosen macroeconomic indicator. **L2 (5–6 marks):** For a limited but descriptive explanation of some factors which might influence savings. Basic comment will be made linking savings and growth/employment but no analytical/discursive comment will 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
5(a)	**Explain the quantity theory of money and discuss why the theory might not work in practice.** *Answers should clearly explain the Quantity Theory of Money. The key elements of the equation i.e. MV = PT should be provided, and each variable should be explained. The monetarist explanation of the use of this equation to explain the cause of inflation should be discussed and the key assumptions necessary to support this theory should be identified. It is important to recognise the monetarist approach which assumes that V and T are constant/stable. Based on this formula and assumptions, the theory predicts a direct relation between changes in the money supply and changes in inflation.* *However, the predictions of the theory are not always borne out in practice. In practice it could be argued that: it is very difficult to identify a precise measure of the money supply; the velocity of circulation is not always constant; T is the full employment level of output which also not always the case; sometimes it is changes in the demand for money which cause changes in the money supply, this undermines the basic premise of the theory.* *A conclusion should be provided based on the preceding argument.* **L4 (9–12 marks):** For a sound explanation of the Quantity Theory of Money which identifies the relevant equation and explains the component parts. Two key assumptions relating to V and T in the equation should be recognised. Some attempt should be made to evaluate the relative importance of these assumptions when considering the extent to which the theory might work in practice. A conclusion should summarize the preceding discussion. **L3 (7–8 marks):** For a competent explanation which clearly explains the key elements of the Quantity Theory of Money and analyses the links between the equation and the monetarist explanation of the cause of inflation. A limited attempt should be made to discuss how well this theory might work in practice. **L2 (5–6 marks):** For a brief and less developed explanation and some descriptive comment relating to its importance in relation to policies used to control inflation There will be no attempt to discuss the extent to which the theory might work in practice. **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)	**To what extent do you agree with the view that the control of inflation should be the most important macroeconomic aim?** *The four key macroeconomic goals should be identified. Different approaches might be adopted to determine whether the control of inflation is the most important. One approach might examine the impact of the failure to control inflation on the other macroeconomic goals. For example, a high rate of inflation might lead to reduction in investment and ultimately a reduction in economic growth.* *At the same time high inflation will make exports more expensive this would have a negative effect on the balance of payments, the exchange rate and the level of employment. Similar analysis might be used to consider the importance of the failure to achieve each of the other goals. Then an attempt to compare their relative importance and draw a conclusion which addresses the specific question should be made.* *An alternative approach might compare the benefits of achieving each macroeconomic goal and base a conclusion on this analysis.* **L4 (9–13 marks):** For a detailed analysis of the impact of the failure to achieve each goal on the economy. Each goal will be analysed in relation to its relationship with other macroeconomic goals. Evaluation of the overall extent of the impact should be made and based on this evaluation; a conclusion should be provided which addresses the specific question. Alternative approaches such as that outlined above will be accepted. **L3 (7–8 marks):** For an analysis of the impact of the failure to achieve each of three macroeconomic goals which must include the goal of inflation; the importance of each goal will be assessed and a limited attempt to provide a conclusion which addresses the specific question should be made. **L2 (5–6 marks):** For a response which is descriptive rather than analytical. Answers might focus on why some macroeconomic goals might be important but will not attempt to use analysis to determine whether inflation might be the most important. **L1 (1–4 marks):** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**13**

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Question	Answer	Marks
6	**'In developing economies an increase in GDP determines an increase in the standard of living. Foreign direct investment (FDI) will produce an increase in GDP therefore governments in undeveloped economies should encourage FDI.'** **How far do you agree with this statement?** *The statement contains three related parts; each part should be explained and discussed; links between each part should then be examined. For example, the link between an increase in GDP and the standard of living is subject to debate. The strengths/weaknesses of this link should therefore be discussed in the light of this debate. Foreign Direct Investment (FDI) should be explained, and some analysis provided to decide the extent to which an increase in FDI might produce an increase in GDP. A range of costs/benefits associated with FDI might be considered.* *Alternative approaches by undeveloped countries to FDI, which might also lead to an increase in economic growth and living standards, might be discussed.* *Based on the above analysis and evaluative comment, a conclusion should be provided which attempts to decide how far it is possible to agree with the statement under consideration.* **L4 (18–25 marks):** For a response which addresses each of the three parts of the statement. Analytical plus evaluative comment should be provided which assesses the extent to which the claims in the statement can be justified. A conclusion which summarizes the preceding analysis should be provided. **L3 (14–17 marks):** For accurate analysis of two parts of the statement which also questions the validity of each part under consideration. A limited conclusion which does not cover all three elements of the statement might be provided. **L2 (10–13 marks):** For a descriptive comment with limited development which does not question the validity of the separate parts of the statement and does not provide a conclusion. **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)	**Explain what is meant by infrastructure and consider the view that an increase in investment in infrastructure will promote an increase in both actual and potential economic growth.** *A clear explanation of what is meant by **infrastructure** should be provided along with supporting examples. Infrastructure provides the basic facilities which enable businesses to provide goods and services efficiently. Examples might include improved road/rail links; health/education facilities; power generation. Economic growth is attained by an increase in real GDP within a specific time period. A clear distinction should be made between actual growth and potential growth, ideally supported by relevant production possibility diagrams.* *An attempt should then be made to illustrate why an increase in investment in infrastructure will initially lead to an increase in aggregate demand which might lead to an increase in the actual growth rate. Also, the relationship between an increase in investment and infrastructure and potential economic growth should be analysed.* *A conclusion should be provided that recognises that both actual and potential economic growth are likely to be affected but one will be a short run effect and its extent will depend upon the existing state of the economy while potential growth will be attained in the long run and will depend upon the nature and extent of the level of investment.* **L4 (9–12 marks):** For demonstrating a clear understanding of the meaning of infrastructure and making the clear distinction between actual and potential economic growth. Economic analysis of the impact of this type of investment on both types of growth will be provided. Evaluative comment will also be provided which distinguishes between the short run and long run impact and which also recognises the impact will depend upon the existing state of the economy. A conclusion will consider the validity of the view in question. **L3 (7–8 marks):** For an attempt to analyse the impact of this type of investment on both actual and potential growth but which does not provide any evaluative comment and which does not provide a conclusion. **L2 (5–6 marks):** For a competent comment which explains what is meant by infrastructure and which also distinguishes between actual and potential growth. However, the distinction will be based on description rather than analysis. No attempt will be made to consider the specific view. **L1 (1–4 marks):** For an answer that has some basic correct facts but includes irrelevancies and errors of theory.	**12**

Question	Answer	Marks
7(b)	**To what extent do you agree that it is not possible to achieve economic growth without simultaneously causing a balance of payments deficit?** *Answers should establish that economic growth and a stable balance of payments are key macroeconomic goals. Alternative policies required to promote economic growth should be explained and analysed. Candidates should then proceed to examine the potential impact of economic growth on the balance of payments.* *Alternative approaches which use circular income flow or Keynesian AD/AS analysis might be used. Evaluative comment will attempt to consider the extent of the impact of economic growth on the level of national income and imports. Similarly, analysis of the links between policies to promote economic growth and a balance of payments deficit will be discussed. For example, economic growth should lead to a rise in incomes which is likely to lead to a higher level of imports which, in turn, would cause/increase a balance of payments deficit.* *Evaluative comment will consider the extent of the impact of economic growth and a balance of payments deficit. A conclusion, based on the preceding analysis, will then attempt to show how far it is possible to agree with the statement under consideration.* **L4 (9–13 marks):** For an answer that examines alternative policies to achieve economic growth. For example, short run demand side and long run supply side. Responses will analyse and evaluate the impact of at least one approach on a balance of payments deficit. A conclusion will discuss the extent to which the outcome referred to in the statement is possible. **L3 (7–8 marks):** For an answer which analyses the impact of economic growth on a balance of payments deficit with some evaluative comment or a response which analyses both elements of the question but makes no attempt to discuss the view under consideration. **L2 (5–6 marks):** For an answer which explains policies which can be introduced to achieve economic growth but focuses upon describing the potential impact on a balance of payments deficit. A conclusion will not be provided. **L1 (1–4 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	**13**