A Level Economics

H460/02 Macroeconomics

MARK SCHEME

Duration: 2 hours

MAXIMUM MARK 80

PREPARATION FOR MARKING

1. Make sure that you have accessed and completed the relevant training packages for on–screen marking: *RM assessor Online Training*; *OCR Essential Guide to Marking*.

2. Make sure that you have read and understood the mark scheme and the question paper for this unit. These are posted on the RM Cambridge Assessment Support Portal http://www.rm.com/support/ca

3. Log–in to RM assessor and mark the **required number** of practice responses ("scripts") and the **required number** of standardisation responses.

YOU MUST MARK 10 PRACTICE AND 10 STANDARDISATION RESPONSES BEFORE YOU CAN BE APPROVED TO MARK LIVE SCRIPTS.

MARKING

1. Mark strictly to the mark scheme.

2. Marks awarded must relate directly to the marking criteria.

3. The schedule of dates is very important. It is essential that you meet the RM assessor 50% and 100% deadlines. If you experience problems, you must contact your Team Leader (Supervisor) without delay.

4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone, email or via the RM assessor messaging system.

5. Crossed Out, Rubric Error (Optional Questions) and Multiple Responses

Crossed Out Responses
Where a candidate has crossed out a response and provided a clear alternative then the crossed out response is not marked. Where no alternative response has been provided, examiners may give candidates the benefit of the doubt and mark the crossed out response where legible.

Rubric Error Responses – Optional Questions
Where candidates have a choice of question across a whole paper or a whole section and have provided more answers than required, then all responses are marked and the highest mark allowable within the rubric is given. Enter a mark for each question answered into RM assessor, which will select the highest mark from those awarded. *(The underlying assumption is that the candidate has penalised themselves by attempting more questions than necessary in the time allowed.)*

Multiple Choice Question Responses
When a multiple choice question has only a single, correct response and a candidate provides two responses (even if one of these responses is correct), then no mark should be awarded (as it is not possible to determine which was the first response selected by the candidate).
When a question requires candidates to select more than one option/multiple options, then local marking arrangements need to ensure consistency of approach.

Contradictory Responses
When a candidate provides contradictory responses, then no mark should be awarded, even if one of the answers is correct.

Short Answer Questions (requiring only a list by way of a response, usually worth only **one mark per response**)
Where candidates are required to provide a set number of short answer responses then only the set number of responses should be marked. The response space should be marked from left to right on each line and then line by line until the required number of responses have been considered. The remaining responses should not then be marked. Examiners will have to apply judgement as to whether a 'second response' on a line is a development of the 'first response', rather than a separate, discrete response. *(The underlying assumption is that the candidate is attempting to hedge their bets and therefore getting undue benefit rather than engaging with the question and giving the most relevant/correct responses.)*

Short Answer Questions (requiring a more developed response, worth **two or more marks**)
If the candidates are required to provide a description of, say, three items or factors and four items or factors are provided, then mark on a similar basis – that is downwards (as it is unlikely in this situation that a candidate will provide more than one response in each section of the response space.)

Longer Answer Questions (requiring a developed response)
Where candidates have provided two (or more) responses to a medium or high tariff question which only required a single (developed) response and not crossed out the first response, then only the first response should be marked. Examiners will need to apply professional judgement as to whether the second (or a subsequent) response is a 'new start' or simply a poorly expressed continuation of the first response.

6. Always check the additional pages (and additional objects if present) at the end of the response in case any answers have been continued there. If the candidate has continued an answer, there then add a tick to confirm that the work has been seen. The 'link page' check box should be used on RM assessor to link candidate responses in additional objects to the corresponding question number.

- Where additional objects are present, all pages must contain an annotation, or RM assessor will not allow you to submit the script. Where no response is given by a candidate on a whole page the 'BP' annotation **must** be applied.
- Where generic answer booklets are used, all pages must contain an annotation, or RM assessor will not allow you to submit the script. Where no response is given by a candidate on a whole page the 'BP' annotation **must** be applied.
- Where structured answer booklets are used, the 'BP' annotation **must** be applied to all pages where no response is given by a candidate.

7.   Award No Response (NR) if:
- there is nothing written in the answer space

Award Zero '0' if:
- anything is written in the answer space and is not worthy of credit (this includes text and symbols).

Team Leaders must confirm the correct use of the NR button with their markers before live marking commences and should check this when reviewing scripts.

8. The RM assessor **comments box** is used by your Team Leader to explain the marking of the practice responses. Please refer to these comments when checking your practice responses. **Do not use the comments box for any other reason.**

If you have any questions or comments for your Team Leader, use the phone, the RM assessor messaging system, or e–mail.

9. Assistant Examiners will send a brief report on the performance of candidates to their Team Leader (Supervisor) via email by the end of the marking period. The report should contain notes on particular strengths displayed as well as common errors or weaknesses. Constructive criticism of the question paper/mark scheme is also appreciated.

10. For answers marked by levels of response:
* **To determine the level** – start at the highest level and work down until you reach the level that matches the answer
* **To determine the mark within the level**, consider the following:

Descriptor	Award mark
Consistently meets the criteria for this level	At top of level
Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Meets most of the criteria with some inconsistencies	Middle of level
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
On the borderline of this level and the one below	At bottom of level

11. **Annotations**

Annotation	Meaning
BP	Blank Page – this annotation must be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.
✔	Tick
✖	Cross
CON	Confused
BOD	Benefit of doubt
KU	AO1 – Knowledge and understanding
APP	AO2 – Apply knowledge and understanding
AN	AO3 - Analyse
EVAL	AO4 - Evaluation
∧	Omission
NAQ	Not answered question
SEEN	Noted but no credit given
TV	Too vague
OFR	Own figure rule

12. **Subject–specific Marking Instructions**

INTRODUCTION
Your first task as an Examiner is to become thoroughly familiar with the material on which the examination depends. This material includes:
- the specification, especially the assessment objectives
- the question paper and its rubrics
- the mark scheme.

You should ensure that you have copies of these materials.
You should ensure also that you are familiar with the administrative procedures related to the marking process. These are set out in the OCR booklet **Instructions for Examiners**. If you are examining for the first time, please read carefully **Appendix 5 Introduction to Script Marking: Notes for New Examiners**.
Please ask for help or guidance whenever you need it. Your first point of contact is your Team Leader.
Rubric Infringement
Candidates may infringe the rubric in the following way:
- answering two questions from Section C.

If a candidate has written two answers for Section C, mark both answers and award the highest mark achieved.

USING THE MARK SCHEME

Please study this Mark Scheme carefully. The Mark Scheme is an integral part of the process that begins with the setting of the question paper and ends with the awarding of grades. Question papers and Mark Schemes are developed in association with each other so that issues of differentiation and positive achievement can be addressed from the very start.
This Mark Scheme is a working document; it is not exhaustive; it does not provide 'correct' answers. The Mark Scheme can only provide 'best guesses' about how the question will work out, and it is subject to revision after we have looked at a wide range of scripts.
The Examiners' Standardisation Meeting will ensure that the Mark Scheme covers the range of candidates' responses to the questions, and that all Examiners understand and apply the Mark Scheme in the same way. The Mark Scheme will be discussed and amended at the meeting, and administrative procedures will be confirmed. Co–ordination scripts will be issued at the meeting to exemplify aspects of candidates' responses and achievements; the co–ordination scripts then become part of this Mark Scheme.
Before the Standardisation Meeting, you should read and mark a number of scripts, in order to gain an impression of the range of responses and achievement that may be expected.
In your marking, you will encounter valid responses which are not covered by the Mark Scheme: these responses must be credited. You will encounter answers which fall outside the 'target range' of Bands for the paper which you are marking. Please mark these answers according to the marking criteria.

Please read carefully all the scripts in your allocation and make every effort to look positively for achievement throughout the ability range. Always be prepared to use the full range of marks.

Levels of response / Level descriptors	Knowledge and understanding/ Application	Analysis	Evaluation
Strong	Precision in the use of the terms in the question and applied in a focused way to the context of the question.	An explanation of causes and consequences, fully developing the links in the chain of argument.	A conclusion is drawn weighing up both sides, and reaches a supported judgement.
Good		An explanation of causes and consequences, developing most of the links in the chain of argument.	A conclusion is drawn weighing up both sides, but without reaching a supported judgement.
Reasonable	Awareness of the meaning of the terms in the question and applied to the context of the question.	An explanation of causes and consequences, which omit some key links in the chain of argument.	Some attempt to come to a conclusion, which shows some recognition of the influencing factors.
Limited	Awareness of the meaning of the terms in the question.	Simple statement(s) of cause and consequence.	An unsupported assertion.

Question			Answer	Marks	Guidance
1	(a)		**Using Fig. 1, explain which type of economic recovery is likely to be most beneficial for an economy.** The V-shaped recovery (1) this lasts a shorter time / is over quicker (1) likely to have less effect on confidence (1) less effect on unemployment / macroeconomic performance (1). The U-shaped recovery (1) more stable growth / more gradual recovery (1) more time to make adjustments/creates more certainty / gives greater confidence (1) more sustainable recovery / growth (1)	3 (AO1 x 1 AO2 x2)	1 mark for identifying the type of recovery Up to 2 marks relevant explanation
1	(b)		**Using information from the stimulus material, including Fig. 2, calculate the difference between Iceland's real GDP per head and its GNI per head in 2014.** $9,818 (2). Correct working or correct approach with error on size of GDP per head figure. (1).	2 (A02 x 2)	Correct working: GDP per head = $14.85bn/0.33m = $45,000. $45,000 - $35,182. Correct approach with error on size of GDP per head: $4,500. Allow full marks for correct figure without $ sign.
1	(c)		**Using Fig. 2, explain why Australia had a higher HDI value than the USA in 2014.** Longer life expectancy/better healthcare (1) better education provision (1).	2 (A01 x 2)	For better education provision accept better literacy.

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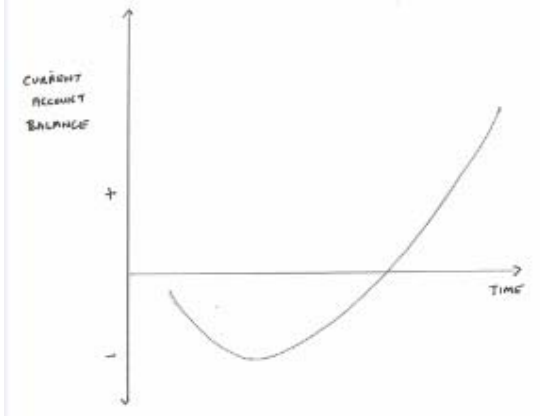
| 1 | (d) | | **Identify one piece of evidence in the stimulus material of the relationship suggested by the Laffer curve and explain why it is an example of such a relationship.**

Tax revenue rising when the tax rate is cut (1).

The Laffer curve shows tax revenue rising at first and then falling as the tax rate rises / beyond a certain tax rate a cut in tax can raise tax revenue / shows an optimum tax rate to maximise tax revenue / accurate Laffer curve diagram (1).

The Laffer curve suggests that a cut from a high tax rate may encourage people to work longer hours/be more willing to work/a cut in higher tax rates may encourage effort/may reduce tax evasion / a high tax rate discourages effort (1) and reduce tax evasion / a high rate encourages tax evasion (1). | **3**
(AO1 x 1
AO2 x\t 2) | 1 mark for identifying the evidence (first line opposite).

Then up to 2 marks for the explanation. These two marks may be gained by:
explaining/showing the Laffer curve (second paragraph opposite) and explaining one reason for the relationship between changes in tax rates and tax revenue (third paragraph)
or by:
explaining two reasons for the relationship (third paragraph).

Accept reverse explanation e.g. how a rise in tax rates may disincentivise and encourage tax evasion |
| 1 | (e) | | **Using information in the stimulus material, evaluate whether Iceland would be likely to experience a recession after 2015.**

Level 2 (5–8 marks)
Good knowledge and understanding of the factors that will influence Iceland's future economic performance.

Good – strong analysis of the future prospects of the Icelandic economy. Good analysis will be in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct | **8**

(AO1 x 1
AO2 x 1
AO3 x 3
AO4 x 3) | *Indicative content*

There are a number of reasons for thinking that Iceland would not be likely to experience a recession. Its financial sector has been reformed which should make a banking collapse less likely in the future. Its economic growth has been impressive and this may have increased confidence in the performance of the economy. This may increase investment by Icelandic firms and may encourage FDI. The country's infrastructure has improved which should reduce firm's costs of production. Loans are being paid back to the IMF and capital controls have been removed. These changes may also encourage an increase in |

and linked to the analysis. **Strong** analysis will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Reasonable – strong evaluation of the future prospects of the Icelandic economy, considering both why and why it might not experience a recession, underpinned by appropriate theoretical analysis. **Good** evaluation will weigh up the reasons why it might and the reasons why it might not but without reaching a strong judgement. **Strong** evaluation should include a supported judgement.

Level 1 (1–4 marks)
Limited – reasonable knowledge and understanding of the factors that will influence Iceland's future economic performance.

Limited – reasonable analysis of the future prospects of the Icelandic economy.

Limited analysis will have little evidence of reasoning that addresses the question asked. There is a lack of a clear structure.

Reasonable analysis will have correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.

Limited evaluation of the future prospects of the

investment.
It was, however, predicted that unemployment was going to rise. This could result in less spending, less output and reduced confidence. A further increase in the income tax rate could also reduce consumer spending and output.
The economy's growth is also heavily dependent on the tourist industry. A slowdown or recession in other European economies could reduce Iceland's output. Whether Iceland will experience a recession will be influenced by not only what is happening in Iceland but also in the global economy.
The Icelandic economy in 2015 was in a relatively good shape but it would benefit from a more diverse industrial base.

Icelandic economy, in the form of an unsupported statement or **no** evaluation. **0 marks** no response or no response worthy of credit. **Note:** although a diagram is **not** required, it may enhance the quality of the answer and should be rewarded at the appropriate level.			

Descriptor	Award mark
Consistently meets the criteria for this level	At top of level
Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
On the borderline of this level and the one below	At bottom of level

Question			Answer	Marks	Guidance
1	f	*	**Evaluate whether an increase in the aid Iceland provides to developing countries would benefit the Icelandic economy.** **Level 3 (9–12 marks)** **Good knowledge and understanding** of how an increase in the aid Iceland provides to developing countries may affect the Icelandic economy. **Good – strong** analysis of how an increase in Iceland's aid may affect net exports, employment, inflation and economic growth in Iceland. **Good analysis** will be in the form of developed links. These	12 (AO1 x 1 AO2 x 1 AO3 x 5 AO4 x 5)	*Indicative content* Increasing aid would involve an opportunity cost. The extra spending could have been used to, for instance, increase the provision of education and health care in Iceland. This might reduce Iceland's potential economic growth. The aid might also increase the price and quality competitiveness of developing countries' industries which might reduce Iceland's exports and employment in the future. Increasing aid, however, may result in a rise in Iceland's exports and economic growth. The aid could be tied to the purchase of Iceland's products. Even, if untied, it

links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. **Strong** analysis will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.

Level 2 (5–8 marks)
Good knowledge and understanding of how an increase in the aid Iceland provides to developing countries may affect the Icelandic economy.

Reasonable analysis of how an increase in Iceland's aid may affect new exports, employment, inflation and economic growth in Iceland. There is correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.

Reasonable evaluation of whether an increase in

may result in Iceland selling more exports. This is because it may help to increase incomes in developing countries which may result in them purchasing more imports.
The developing countries may have comparative advantages in different products to Iceland. If the aid causes productivity to rise and costs to fall in developing countries, this could result in the price of some of Iceland's imports falling. Such a reduction could improve living standards, reduce costs of production and inflation in Iceland.
Whether the economic performance and standard of living rises in the developing countries will be influenced by what form the aid comes in and how efficiently the aid is used.
Tied aid has been falling in recent years but the tendency is for aid recipients to form stronger trade links with their donors. There is the potential for both the recipients and for Iceland to benefit from an increase in the aid that Iceland gives.

Iceland's aid to developing countries would benefit the Icelandic economy, considering both why it might and why it might not.

There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.

Level 1 (1–4 marks)
Limited – reasonable knowledge and understanding of how an increase in the aid Iceland provides to developing countries may affect the Icelandic economy.

Limited analysis of how an increase in Iceland's aid may affect net exports, employment, inflation and economic growth in Iceland.

Limited evaluation of whether an increase in Iceland's aid to developing countries would benefit the Icelandic economy, in the form of an unsupported statement or **no** evaluation.

The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.

0 marks no response or no response worthy of credit.

Note: although a diagram is **not** required, it may enhance the quality of the answer and should be rewarded at the appropriate level.

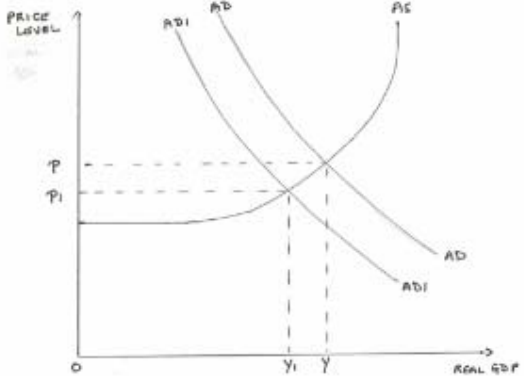| Descriptor	Award mark
Consistently meets the criteria for this level	At top of level

Meets the criteria but with some slight inconsistency		Above middle and either below top of level or at middle of level (depending on number of marks available)	
Just enough achievement on balance for this level		Above bottom and either below middle or at middle of level (depending on number of marks available)	
On the borderline of this level and the one below		At bottom of level	

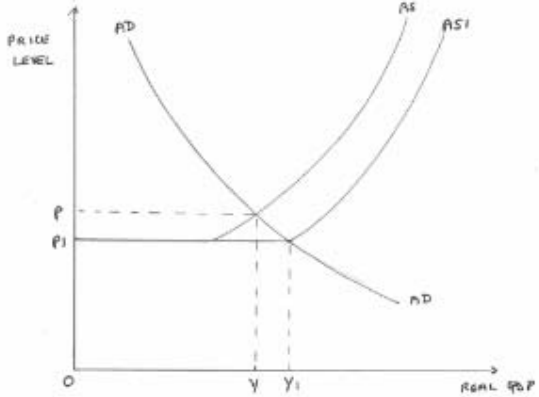| Question			Answer	Marks	Guidance
2	*		**Evaluate, with the use of an appropriate diagram(s), whether a fall in the value of a country's currency will always reduce a deficit on the current account of its balance of payments.** **Level 5 (21–25 marks)** **Good – Strong knowledge and understanding** of the effects of a fall in the value of the currency on the current account of the balance of payments. **Strong analysis** of how a fall in the value of the currency will be affected by the price elasticity of demand for exports and imports and other relevant	**25** (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	*Indicative content* A fall in the value of a country's currency will be likely to reduce export prices in terms of foreign currency and increase the price of imports in terms of the domestic currency. The J-curve effect suggests that a reduction in the value of a country's currency will initially increase a current account deficit before it reduces it as shown in the diagram below. Insert Fig.3

factors. **Strong** analysis will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Strong evaluation of whether a fall in the value of the currency will reduce a deficit on the current account of the balance of payments, weighing up both why it might and why it might not and reaching a supported judgement.

There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.

Level 4 (16–20 marks)
Good knowledge and understanding of the effects of a fall in the value of the currency on the current account of the balance of payments.

Strong analysis of how a fall in the value of the currency will be affected by the price elasticity of demand for exports and imports and other relevant factors. **Strong analysis** will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Good evaluation of whether a fall in the value of the currency will reduce a deficit on the current account of

In the short term, firms purchasing imports may not have the time to find alternative products and so demand may be price inelastic.

The Marshall-Lerner conditions states that a devaluation or depreciation in the currency will only improve a current account position if the combined price elasticity of demand for exports and imports is greater than one. Demand for products can become more elastic over time as buyers can investigate alternative products and change contracts. This means that it is possible that export revenues may increase and import expenditure may fall over time.

There is the possibility that demand for exports and imports may remain inelastic in the long run. In this case, exporters may decide to keep their price unchanged in terms of the foreign currency. When the revenue is converted back into the domestic currency, it will rise in value.

If, however, price is lowered for exports and raised for imports and demand stays inelastic, the current account position will not improve.

the balance of payments, weighing up both why it might and why it might not and will weigh up both sides but without reaching a supported judgement.

There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.

Level 3 (11–15 marks)
Good knowledge and understanding of the effects of a fall in the value of the currency on the current account of the balance of payments.

Good analysis of how a fall in the value of the currency will be affected by the price elasticity of demand for exports and imports and other relevant factors. There is correct analysis in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis.

Reasonable evaluation of whether a fall in the value of the currency will reduce a deficit on the current account of the balance of payments, considering both why it might and why it might not.

There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.

Level 2 (6–10 marks)
Good knowledge and understanding of the effects of a fall in the value of the currency on the current

There are other reasons why a fall in the value of the currency may not improve the current account position. Domestic firms may find it difficult to sell more products at home and abroad if the quality of their products has not kept pace with rival products. The presence of import restrictions may also make it difficult to export more. In addition, while foreigners may be willing and able to purchase more of the country's imports, if supply is inelastic, it will not be possible to raise supply significantly. One reason why supply may be price inelastic is because the economy is experiencing full or near full employment.

There is also the possibility that a fall in the value of the currency will not reduce a deficit if incomes fall abroad which will reduce foreigners' purchasing power. Primary income may move into a deficit if, for instance, domestic firms are paying higher interest on foreign loans. Having fewer workers sending back income from abroad may move the balance on secondary income into a deficit.

A fall in the value of a country's currency will not always reduce a deficit on the current account. The outcome will depend, in part, on the price elasticity of demand of exports and imports. As the J curve suggests demand is likely to be more elastic in the long run. Over time, however, other factors may change such as incomes abroad which can offset the competitive advantage of lower export prices and higher import prices. A depreciation/devaluation is more likely to reduce a current account deficit if the demand for exports and imports are elastic, the supply of exports is elastic, domestically produced goods are increasing in quality, incomes abroad are rising and there is an absence of trade restrictions.

account of the balance of payments.

Reasonable analysis of how a fall in the value of the currency will be affected by the price elasticity of demand for exports and imports and other relevant factors. How a fall in the value of the currency will be affected by the price elasticity of demand for exports and imports and other relevant factors. There is correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.

Reasonable evaluation of whether a fall in the value of the currency will reduce a deficit on the current account of the balance of payments, considering both why it might and why it might not.

The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.

Level 1 (1–5 marks)
Reasonable knowledge and understanding of the consequences of the effects of a fall in the value of the currency on the current account of the balance of payments.

Limited or no analysis of how a fall in the value of the currency will be affected by the price elasticity of demand for exports and imports and other relevant factors. There is little evidence of reasoning that addresses the question asked. There is a lack of a

clear structure. The relevant diagram(s) may not be present or are incorrectly labelled.

Limited evaluation of whether a fall in the value of the currency will reduce a deficit on the current account of the balance of payments, in the form of an unsupported statement or **no** evaluation.

Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.

0 marks no response or no response worthy of credit.

Descriptor	Award mark
Consistently meets the criteria for this level	At top of level
Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
On the borderline of this level and the one below	At bottom of level

Question			Answer	Marks	Guidance
3	*		**Evaluate, with the use of an appropriate diagram(s), whether deflation always harms a country's macroeconomic performance**. **Level 5 (21–25 marks)** **Good -Strong knowledge and understanding** of how deflation may affect a country's macroeconomic performance. **Strong analysis** of how a decrease in AD and an increase in AS may affect a country's macroeconomic performance. It will have **consistently** well-developed links through a **coherent** chain of reasoning which	**25** (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	*Indicative content* The effect of a fall in the price level on a country's macroeconomic performance will depend on its cause, how economic agents respond and what is happening in other countries. The diagram below shows deflation arising from a decrease in aggregate demand. The price level falls from P to P1 and output declines from Y to Y1.

addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Strong evaluation of whether deflation will always harm a country's macroeconomic performance, weighing up both why it might and why it might not and reaching a supported judgement.

There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.

Level 4 (16–20 marks)
Good knowledge and understanding of how deflation may affect a country's macroeconomic performance.

Strong analysis of how a decrease in AD and an increase in AS may affect a country's macroeconomic performance. It will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Good evaluation of whether deflation will always harm a country's macroeconomic performance, weighing up both why it might and why it might not without reaching a supported judgement.

There is a well-developed line of reasoning which is clear and logically structured. The information

If AD falls, firms may reduce output and the number of workers they employ. The economic growth rate may decline and the economy may experience a recession. Unemployment may increase.
A period of falling prices resulting from lower AD, may result in downward spiral developing. Consumers may delay their purchases and firms may postpone their investment in expectation that prices will be lower in the future. This reduction in AD may lower prices further and result in output declining even more. Such deflation can reduce consumer and business confidence which can reduce the effectiveness of any government policy measures designed to increase economic activity.
Deflation also causes an increase in the burden of debt on households, firms and governments. The amount that has to repaid rises in real terms and this can further reduce consumers' expenditure, investment and government spending.
Deflation arising from a fall in aggregate demand is sometimes referred to as 'bad' deflation. This is in contrast with 'good deflation' which arises from an increase in aggregate supply as shown in the diagram

presented is relevant and in the most part substantiated.

Level 3 (11–15 marks)
Good knowledge and understanding of how deflation may affect a country's macroeconomic performance.

Good analysis of how a decrease in AD and an increase in AS may affect a country's macroeconomic performance. There is correct analysis in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis.

Reasonable evaluation of whether deflation will always harm a country's macroeconomic performance, considering both sides.

There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.

Level 2 (6–10 marks)
Good knowledge and understanding of how deflation may affect a country's macroeconomic performance.

Reasonable analysis of how a decrease in AD and/or an increase in AS may affect a country's macroeconomic performance. There is correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. Any relevant diagram(s) may be impatiently labelled or not linked to the analysis.

below. The price level falls from P to P1 and output rises from Y to Y1.

A fall in the price level that results from, for example, advances in technology can increase the price and quality competitiveness of domestic products. Such a rise in competitiveness can increase demand for the country's products. As a result, the current account position may improve, output may rise and unemployment may fall. Cheaper products arising from lower costs of production, accompanied by higher output and employment is likely to encourage consumers to buy more and firms to undertake more investment.

Over time economic growth usually occurs as a result of increases in both AD and AS. Most central banks set a positive target for inflation as its thought that a low rate of demand-pull inflation can stimulate firms to produce more. Recent years have witnessed a number of central

		Reasonable evaluation of whether deflation will always harm a country's macroeconomic performance, considering both sides. *The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.* **Level 1 (1–5 marks)** **Reasonable knowledge and understanding** of how deflation may affect a country's macroeconomic performance. **Limited or no analysis** of how a decrease in AD and/or an increase in AS may affect a country's macroeconomic performance. There is little evidence of reasoning that addresses the question asked. There is a lack of clear structure. The relevant diagram(s) may not be present or are incorrectly labelled. **Limited evaluation** of whether deflation will always harm a country's macroeconomic performance in the form of an unsupported statement or **no** evaluation. *Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.* **0 marks** no response or no response worthy of credit.		banks seeking to avoid or reverse deflation arising from a fall in AD. Some, most noticeably, Japan's central bank, have found this difficult as 'bad' deflation changes people's expectations and behaviour. .
		Descriptor		**Award mark**
		Consistently meets the criteria for this level		At top of level

Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
On the borderline of this level and the one below	At bottom of level

Question			Answer	Marks	Guidance
4	*		**Evaluate the extent to which government policy measures to reduce a budget deficit will increase unemployment.** **Level 5 (21–25 marks)** **Good–Strong knowledge and understanding** of the policy measures a government may use to reduce a budget deficit. **Strong analysis** of how government policy measures to reduce a budget deficit may affect unemployment. It will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the	**25** (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	*Indicative content* The extent to which government policy measures to reduce a budget deficit will cause unemployment will depend on what the measures are, how firms and households react and whether the government is seeking to reduce the deficit in the short run or the long run. If a government is seeking to reduce a budget deficit in the short run, it may raise tax rates and cut government spending. Higher tax rates reduce disposable income and so are likely to reduce consumer expenditure and investment and so aggregate demand. Lower

question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Strong evaluation of the extent to which government policy measures to reduce a budget deficit will increase or reduce unemployment, weighing up both why it might and why it might not and reaching a supported judgement.

There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.

Level 4 (16–20 marks)
Good knowledge and understanding of the policy measures a government may use to reduce a budget deficit.

Strong analysis of how government policy measures to reduce a budget deficit may affect unemployment. It will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Good evaluation of the extent to which government policy measures to reduce a budget deficit will increase or reduce unemployment, weighing up both why it might and why it might not, weighing up both sides but without reaching a supported judgement.

government spending directly reduces aggregate demand. Lower AD may reduce the output of firms and so may result in an increase in cyclical unemployment. Higher income tax rates may reduce the incentive to work and so may lead to higher voluntary unemployment. Lower government spending on education and training may reduce occupational mobility and increase structural unemployment. Reduced subsidies given to firms may discourage firms from expanding. If output increases by less than any rise in the labour force, a rise in unemployment will occur.

Higher tax rates, however, do not always result in reduced spending by firms and households. If they are optimistic about the future, they may continue to spend at the same rate by reducing their saving and/or by borrowing.

It is also possible that cuts in government spending on unemployment benefits may put greater pressure on the unemployed to search for employment. If they are successful frictional and voluntary unemployment will fall.

A government might try to reduce a budget deficit by raising the retirement age. This would lower the amount the government spends on pensions. If people work longer they may enjoy higher incomes and may spend more, increasing tax revenue.

If the budget deficit is reduced, government borrowing may be reduced. The lower demand for funds to borrow may reduce the rate of interest and make more funds available for the private sector to borrow. In such a circumstance, the level of AD may remain unchanged, with government spending being replaced by private sector spending.

Trying to reduce a budget deficit in the long run may

		There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated. **Level 3 (11–15 marks)** **Good knowledge and understanding** of the policy measures a government may use to reduce a budget deficit. **Good analysis** of how government policy measures to reduce a budget deficit may affect unemployment. There is correct analysis in the form of developed links. Theses links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis. **Reasonable evaluation** of the extent to which government policy measures to reduce a budget deficit will increase or reduce unemployment, considering both why it might and why it might not. *There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.* **Level 2 (6–10 marks)** **Good knowledge and understanding** of the policy measures a government may use to reduce a budget deficit. **Reasonable analysis** of how government policy measures to reduce a budget deficit may affect		involve higher government spending now. For instance, a government might spend more on education and training. This may raise labour productivity, increase output and so raise tax revenue. By increasing AD and workers' skills, it is also likely to reduce cyclical and structural unemployment. Measures to speed up the deficit reduction are likely to reduce unemployment. Measures to reduce a structural deficit are more likely to increase unemployment but this may not be the case if they increase confidence in the financial stability of government finances and the economy. Those countries with low government debt may attract more FDI. Cuts in tax rates might reduce a budget deficit if they reduce tax evasion, act as a stimulus to effort and enterprise and attract FDI. The Laffer curve suggests that tax cuts can increase output and tax revenue. Lower tax rates may reduce voluntary, search and cyclical unemployment. Unemployment is more likely to increase if the government policy measures taken to reduce a budget deficit involve increases in tax rates and cutting government spending and firms and households react by cutting back on their spending.

unemployment. There is correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.

Reasonable evaluation of the extent to which government policy measures to reduce a budget deficit will increase or reduce unemployment, considering both why it might and why it might not.

The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.

Level 1 (1–5 marks)
Reasonable knowledge and understanding of the policy measures a government may use to reduce a budget deficit.

Limited or no analysis of how government policy measures to reduce a budget deficit may affect unemployment. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or are incorrectly labelled.

Limited evaluation of the extent to which government policy measures to reduce a budget deficit will increase unemployment in the form of an unsupported statement or **no** evaluation.

Information presented is basic and may be ambiguous

or unstructured. The information is supported by limited evidence.

0 marks no response or no response worthy of credit.
Note: although a diagram is **not** required, it may enhance the quality of the answer and should be rewarded at the appropriate level.

Descriptor	Award mark
Consistently meets the criteria for this level	At top of level
Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
On the borderline of this level and the one below	At bottom of level

Question			Answer	Marks	Guidance
5	*		**Evaluate the extent to which the accelerator theory explains the level of investment in an economy.** **Level 5 (21–25 marks)** **Good–Strong knowledge and understanding** of the accelerator theory. **Strong analysis** of how changes in GDP can affect investment. It will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that	25 (AO1 x 6 AO2 x 6 AO3 x 6 AO4 x 7)	*Indicative content* The accelerator theory states that the level of investment depends on the rate of change of GDP. It also suggests that investment fluctuates more than consumer expenditure. During an economic boom, investment can increase dramatically with many more capital goods being purchased to expand capacity. If real GDP is constant, the only investment which takes place may be replacement investment. During a recession, net investment may be negative, with some obsolete capital goods not being replaced. There are two key reasons for thinking that changes in real GDP do play a significant role in explaining the

affect the validity of the analysis. Any diagrams must be integral to the analysis.

Strong evaluation of the influences on investment, weighing up which are the key influences and reaching a supported judgement.

There is a well-developed and sustained line of reasoning which is coherent and logically structured. The information presented is entirely relevant and substantiated.

Level 4 (16–20 marks)
Good knowledge and understanding of the accelerator theory.

Strong analysis of how changes in GDP can affect investment. It will have **consistently** well-developed links through a **coherent** chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct with no significant errors that affect the validity of the analysis. Any diagrams must be integral to the analysis.

Good evaluation of the influences on investment, weighing up which are the key influences but without reaching a supported judgement.

There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and in the most part substantiated.

Level 3 (11–15 marks)
Good knowledge and understanding of the

level of investment. A rise in real GDP would be likely to increase consumer expenditure and so the quantity of goods and services purchased. This will increase the willingness and ability of firms to invest. Willingness increases as firms will expect to earn higher profits. There is more ability to invest as firms will have more retained profits to finance investment.
The accelerator theory is, however, not a full explanation of investment. This is because there are other influences on investment. It is possible, for instance, that GDP may increase without there being any rise in investment. Firms may think that the increase in GDP may not last and they may be pessimistic about the future. Expectations play an important role in firms, investment decisions.
Firms may be able to produce more goods and services without undertaking any investment if they have spare capacity. The level of spare capacity of the capital goods industry is operating at full capacity, firms will not be able to make more capital goods.
Advances in technology may encourage firms to buy new capital goods even if GDP is not changing. More productive capital goods can increase profits by lowering costs of production. Advances in technology can also alter the relationship between the value of capital goods needed to produce a given value of consumer goods and services.
Lower prices of capital goods and government incentives, including cuts in corporation tax and subsidies may also stimulate a rise in investment, independently of changes in income.
Changes in income is an important influence on investment but it is not the only one. Some investment is induced investment (dependent on changes in income) and some is autonomous investment

accelerator theory.

Good analysis of how changes in GDP can affect investment. There is correct analysis in the form of developed links. These links are developed through a chain of reasoning which addresses the question. Any relevant diagram(s) are predominantly correct and linked to the analysis.

Reasonable evaluation of the influences on investment, weighing up which are the key influences.

There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.

Level 2 (6–10 marks)
Good knowledge and understanding of the accelerator theory.

Reasonable analysis of how changes in GDP can affect investment. There is correct analysis largely in the form of single links. These address the question **but** are not developed into a clear chain of reasoning. Any relevant diagram(s) may be imperfectly labelled or not linked to the analysis.

Reasonable evaluation of the influences on investment.

The information has some relevance, but is communicated in an unstructured way. The information is supported by limited evidence, the relationship to the evidence may not be clear.

Level 1 (1–5 marks)

(independent of changes in income). The two main influences on investment are probably changes in GDP and changes in business confidence.

			Reasonable knowledge and understanding of the accelerator theory. **Limited or no analysis** of how changes in GDP can affect investment. There is little evidence of reasoning that addresses the question asked. There is a lack of a clear structure. The relevant diagram(s) may not be present or are incorrectly labelled. **Limited evaluation** of the influences on investment in the form of an unsupported statement or **no** evaluation. *Information presented is basic and may be ambiguous or unstructured. The information is supported by limited evidence.* **0 marks** no response or no response worthy of credit. **Note:** although a diagram is **not** required, it may enhance the quality of the answer and should be rewarded at the appropriate level.	

			Descriptor	**Award mark**
			Consistently meets the criteria for this level	At top of level
			Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
			Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
			On the borderline of this level and the one below	At bottom of level

Assessment Objectives Grid

Question	AO1	AO2	AO3	AO4	TOTAL	(Quantitative Skills)
1(a)	1(1)	2			**3**	**(1)**
1(b)		2 (2)			**2**	**(2)**
1(c)	2 (2)				**2**	**(2)**
1(d)	1 (1)	2 (2)			**3**	**(3)**
1(e)	1	1	3	3	**8**	
1(f)	1	1	5	5	**12**	
2/3	6 (2)	6 (2)	6 (2)	7 (2)	**25**	**(8)**
4/5	6	6	6	7	**25**	
TOTAL	**18 (6)**	**20 (6)**	**20 (2)**	**22 (2)**	**80**	**(16)**