



AS ECONOMICS

Paper 1 Specimen Assessment Material

Mark scheme

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the candidates' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation, each associate analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised, they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aqa.org.uk.

Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows a description of the response at the middle of the level. There are marks in each level based on the division of the total number of marks for the question.

Before you apply the mark scheme to a student's answer, read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme, you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material, it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level, you need to decide on the mark. The descriptors on how to allocate marks will help with this. The exemplar materials used during standardisation will illustrate the performance needed to achieve a specific mark. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Examiners are required to assign each of the candidates' responses to the most appropriate level according to **its overall quality**, then allocate a single mark within the level. When deciding upon a mark in a level examiners should bear in mind the relative weightings of the assessment objectives (see page 18) and be careful not to over/under credit a particular skill. For example, in questions 26 and 32 more weight should be given to AO4 than to AO1, AO2 and AO3. This will be exemplified and reinforced as part of examiner training and standardisation.

SECTION A

The following list indicates the correct answers used in marking the candidates' responses.

KEY LIST

1	D	11	A
2	C	12	A
3	A	13	D
4	B	14	D
5	D	15	C
6	C	16	C
7	C	17	B
8	D	18	D
9	A	19	C
10	B	20	C

The levels of response grid below should be used when marking the 25 mark questions

Level of response	Response	Max 25 marks
5	<p>Sound, focused analysis and well-supported evaluation that:</p> <ul style="list-style-type: none"> • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning • includes supported evaluation throughout the response and in a final conclusion. 	21–25 marks
4	<p>Sound, focused analysis and some supported evaluation that:</p> <ul style="list-style-type: none"> • is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response • includes some well-focused analysis with clear, logical chains of reasoning • includes some reasonable, supported evaluation. 	16–20 marks
3	<p>Some reasonable analysis but generally unsupported evaluation that:</p> <ul style="list-style-type: none"> • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these are not well-supported by arguments and/or data. 	11–15 marks
2	<p>A fairly weak response with some understanding that:</p> <ul style="list-style-type: none"> • includes some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • includes some limited, application of relevant economic principles to the given context and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes attempted evaluation which is weak and unsupported. 	6–10 marks
1	<p>A very weak response that:</p> <ul style="list-style-type: none"> • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which, at best, is very weak • includes attempted analysis which is weak and unsupported. 	1–5 marks

SECTION B**Context 1 FREE SCHOOL MEALS****Total for this Context: 50 marks****21** Define the term 'externalities' (**Extract B**, line 22).**[3 marks]**

Level of response	Response:	Max
3	<ul style="list-style-type: none"> A full and precise definition is given. 	3 marks
2	<ul style="list-style-type: none"> The substantive content of the definition is correct, but there may be some imprecision or inaccuracy. 	2 marks
1	<ul style="list-style-type: none"> Some fragmented points are made. 	1 mark

Examples of acceptable definitions:

- effect on a third party as a result of an economic transaction/activity
- spill-over effect as a result of an economic transaction/activity
- the difference between (marginal) social costs and benefits and (marginal) private costs and benefits
- a consumption externality where there is a difference between private benefits and social benefits or a production externality where there is a difference between private costs and social costs.

MAXIMUM FOR QUESTION 21: 3 MARKS

22 *Extract B (line 2) states that spending on food by low-income families' forms a significant part of their total weekly spend'*
Calculate the income elasticity of demand for food if an increase in income from £25 000 to £30 000 leads to an increase in the quantity demanded of food of 10%.
[4 marks]

Response	Marks
For a correct answer: 0.5 or $\frac{1}{2}$ (plus sign not needed).	4 marks
For the correct value but the wrong sign: -0.5 or $-\frac{1}{2}$.	3 marks
For the correct values top and bottom but the wrong answer: 10/20.	2 marks
For the correct percentage change in price: 20% (ignore sign). For stating the equation of income elasticity of demand. For any valid attempt at a calculation, even though the answer is incorrect.	1 mark

Maximum of 3 marks if the final answer is inaccurate
MAXIMUM FOR QUESTION 22: 4 MARKS

23 Using **Extract A**, identify **two** significant points of comparison between the changes in the index of average disposable income and the changes in the index of food prices over the period shown.

[4 marks]

Award up to 2 marks for each significant point of comparison made.

Response	Marks
Identifies a significant point of comparison. Makes accurate use of the data to support the comparison identified. Unit of measurement given accurately.	2 marks
Identifies a significant point of comparison but only one piece of data is given when two are needed and/or no unit of measurement is given and/or the unit of measurement is inaccurate and/or the wrong date is given. OR Identifies a significant feature of one data series with accurate use of the data (including the unit of measurement) but no comparison is made.	1 mark

If a candidate identifies more than two significant points of comparison, reward the best two.

Significant points include:

- the index of average disposable income (from 100 to 108) and the index of food prices (from 100 to 118) were both higher at the end of the period than the beginning
- the index of food prices increased more (from 100 to 118, ie an increase of 18%) than the index of average disposable income (from 100 to 108, ie an increase of 8%)
- the highest index of average disposable income was in 2011 (110), whereas the highest index of food prices was in 2012 (118)
- the index of average disposable income and the index of food prices were both lowest at the start of the period (100 for both income and food prices in 2008)
- the range of the index of average disposable income (100 to 118, ie 18) was greater than the range for the index of food prices (100 to 110, ie 10)
- the greatest change in the index of average disposable income was between 2010 and 2011 (105 to 110), whereas the greatest change in the index of food prices was between 2008 and 2009 (100 to 106)
- the smallest change in the index of average disposable income was between 2011 and 2012 (110 to 108), although allow 2008 to 2009 where the index rose from 100 to 102 (a slightly larger percentage), whereas the smallest change in the index of food prices was between 2009 and 2010 (106 to 109)
- the index of food prices rose every year (eg from 109 to 114 between 2010 and 2011), whereas the index for average disposable income rose each year until 2011 (eg from 105 to 110 between 2010 and 2011), before falling in 2012 (to 108).

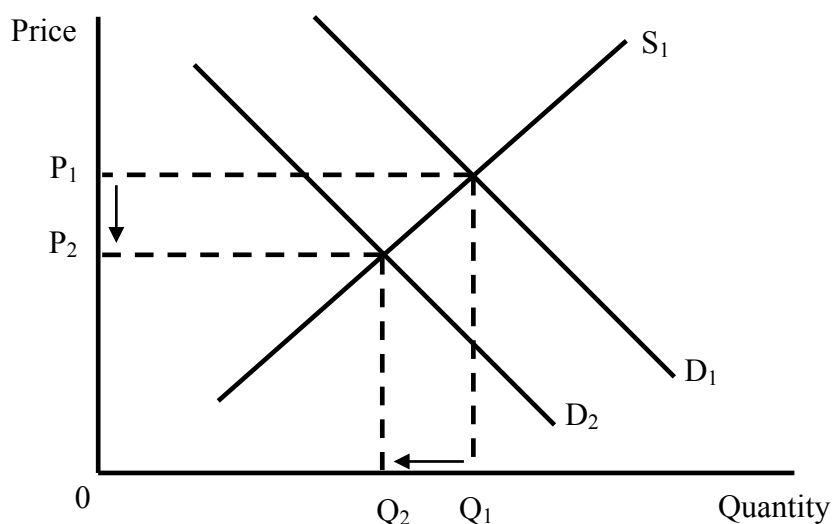
Notes: Do NOT allow that food prices are higher than incomes for most of the period.
The higher index number for food is covered by the second point in the mark scheme.
Index numbers have no units but valid points should refer to 'the index'.

MAXIMUM FOR QUESTION 23: 4 MARKS

24 In **Extract B** (line 11) it states that a spokesperson for the Food Ethics Council charity recently claimed that ‘cheap food’ is often an inferior good.
 Draw a supply and demand diagram showing the effects of an increase in income on the price and quantity sold of an inferior good.

[4 marks]

The correct diagram involves a decrease in demand/shift to the left of the demand curve and an indication of the resulting decreases in price and quantity sold.



Response	Marks
Accurately drawn D/S diagram showing a leftwards shift in D, new equilibrium price level and output, eg P_2 , Q_2 , with both axes and all curves and coordinates correctly labelled (arrows not needed).	4 marks
Accurately drawn D/S diagram showing a leftwards shift in D with one label missing (axis or curve). OR Accurately drawn D/S diagram showing a leftwards shift in D with one coordinate missing (P or Q).	3 marks
Accurately drawn D/S diagram showing an initial equilibrium point and a leftwards shift in D with two or more labels missing.	2 marks
Accurately drawn D/S diagram showing an initial equilibrium point with both axes, both original curves and both coordinates correctly labelled eg, P_1 Q_1 .	1 mark

For axes labels: Horizontal:
Vertical :

Quantity or Q (but not QD or QS).
Price, P, £ or some monetary symbol. Price level is not acceptable.

MAXIMUM FOR QUESTION 24: 4 MARKS

25 *Extract B (line1) states that ‘In recent years, food prices have risen faster than incomes’.*
 Explain **two** possible reasons, **other than a change income**, for the rise in the price of food over the period shown.

[10 marks]

Level of response	An answer that:	Max 10 marks
3	<ul style="list-style-type: none"> • identifies two valid reasons • shows sound knowledge and understanding of relevant economic terminology, concepts and principles • includes good application of relevant economic principles and/or good use of data to support the response • includes well-focused analysis with a clear, logical chain of reasoning • may include a relevant diagram to support their explanation. 	8–10 marks
2	<ul style="list-style-type: none"> • identifies at least one valid reason • shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and/or data to the question • includes some reasonable analysis but it might not be adequately developed and may be confused in places • may include a relevant diagram to support their explanation. 	4–7 marks
1	<ul style="list-style-type: none"> • identifies at least one valid reason • shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • demonstrates very limited ability to apply relevant economic principles and/or data to the question • may include some very limited analysis but the analysis lacks focus and/or becomes confused • may include a diagram but the diagram is likely to be inaccurate in some respects or is inappropriate. 	1–3 marks

Relevant issues include:

- reasons such as: climate change, population growth, speculation, a rise in the costs of production, indirect tax increases, reduced subsidies, exercise of monopoly power
- elasticities of demand and supply
- excess demand and shortages
- output restricted to force up the price
- derived demand
- rising factor prices
- expectations of future price rises.

MAXIMUM FOR QUESTION 25: 10 MARKS

26 *Extract C (lines 15–17) states that ‘Free school meals will help give every child the chance in life they deserve, building a stronger economy and a fairer society.’*

Using the data in the extracts and your economic knowledge, assess whether the government should provide free school meals for all, some or no school children. [25 marks]

Areas for discussion include:

- possible market failures that might justify the provision of free school meals, eg food as a merit good, externalities, inadequate information, inequality of income
- children and their parents do not necessarily make rational decisions
- the private and external costs of a poor diet
- ‘cheap food’ as a demerit good
- the case for universal versus means-tested provision
- the possibility of government failure and unintended consequences
- the financial and opportunity costs of providing free school lunches
- possible effects on tax rates and the budget balance in a time of austerity
- the effects of providing free school lunches upon the distribution of income and equity issues
- the significance of the index of average disposable income and the index of prices (Extract A) and/or the figures in Extract B showing the increasing proportion of income being spent on food by low-income families
- the significance of other data included in the Extracts, such as: the growing use of food banks, the push to persuade people to eat healthier foods, the spending patterns of low-income households, bad diet and the wastage of food, the impact of pilot schemes
- an overall assessment of whether the government should provide free school meals for all, some or no school children.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate’s response to the question.

Use the levels mark scheme on page 5 to award candidates marks for this question.

MAXIMUM FOR QUESTION 26: 25 MARKS

Context 2 COMMODITY PRICES**Total for this Context: 50 marks****27** Define 'monopoly' (*Extract E, line 4*).**[3 marks]**

Level of response	Response:	Max
3	<ul style="list-style-type: none"> A full and precise definition is given. 	3 marks
2	<ul style="list-style-type: none"> The substantive content of the definition is correct, but there may be some imprecision or inaccuracy. 	2 marks
1	<ul style="list-style-type: none"> Some fragmented points made. 	1 mark

Examples of acceptable definitions:

- where a firm is the sole supplier
- where one firm dominates a market
- where one firm has at least a 25% share of the market.

MAXIMUM FOR QUESTION 27: 3 MARKS

28 *Extract E (line 6–7) states that ‘the price of potash is expected to fall from around \$400 to \$300 per tonne by the end of 2013.’*
Calculate the price elasticity of demand for potash if this fall in price leads to an increase in the quantity demanded of 10%.

[4 marks]

Response	Marks
For a correct answer: -0.4 or $-2/5$	4 marks
For the correct value but the wrong sign: 0.4 or $2/5$	3 marks
For the correct values top and bottom but the wrong answer: $10/-25$	2 marks
For the correct percentage change in price: 25% (ignore minus sign). For stating the equation of price elasticity of demand. For any valid attempt at a calculation, even though the answer is incorrect.	1 mark

Maximum of 3 marks if the final answer is inaccurate

MAXIMUM FOR QUESTION 28: 4 MARKS

29 Using **Extract D**, identify **two** significant points of comparison between the changes in the price of potash and the changes in the price of crude oil over the period shown. **[4 marks]**

Award up to 2 marks for each significant point of comparison made.

Response	Marks
Identifies a significant point of comparison. Makes accurate use of the data to support the comparison identified. Unit of measurement given accurately.	2 marks
Identifies a significant point of comparison but only one piece of data is given when two are needed and/or no unit of measurement is given and/or the unit of measurement is inaccurate and/or the wrong date is given. OR Identifies a significant feature of one data series with accurate use of the data (including the unit of measurement) but no comparison is made.	1 mark

If a candidate identifies more than 2 significant points of comparison, reward the best two.

Significant points include:

- the average monthly price of potash was lower at the end of the period than the beginning (from \$630 to \$390 per tonne), whereas the average monthly price of crude oil was higher at the end of the period than the beginning (from \$62 to \$109 per barrel)
- the highest average monthly price of potash was in 2009 (\$630 per tonne), whereas the highest average monthly price of crude oil was in 2012 (\$112 per barrel)
- the lowest average monthly price of potash was in 2010 (\$330 per tonne), whereas the lowest average monthly price of crude oil was in 2009 (\$62 per barrel)
- the range of the average monthly prices of potash was \$300 per tonne (between \$330 and \$630), whereas the range of the average monthly prices of crude oil was \$50 per barrel (between \$62 and \$112). (Ok if candidates say that the range for potash is greater, despite the different units, since this is true in relative terms)
- the average monthly price changes for potash were more volatile than the average monthly price changes of crude oil (eg down for potash from \$630 to \$330 per tonne between 2009 and 2010, and then up to \$440 in 2011, whereas crude oil prices increased between 2009 and 2012 from \$62 to \$112 per barrel before falling back to \$109 in 2013)

OR

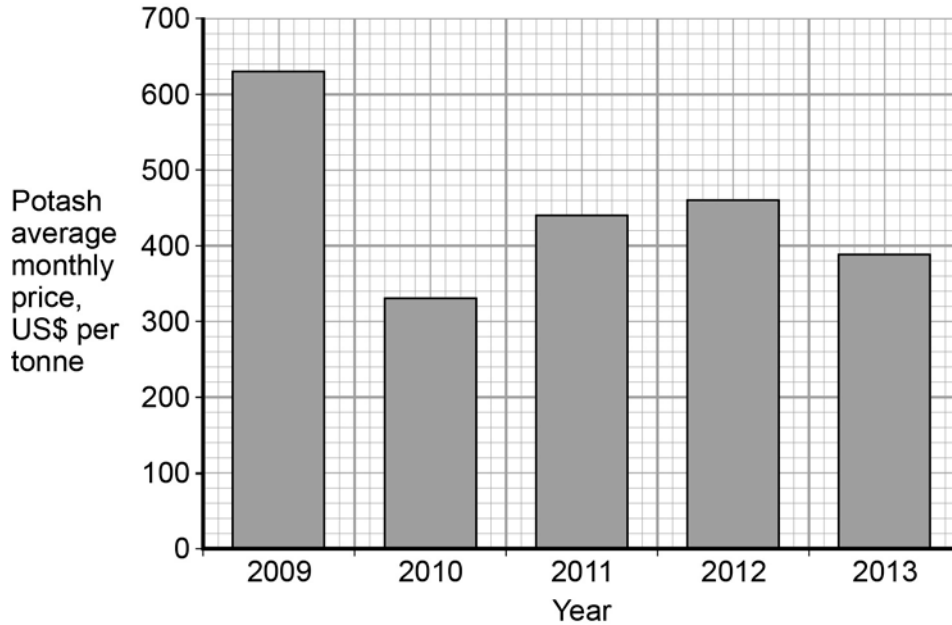
- the greatest average monthly price change for potash was between 2009 and 2010 (a fall of \$300 per tonne, from \$630 to \$330), whereas the greatest average monthly price change for crude oil was between 2010 and 2011 (a rise of \$31 per barrel, from \$80 to \$111)
- the lowest average monthly price change for both potash and crude oil was between 2011 and 2012 (\$440 to \$460 per tonne for potash and \$111 to \$112 per barrel for crude oil)
- in most years (three out of four), the average monthly price for crude oil increased (eg from \$62 to \$80 per barrel between 2009 and 2010), whereas the average monthly price change for potash increased in two years and decreased in the other two (eg it decreased from \$630 to \$330 per tonne between 2009 and 2010).

Note: The units are different, so do NOT credit potash prices are always higher

MAXIMUM FOR QUESTION 29: 4 MARKS

30 Using **Extract D**, draw a bar chart to show the average monthly price of potash in the years 2009 to 2013.

[4 marks]



Response	Marks
Accurately drawn bar chart with both axes correctly labelled.	4 marks
Accurately drawn bar chart with one axis correctly labelled. OR 4 bars drawn accurately and both axes correctly labelled.	3 marks
Accurately drawn bar chart but neither axis is correctly labelled. OR 3 or 4 bars drawn accurately with one axis correctly labelled. OR 1 or 2 bars drawn accurately and both axes correctly labelled.	2 marks
No bars drawn accurately but both axes labelled correctly. OR At least one bar drawn accurately regardless of axes labels.	1 mark

Notes: Charts with gaps between the bars and without are equally acceptable here. Also accept bars with a discontinuity but if they simply start at a value above zero, deduct one mark from the mark obtained using the grid above.

For axes labels: Horizontal: 2009; 2010; 2011; 2012; 2013
Vertical: allow (average monthly price) US\$ per tonne; price in US\$; or US\$

For drawing accuracy allow ± 20 tonnes

MAXIMUM FOR QUESTION 30: 4 MARKS

31 *Extract E* (lines 1-2), states ‘Potash is one of three main fertiliser products which farmers use to increase their output before planting crops such as wheat.’

Explain the possible effects on the market for wheat of a fall in the price of a fertiliser such as potash.

[10 marks]

Level of response	An answer that:	Max 10 marks
3	<ul style="list-style-type: none"> • is well organised and develops one or more of the key issues that are relevant to the question • shows sound knowledge and understanding of relevant economic terminology, concepts and principles • includes good application of relevant economic principles and/or good use of data to support the response • includes well-focused analysis with a clear, logical chain of reasoning • may include a relevant diagram to support their explanation. 	8–10 marks
2	<ul style="list-style-type: none"> • includes one or more issues that are relevant to the question • shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles and/or data to the question • includes some reasonable analysis but it might not be adequately developed and may be confused in places • may include a relevant diagram to support their explanation. 	4–7 marks
1	<ul style="list-style-type: none"> • is very brief and/or lacks coherence • shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • demonstrates very limited ability to apply relevant economic principles and/or data to the question • may include some very limited analysis but the analysis lacks focus and/or becomes confused • may include a diagram but the diagram is likely to be inaccurate in some respects or is inappropriate. 	1–3 marks

Relevant issues include:

- fertiliser as a factor of production
- derived demand
- costs of production, profits and product prices
- impact on the market supply of wheat
- expectations
- elasticities of demand and supply
- excess supply and surplus stocks
- short-run versus long-run effects
- impact on the total output and market price.

MAXIMUM FOR QUESTION 31: 10 MARKS

32 *Extract F (lines 15–16) states that ‘Commodities are vital as the raw materials and energy sources to make finished products.’*

Using the data in the extracts and your economic knowledge, assess whether market forces should be left to determine the price of commodities such as potash, oil and gas.
[25 marks]

Areas for discussion include:

- why commodity prices matter and the importance of commodities as raw materials for finished products
- the reasons why commodity prices fluctuate and the significance of such fluctuations
- the significance of elasticities
- why fluctuating and/or rising prices of commodities may cause problems and for whom
- monopoly power in commodity markets
- external costs associated with the production of some commodities that may not be adequately reflected in the market price
- other market failures associated with high and/or fluctuating commodity prices
- the benefits of allowing commodity prices to be determined by market forces, eg rationing, incentive and signalling functions of the price mechanism
- methods of government intervention in the markets for commodities and their consequences, such as: the development of illegal markets, surplus stocks
- the difference between the short-run and long-run consequences
- the costs and opportunity costs of intervention
- the possibility of intervention leading to government failure and unintended consequences
- the different consequences for producers and consumers, including different countries
- equity versus efficiency arguments
- the significance of the data in the Extracts, such as: the volatility of commodity prices, the nature of the market for potash, possible consequences of the changes that are occurring in the market for potash, population growth and changing diets, the oil market and the role of OPEC, externalities associated with developing new sources of energy.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the candidate’s response the question.

Use the levels mark scheme on page 5 to award candidates marks for this question.

MAXIMUM FOR QUESTION 32: 25 MARKS

Assessment Objectives

MCQs

Specification section	AO1 (K+U)	AO2 (Application)	AO3 (Analysis)	Total
1.1	1	1	-	2
1.2	1	1	3	5
1.3	2	1	-	3
1.4	2	2	1	5
1.5	3	2	-	5
Total	9	7	4	20

Context 1 and 2

	A01	A02	A03	A04	TOTAL
Section B					
Context 1					
21	3				3
22	2	2			4
23		4			4
24	2	2			4
25	2	3	5		10
26	3	5	6	11	25
Context 2					
27	3				3
28	2	2			4
29		4			4
30	2	2			4
31	2	3	5		10
32	3	5	6	11	25
MCQs	9	7	4		
DRQ	12	16	11	11	
Paper total	21	23	15	11	70

