AQA

AS
Economics

7135/1 The operation of markets and market failure
Mark scheme

7135
June 2016

Version 1.0: Final 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 students' 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 students' 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 students' 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.

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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 the average performance for the level. There are marks in each level.

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 can help with this. The exemplar materials used during standardisation will help. 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.

SECTION A

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

KEY LIST

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

	Total
A	6
B	5
C	4
D	5
	20

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

Level of response	Response	Max 25 marks
5	**Sound, focused analysis and well-supported evaluation that:** • 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	**Sound, focused analysis and some supported evaluation that:** • 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	**Some reasonable analysis but generally unsupported evaluation that:** • 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 judgments but these are not well-supported by arguments and/or data.	**11–15 marks**
2	**A fairly weak response with some understanding that:** • 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	**A very weak response that:** • 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: THE UK HOUSING MARKET **Total for this Context: 50 marks**

2 1 *Define the term 'government failure' **Extract C** (lines 20 – 21).*

[3 marks]

Level of response	Response	Max 3 marks
3	• A full and precise definition is given.	**3 marks**
2	• The substantive content of the definition is correct, but there may be some imprecision or inaccuracy.	**2 marks**
1	• Some fragmented points are made.	**1 mark**

Examples of acceptable definitions

- when government intervention in a market leads to a less efficient allocation of resources/ makes the situation worse
- when government intervention to correct market failure leads to a net welfare loss
- when the costs of government intervention to correct market failure exceed the benefits.

Examples of 2 mark responses:

These will typically include recognise that government intervention hasn't worked **and** will identify one or more possible reasons for government failure

- when government intervention makes the market failure worse
- when government intervention doesn't work due to the unintended consequences of government action
- when government intervention doesn't work due to inadequate information

Examples of 1 mark responses:

Typically these will just give reasons for government failure **or** may just say the intervention doesn't work.

- government failure occurs because government intervention is expensive/has unintended consequences
- it occurs when government intervention does not work
- when government intervention leads to a misallocation of resources

Do not reward an answer that just gives examples of methods of intervention, e.g. indirect taxes, subsidies, price controls

MAXIMUM FOR QUESTION 21: 3 MARKS

2 2 *Use **Extract C** to calculate, to the nearest whole number, the estimated number of people sleeping on the streets in England on any one night in 2010.* ***[4 marks]***

Response	**Marks**
For a correct answer: 1751	**4 marks**
For the correct value including decimal places, eg 1750.97 Or 1750	**3 marks**
For the correct values top and bottom but the wrong answer: 2714/155 x 100 Or 2714/1.55	**2 marks**
Incomplete calculation eg 2714/155 = 17	**1 mark**
Any number between 1745 to 1760 other than 1751 or 1750	
Allow 1221 (e.g. obtained from 2714 x 0.45) - allow even if not rounded or rounded up to 1222	

MAXIMUM FOR QUESTION 22: 4 MARKS

2 3 *Use **Extract A** to identify **two** significant points of comparison between the number of new houses built per year in the UK and the changes in UK population over the period shown.*

[4 marks]

Award up to 2 marks for <u>each</u> significant point of comparison made

Response	Marks
• Identifies a significant point of comparison • Makes accurate use of the data to support the comparison identified • Units 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**

Significant points include:

- the number of houses built per year in the UK decreased over the period from 195 000 in 1992 to 140 000 in 2013 whilst the annual **change** in the UK population was higher at the end of the period than at the start, the annual **change** was just under 150 000 in 1992 and was 400 000 in 2013

- the largest number of houses built in any one year in the UK was 215 000 in 2007/8 and the largest annual **change** in the UK population was 525 000 in 2011

- the lowest number of houses built in any one year in the UK was 138 000 in 2012 (accept 2010 or 2011 but **not** 20<u>1</u>3) and the lowest **change** in the UK population was 130 000 in 1993.

- The range for the number of new houses built is 77,000 whereas the range for the change in population is 395,000

Allow a margin of error of + or – 15 000

Generally, allow a margin of + or – 1 year for the date

Also, allow some flexibility when the candidate uses words such as: 'about', 'around', 'approximately'

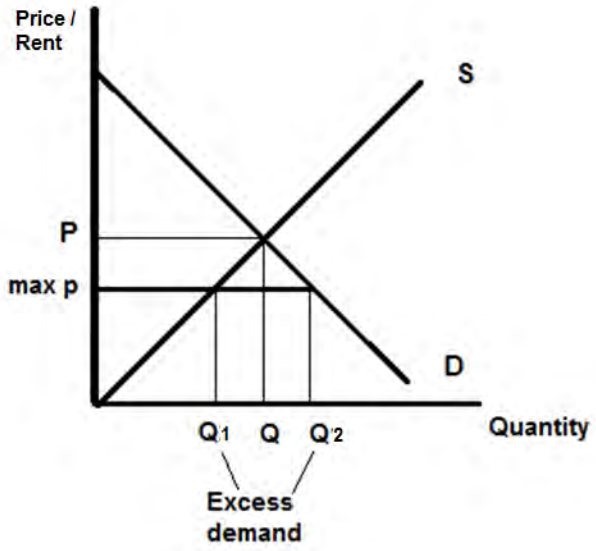
MAXIMUM FOR QUESTION 23: 4 MARKS

2 4 ***Extract C*** *(lines 17 to 19) states 'Some economists have suggested the implementation of maximum price controls on rented accommodation that prevent landlords from charging the market rent'.*

Draw a diagram to show the effect of implementing this suggestion on the market for rented accommodation.

[4 marks]

The correct diagram involves a demand and supply diagram, illustrating an initial equilibrium point, with a maximum price drawn beneath the equilibrium price.



Response	Marks
Accurately drawn D/S diagram showing initial equilibrium, a maximum price drawn beneath the equilibrium price, and the resulting disequilibrium with excess demand clearly illustrated, with both axes and all curves and coordinates correctly labelled. Excess demand could be illustrated by just showing Q1 and Q2 as above or indicating the excess demand in some other meaningful way	**4 marks**
Accurately drawn D/S diagram showing a maximum price beneath the equilibrium price with one label missing (axis or curve) **OR** Accurately drawn D/S diagram showing a maximum price beneath the equilibrium price with one coordinate missing (P or Q).	**3 marks**
Accurately drawn D/S diagram showing a maximum price beneath the equilibrium price with no more than two labels missing (treat excess demand as one label).	**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_1Q_1.	**1 mark**

<u>For axes labels;</u> Horizontal: Quantity or Q (QD or QS or output are not acceptable)
Vertical: Rent, Price, P, £ or some monetary symbol. Price level is not acceptable.

MAXIMUM FOR QUESTION 24: 4 MARKS

2 5 ***Extract B*** *(lines 9 and 10) states 'However, the housing market is not a perfectly competitive market.'*

Explain why the housing market is not a perfectly competitive market.

[10 marks]

Level of response	Response	Marks 10 marks
3	• 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	• 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	• 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

- the main characteristics of a perfectly competitive market
- why the housing market does not have homogenous products
- why the housing market does not contain 'many sellers'
- the existence of barriers to entry / difficulties of entering the market
- why some firms within the market are price makers rather than price takers
- immobility of factors of production eg. land or skilled labour
- there is evidence of government intervention in the market, e.g. the Help-to-Buy scheme
- any other characteristics of a perfectly competitive market which cannot be applied to the housing market.

MAXIMUM FOR QUESTION 25: 10 MARKS

2 6 *Extract C (lines 20 and 21) states 'Some are mindful of government failure and advocate a lesser role for governments.'*

Use the extracts and your knowledge of economics to assess the view that housing markets should be left to market forces with only the minimum of intervention from governments.

[25 marks]

Areas for discussion include:

- the importance of the housing market
- market mechanism
- interaction of demand and supply in the context of the housing market
- firms and the profit incentive
- market failure
- housing as a merit good, and consequent market failure
- negative externalities arising from homelessness
- market failure arising from widening inequalities
- government intervention
- maximum price controls / provision of affordable housing
- tweaking markets – relaxing planning controls / help to buy schemes
- costs and benefits of different types of intervention
- short-run and long-run consequences
- efficiency versus equity arguments
- government failure
- imperfect knowledge
- the law of unintended consequences
- the significance of the data in the extracts.

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: THE COSTS OF SMOKING **Total for this Context: 50 marks**

2 7 *Define the term 'demerit good' **Extract F** (line 1).*

[3 marks]

Level of response	Response	Max 3 marks
3	• A full and precise definition is given.	**3 marks**
2	• The substantive content of the definition is correct, but there may be some imprecision or inaccuracy.	**2 marks**
1	• Some fragmented points are made.	**1 mark**

Examples of acceptable definitions

- a good which generates negative externalities in consumption
- a good for which the social optimum level of consumption is less than the private level of consumption
- a good which society judges is undesirable and whose consumption should be restricted.
- social benefit is less than the private benefit of consumption

2 marks may be given for an imprecise definition such as:

- a good which is over-consumed
- a good which generates negative externalities
- there are external costs of consumption

1 mark may be given for an imprecise definition such as:

- a good which generates externalities
- a good where there is information failure
- a product that is bad for you
- social cost exceeds private cost
- a good which is overproduced (no mention of consumption)

MAXIMUM FOR QUESTION 27: 3 MARKS

2 8 *Use **Extract D** to calculate, to the nearest penny, the mean price of a pack of 20 cigarettes between 2007 and 2013.*

[4 marks]

Response	**Marks**
For a correct answer: £6.29	**4 marks**
For the correct value but the wrong units: 6.29	**3 marks**
For the correct values top and bottom but the wrong answer: 44.01/7	**2 marks**
For the correct total for the 7 years: £44.01. £ sign not required.	**1 mark**
For the correct number of years: 7	
For stating the correct method/formula, eg sumx/n	

MAXIMUM FOR QUESTION 28: 4 MARKS

2 9 *Use **Extract D** to identify **two** significant points of comparison between the price and the quantity of cigarettes consumed in the UK from 2007 to 2013.*

[4 marks]

Award up to 2 marks for <u>each</u> 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**

Significant points include

- the price of cigarettes rose over the period from £5.33 to £7.72 but the quantity of cigarettes consumed was lower at the end of the period, falling from 47.0bn to 37.9bn
- the peak price for cigarettes was in 2013 at £7.72 but the peak quantity of cigarettes consumed was in 2007 at 47.0bn
- when the price of a packet of cigarettes was highest in 2013, at £7.72, the number of cigarettes consumed was lowest at 37.9bn
- cigarette prices were lowest in 2007 at £5.33 but the quantity of cigarettes consumed was lowest in 2013 at 37.9bn
- when the price of a packet of cigarettes was lowest in 2007, at £5.33, the number of cigarettes consumed peaked at 47bn
- the range for the price of cigarettes is £2.39 whereas the range for the quantity of cigarettes consumed is 9.1 billion
- there is evidence of an inverse correlation between the price of cigarettes and the number consumed, for example, as the price of cigarettes rose between 2010 and 2011 from £6.63 to £7.09 the quantity consumed fell from 42bn to 40.5bn.
- The only year in which a rise in the price of cigarettes was not accompanied by a fall in the quantity consumed was in 2009. The price rose from £5.44 to £5.67 but the quantity consumed remained at 46.5bn

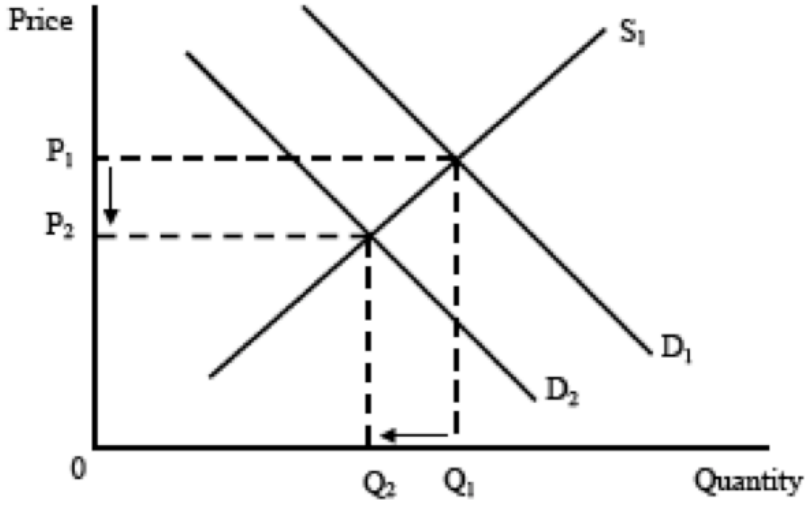
MAXIMUM FOR QUESTION 29:4 MARKS

3 0 ***Extract E*** *(lines 10 –11) states 'Researchers at the Universities of Glasgow and Stirling offered pregnant smokers up to £400 worth of shopping vouchers to give up smoking …'*

Draw a diagram illustrating the effect on the market for cigarettes of giving shopping vouchers to pregnant women as an incentive to stop smoking.

[4 marks]

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



Response	Marks
Accurately drawn D/S diagram showing a leftwards shift in D, new equilibrium price level and quantity, eg P_2,Q_2, with both axes and all curves and coordinates correctly labelled. (Do not award 4 marks if they shift both supply and demand)	**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 a leftwards shift in D with no more than two labels missing. If a candidate shifts demand to the left but <u>also</u> shifts supply to the left, they can't get more than 2 marks. (2 marks should be awarded if all labels are correct.)	**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_1Q_1.	**1 marks**

For axes labels: Horizontal Quantity or Q (QD or QS or output are not acceptable)
Vertical: Price, P, £ or some monetary symbol. Price level is not acceptable.

MAXIMUM FOR QUESTION 30: 4 MARKS

3 1 ***Extract F*** *(line 10) states 'Taxation is one way governments attempt to control cigarette consumption'.*

Explain the effect of indirect taxation on the consumption of cigarettes.

[10 marks]

Level of response	Response	Marks
3	• 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	• 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	• 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:

- what is meant by indirect tax and examples of these
- impact of indirect taxes on the costs of supply
- the impact of indirect taxes resulting in a leftward shift of the supply curve
- effects on market price and quantity consumed
- effect that elasticities of demand and supply may have on quantity and price.

MAXIMUM FOR QUESTION 31: 10 MARKS

3 2 ***Extract F*** *(line 12) states 'Regulation to reduce consumption of cigarettes is extensive in the UK.'*

Use the extracts and your economics knowledge to assess the view that regulation is the best way of dealing with the market failure that results from the consumption of cigarettes.

[25 marks]

Areas for discussion include:

- reasons for market failure
- consumption of tobacco as a source of market failure
- negative externalities in consumption and the application to smoking
- consequences of market failure
- information failure suggests smokers may give greater weight to the immediate benefits and discount the long-run costs
- over-production and consumption of cigarettes, ie the social optimum level of output is below the free market output
- tobacco as a demerit good
- regulation versus taxation
- examples of regulation and legislation in the market
- examples of different methods of intervention in the market
- comparing policies that provide incentives to change behaviour to those that use legislation
- opportunity cost issues of different forms of government intervention
- the impact of the various policies on tax revenues and public expenditure
- reasons for government failure
- unintended consequences of intervention
- the arguments for leaving it to market forces and individual choice.

The use of relevant diagrams to support the analysis should be taken into account when assessing thequality 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 32: 25 MARKS

Assessment Objectives

MCQs

Specification section	AO1 (K+U)	AO2 (Application)	AO3 (Analysis)	Total
2.1	1	1	-	2
2.2	2	2	1	5
2.3	2	1	-	3
2.4	1	1	2	4
2.5	3	1	2	6
TOTAL	9	6	5	20

Context 1 and 2

	A01	A02	A03	A04	
Section B					**TOTAL**
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		**20**
DRQ	12	16	11	11	**50**
Paper total	**21**	**23**	**15**	**11**	**70**