



GCE AS MARKING SCHEME

SUMMER 2017

**AS (NEW)
ECONOMICS - UNIT 1
2520U10-1**

INTRODUCTION

This marking scheme was used by WJEC for the 2017 examination. It was finalised after detailed discussion at the examiners' conference by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

Positive Marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good learner to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme, nor should marks be added as a consolation where they are not merited.

SECTION A

Question	Answer	Assessment Objective
1	C	AO1
2	A	AO1
3	C	AO1
4	D	AO2
5	E	AO2
6	B	AO1
7	D	AO1
8	B	AO1
9	E	AO2
10	C	AO2
11	A	AO2
12	E	AO2
13	D	AO2
14	A	AO1
15	B	AO1

SECTION B

Q.16	<p>Use the data. Compare the likely income elasticities of demand (YED) for milk and alcohol. [6]</p> <p>Award up to 3 marks per product (AO1 - 1 mark: AO2 - 2 marks)</p> <p>AO1 Does the candidate offer a 'correct' label (or YED value) for the product?</p> <p>Correct identification of YED according to a later justification given in AO2 column (or a value of YED is given which links to the justification offered in AO2)</p> <p>Milk: 1 mark</p> <p>If no justification is given, then candidate can have a mark for identifying the good as income inelastic/'necessity' or inferior (or YED values of +1 to 0, or any negative number).</p> <p>Alcohol: 1 mark</p> <p>If no justification is given, then candidate can have a mark for identifying the good as normal, income (in)elastic or luxury (or any positive YED value).</p> <p>Correct definition of YED will only be credited if there is nothing else in the candidate's answer that can be credited.</p>
Band	AO2
	2 marks per product
	Has the data been used to justify the labels and/or values used in AO1?
	2 marks
2	<p>Excellent use of the data.</p> <p>Relevant content from the data is used to develop and support their decision in AO1.</p>
	1 mark
1	<p>Limited use of the data.</p> <p>Candidate only uses one part of the data (from which it would be difficult to deduce a trend) or only looks at the very general trend without mentioning specific figures.</p>
	0 marks
0	<p>No use of the data</p> <p>Nothing worth crediting in the application of the data.</p>

Indicative content:

Whilst milk consumption increases from the 1st decile (1800ml) to the 2nd (2000ml) from that point onwards it stays relatively constant (at around 2000ml to 1800ml) and, if anything, starts declining as you move into the higher deciles (e.g. 6th decile is approx. 1900ml and 10th decile is 1800ml). This indicates that milk is somewhere between being income inelastic and inferior.

There is a very obvious upwards trend in alcohol consumption from the 1st decile (approx. 400ml) to the 5th decile (600ml) to the 10th decile (1000ml). This indicates that higher income households consume more alcohol than lower-income households, suggesting that alcohol is a normal good and, most likely, income elastic.

Candidates may also wish to evaluate whether YED values of Milk/Alcohol differ over the income range e.g. Milk behaves like a normal good and an inferior good depending on the income deciles that you are looking at. Examiners should give such a discussion credit if the answer fulfils the criteria of making a correct judgement on the 'label' of YED (AO1) based on a specific data set which is accurately presented (AO2).

With regards to Milk: Examiners should not credit the label Income elastic/Luxury, nor a strongly income elastic YED, nor a strongly inferior YED. Examiners should not credit any YED value that does not correctly correspond to the justification given in AO2. If candidate offers both a YED 'label' and a YED value, he does not score any marks if they are inconsistent with each other.

With regards to Alcohol: Examiners should not credit the label 'Inferior', nor any negative YED value, nor any YED value that does not correctly correspond to the justification given in AO2. If candidate offers both a YED 'label' and a YED value, he does not score any marks if they are inconsistent with each other.

Q.17 (a)	<p>Using examples from the data. Define the concept of private costs and external costs of alcohol consumption. [4]</p> <p>Private Costs (AO1 - 1 mark: AO2 - 1 mark)</p> <p>AO1 - Definition of the private costs of alcohol consumption.</p> <p>1 mark The term 'private costs' is defined to a good standard. This must be defined from the point of view of the consumer.</p> <p>AO2 - Suitable examples of the private costs of alcohol consumption.</p> <p>1 mark Examples of the private costs of alcohol are offered and are correct.</p> <p>External Costs (AO1 - 1 mark: AO2 - 1 mark)</p> <p>AO1 - Definition of the external costs of alcohol consumption.</p> <p>1 mark The term 'external costs' is defined to a good standard.</p> <p>AO2 - Suitable examples of the external costs of alcohol consumption.</p> <p>1 mark Examples of the external costs of alcohol are offered and are correct.</p>
----------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Indicative content:

Private costs: The cost that is incurred when an individual consumes something – in this case alcohol, which is likely to lead to possible ill-health and/or injury, long-term physical damage, loss of earnings due to hangover etc ...

OR

The actual cost (financial burden) of having to pay for an alcoholic drink. The fact that alcohol has a price (and therefore an opportunity cost) in its consumption can also be credited.

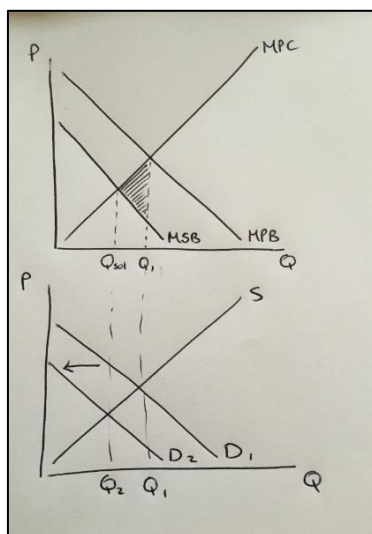
NB Private Costs in the sense of costs that are incurred when a business produces something (in this case alcohol, which is likely to have been raw ingredients, staff members, packaging, fixed and variable costs) cannot be credited since the question is about alcohol 'consumption'.

External Costs: External cost is the cost to a third party of a transaction between private agents (buyer and seller). Could also include: neither private agent (buyer or seller) takes responsibility for paying for the external cost. In this case, alcohol leads to external costs such as alcohol misuse and increasing NHS costs, alcohol is the biggest single cause of death in under-60's, drinking contributes to a number of serious health conditions, including cancer, liver disease and heart disease. Alcohol misuses costs the NHS in Wales about £109 m a year.

Q.17 (b)	Use an appropriate diagram. Discuss the extent to which public health campaigns alone can solve the market failure problem associated with alcohol consumption. [8]		
Band	AO1	AO3	AO4
	1 marks	3 marks	4 marks
	<i>Is the diagram correct?</i>	<i>Has economic theory been well developed to explain why public health campaigns alone can solve the market failure?</i>	<i>Has economic theory and/or 'real-world' analysis been used to evaluate the arguments?</i>
2		<p>2-3 marks</p> <p>A good analysis of how public information campaigns will reduce the demand of alcohol to optimal level.</p> <p>Analysis must link back to the ideas of: Market Failure Reduction in demand Resolving the market failure (socially optimum level/welfare maximisation)</p>	<p>3-4 marks</p> <p>Clear well-reasoned and balanced evaluation that counters the claims made in AO3 successfully.</p> <p>Clear reference to economic theory.</p>
1	<p>1 mark</p> <p>Diagram successfully shows the market failure <i>problem</i>.</p>	<p>1 mark</p> <p>A limited analysis of market failure.</p> <p>Limited reference to misallocation of resources.</p> <p>Superficial development.</p>	<p>1-2 marks</p> <p>Limited evaluation.</p>
0	<p>0 marks</p> <p>Incorrect diagram.</p>	<p>0 marks</p> <p>No or incorrect analysis of market failure.</p>	<p>0 marks</p> <p>No valid evaluation.</p>

Indicative content:

AO1 (diagram)



AO1 – Market failure diagram is correctly drawn OR demand curve shifts left, which returns the market to the socially optimum level.

AO3

Market Failure can be identified in this context in two main ways:

- 1) Demerit goods: consumers don't take into account the external cost of their alcohol consumption on the third party.
- 2) Asymmetric Information: consumers often don't realise the hefty costs on the third party involved with their alcohol consumption because they do not understand the likely consequences of binge-drinking.

Public health campaigns seek to directly inform consumers of the possible impact that alcohol may have on their health. In doing so, they hope to reduce people's fundamental demand preferences for alcohol which should lead to a reduction in demand for the good. As demand shifts left, this will cause the quantity of alcohol consumed to fall. It is the aim of the scheme that the allocation of resources into alcohol is now at the socially optimum level, thus solving the market failure.

NOTE: must talk about how this solves the market failure problem. E.G. Q_2 is the socially optimal level – welfare maximised for top band.

BUT

Public health campaigns cannot possibly reach all consumers and therefore it will have a limited impact. It may not solve the failure of over-consumption.

Even if the campaigns are well-publicised, people may still choose to ignore the information. People are desensitized to many awareness campaigns these days.

In addition, alcohol is price inelastic/an addictive substance. Just giving someone information will not change their behaviour. Campaigns cannot work alone; they must be supported by schemes to help people break their addictions.

People do not always behave rationally. They may well know about the full private and external costs of alcohol consumption (and that costs outweigh the utility gained) and still choose to consume despite this being an irrational choice.

Campaigns do not change the price of alcohol and as long as alcohol is cheap then people will continue to purchase it. Campaigns cannot work alone; they must be supported by schemes to help raise the price of alcohol such as tax and/or min price.

The figures show that binge-drinking has gone down but that is unlikely to have been caused by public health campaigns. Candidate may offer other reasons here, which should be credited if they are suitable. For example: young people today are more health conscious, the rise of social media means that young people can socialise at home, rather than around bus shelters and/or parks, the cultural diversity of the population has changed are there are more people following religions that do not tolerate alcohol consumption, academic places at University/College are so competitive that young people prefer to abstain from drinking.

Q. 18 (a) (i)	Calculate the % of the teacher's gross annual income paid in income tax.	Total
	AO2: 1 mark Award 1 mark for correct answer. $(£2329/22244)*100 = 10.47\%$. Accept 10% or 10.5%	1
(a) (ii)	How much would a person earning £10 000 per year pay in income tax? AO1: 1 mark £0/nothing – the income does not incur income tax since it is below the personal allowance threshold. No explanation needed. No other answer is acceptable.	1

Q.18 (b)	Use the data. Outline why income tax is generally considered to be progressive.		[4]
Band	AO1	AO2	
	2 marks	2 marks	
	<i>Does the candidate demonstrate a good understanding of what a progressive tax is?</i>	<i>Has the data been applied well?</i>	
2	2 marks Understanding of progressive taxes is either explicit through definition or implicit in the quality of the answer.	2 marks Reference to the income tax bands given in the data. The figures must be used explicitly through the use of a calculation . (i.e. % of income).	
1	1 mark Partially correct understanding. Either understanding of a tax on earnings or direct taxation.	1 mark Reference to the tax bands but no usage of the figures.	
0	0 marks No understanding.	0 marks No use of data.	

Indicative content:

AO1: Understanding can be shown in multiple ways. For example,

A progressive tax is one where the **average rate of tax rises as income rises.**

OR the proportion of your income taken in tax rises as you become richer.

OR as the taxable amount increases, the tax rates increases.

OR a larger percentage is taken from high-income earners than it does from low-income individuals.

AO2: Use of the tax bands to illustrate that people with higher incomes end up in higher tax brackets and how (OR as income increases, the % paid in income tax increases).

Candidates can use their answers to part (a) in their answer – this would satisfy the AO2 criteria and how as the taxable amount increases, the tax rates increases (OR as income increases, the % paid in income tax increases).

For example, the NQT is paying 10.47% of her income in tax (in the Basic Rate bracket) whilst someone earning half her salary is barely paying any income tax at all. A person earning £40,000 per year, however, pays 14.7% (Top Rate bracket) which is much more.

**Look out for confusion with incomes that are on the boundaries and not realising that income tax is staggered.

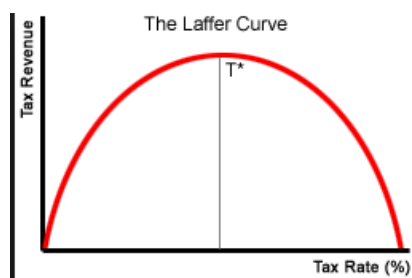
Q.18 (c) Use a Laffer Curve diagram. Discuss whether increasing the additional rate of income tax can successfully reduce income inequality in the UK. [8]			
Band	AO1	AO3	AO4
	2 marks	4 marks	2 marks
	<i>Has the candidate accurately drawn and interpreted the Laffer curve? Has the candidate shown a good understanding of income inequality?</i>	<i>Has economic theory been well developed to support the argument that income tax rates should be increased in order to reduce inequality?</i>	<i>Has economic theory been used to evaluate the arguments made in AO3?</i>
2	2 marks Accurate drawing - with all labels - of the Laffer Curve. AND Understanding of income inequality is either explicit through definition or implicit in the quality of the answer.	3-4 marks A good analysis. Candidate makes the link between tax rates and income inequality well and demonstrates that increasing the top rate of tax should decrease inequality.	2 marks Clear well-reasoned and balanced evaluation that counters the claims made in AO3 successfully. Clear reference to economic theory.
1	1 mark Only one of two things above is done successfully.	1-2 marks Limited analysis. NOTE: If there is nothing else in the candidate's answer that can be credited, then 1 mark can be credited for the mechanics of Laffer Curve.	1 mark Limited evaluation. Throwaway remarks without development should not be credited.
0	0 marks Inaccurate drawing. Income inequality is not satisfactorily understood.	0 marks No or incorrect analysis.	0 marks No evaluation offered.

No engagement with inequality cannot score more than 2 marks (AO1-1 and AO3-1)

Indicative content

AO1 – 1 mark: Income Inequality implies that there is a significant number of low-income earners and high-income earners in a country – and that the gap between them is very wide.

Laffer Curve (AO1 – 1 mark)



AO3 (Explanation): The Laffer Curve illustrates that tax revenue increases when tax rates are increased until T^* (the optimum level of tax). Beyond this point, increasing tax rates further will only reduce tax revenue as people look to avoid/evade tax or leave the country to seek work elsewhere.

Assuming tax is raised to a level below T^* , this additional revenue can then be used by the government in the form of welfare payments to improve the income levels of low income earners. Therefore the income inequality gap is closed.

Increase in top rate of income tax rate only affects higher income earners. Low income earners are not affected by the top rate of tax. Therefore the gap is closed. In addition, the government has already increased the Personal Allowance and this will have the greatest effect on lower income earners meaning that their net incomes are, again, closer together. Although it must be said that the very lowest earners (earning below P.A.) would not be better off after this move.

NOTE: If there is nothing else in the candidate's answer that can be credited, then 1 mark can be credited for the mechanics of Laffer Curve.

AO4 (Evaluation): At some point, however, high income earners may actually leave the country or try to evade/avoid paying taxes and tax revenue falls (hence the redistribution of wealth may also grind to a halt).

It depends on the size of the change – obviously a small change will have a negligible impact on closing the equality gap.

However, other factors affect income inequality within a country – not just income taxes. Other taxes such as Stamp Duty or Capital Gains Tax might be more appropriate if you really wanted to cut the gap. Or the government could increase welfare payments rather than increasing additional rate tax.

Answer is reversible.

Q.19	Discuss how the introduction of the National Living Wage is likely to affect investment within the Welsh economy.			[8]
Band	AO2	AO3	AO4	
	2 marks	4 marks	2 marks	
	<i>Has economic theory been well developed to support arguments with regards to the context of Wales?</i>	<i>Has economic theory been well developed to support the argument – that investment will fall?</i>	<i>Has economic theory been used to evaluate the arguments made?</i>	
2	2 marks Clear reference to the data or personal knowledge. Relevant content from the data is used to develop and support their argument.	3-4 marks A good analysis. A clear link from an increased min wage (perhaps through a diagram) through to the impact on firms and how that will affect their likely investment levels in the future.	2 marks Clear well-reasoned and balanced evaluation. Clear reference to economic theory to justify the judgement.	
	1	1-2 marks A limited analysis.	1 mark Limited evaluation. The evaluation may be unbalanced and superficial.	
0	0 marks No use of the data.	0 marks No or incorrect analysis.	0 marks No evaluation offered.	

Indicative content:

Candidates may make one of the following credible arguments:

AO3 (Explanation) - Investment will fall:

- Businesses' labour costs increase due to the Living Wage increases. This limits the money available for reinvestment and, therefore, limits future business growth.
- Businesses may seek alternative investment opportunities elsewhere (in other parts of the world) where labour costs are lower. They may leave Wales.
- Businesses may sense that unemployment is likely to rise (Living Wage diagram showing the rise of unemployment) and therefore they are unlikely to expand in a climate of high unemployment.
- Impact in Wales is likely to be greater than elsewhere in the UK because of the pre-eminence of low-wage industries – in particular parts of Wales. The effect in say South-East England is going to be much lower since most people are paid above the Living Wage.

AO4 (Explanation) - Investment will rise:

- Income inequality is reduced and therefore more workers have greater disposable income which they can spend in the economy. Increased consumption may drive investment (or at least it may offset the loss in investment).
- Investment is dependent on various factors – this must be expanded on in the context of the question if it is to gain any credit. For example, various capital infrastructure projects in Wales are being funded at the moment and therefore labour costs may be offset by the reduction in costs elsewhere and therefore investment may not fall as much. Or that entrepreneurial expectations may improve or even that interest rates fall to 0% in the future
- Businesses may take the opportunity to automate/mechanise their production processes and therefore investment actually increases in the short-term.

AO2:

Almost any use of data is permissible here so long as the points in AO3 and AO4 are heavily contextualised within the framework of the Welsh economy. Personal knowledge or any of the data above is used well to support the answer.

This is not an exhaustive list and examiners should be prepared to credit other answers if they are appropriate.

Answer is reversible. In this case, AO3 would be available for making the case that investment will not fall/increase.