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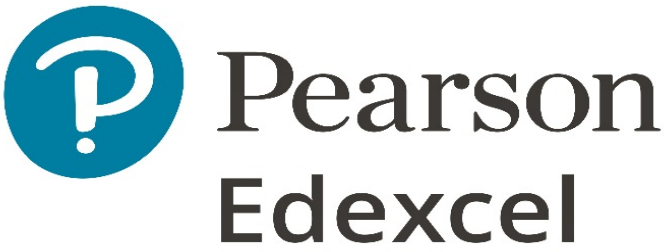

Mark Scheme (Results)

Summer 2019

Pearson Edexcel IAS
In Economics (WEC11)
Paper 01 Markets in Action

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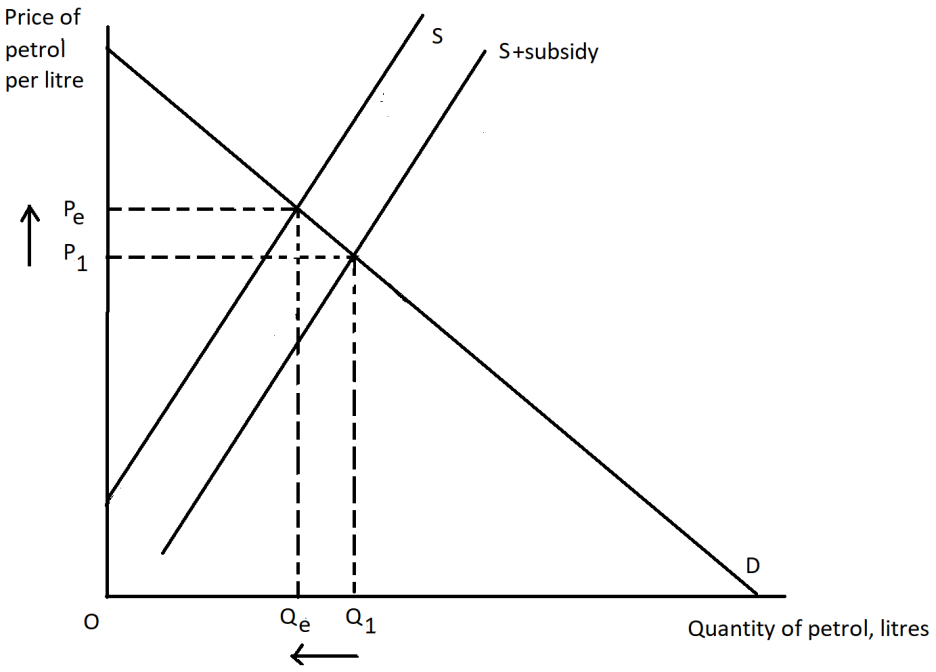
General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Section A

Question Number	Quantitative skills assessed	Answer	Mark
1	–	B	**(1)**
2	–	A	**(1)**
3	–	D	**(1)**
4	**QS9**: Interpret, apply and analyse information in written, graphical and tabular forms	B	**(1)**
5	**QS9**: Interpret, apply and analyse information in written, graphical and tabular forms	C	**(1)**
6	**QS8**: Make and interpret calculations of elasticity	D	**(1)**

Section B

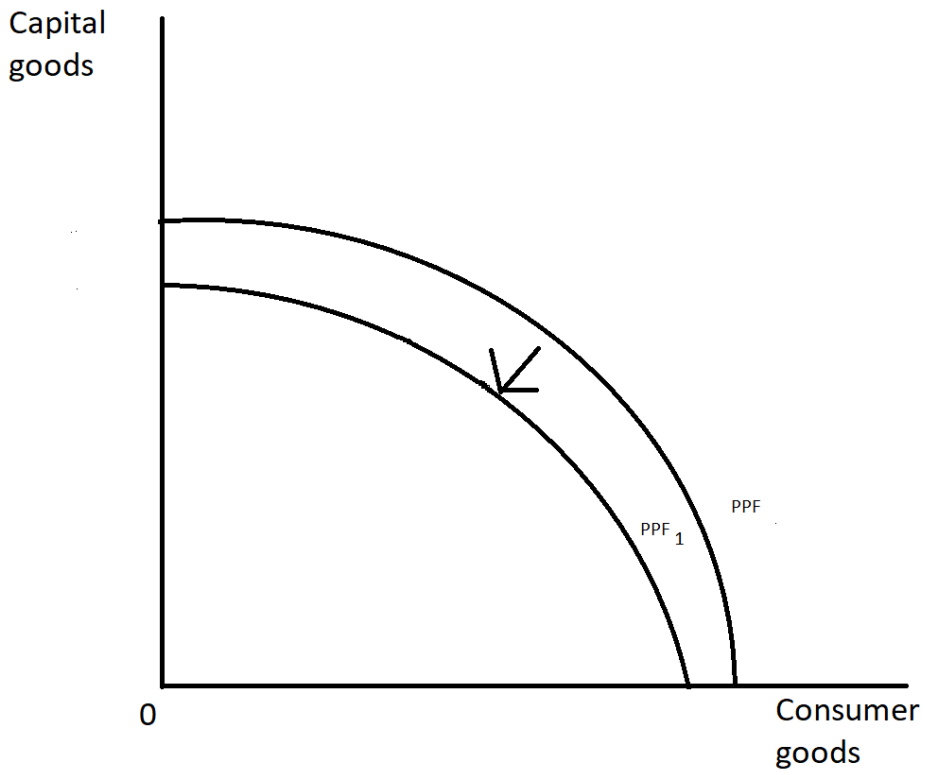
Question Number	In 2016 the Nigerian Government removed the subsidy on petrol. Draw a diagram to illustrate the impact of the removal of the subsidy on the equilibrium price and quantity of petrol. Answer	Mark
7	**Knowledge 1, Application 3** Quantitative skills assessed: **QS4**: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical and tabular forms. **Knowledge** • 1 mark for drawing original supply and demand (they do not have to include market equilibrium). **Application** Up to 3 marks for the following information included on diagram: • 1 mark for drawing a supply curve to the left of original • 1 mark for labelling the new higher price • 1 mark for labelling the new lower quantity.  	**(4)**

Question Number	With reference to Canada's electricity generation, explain the difference between 'renewable resources' and 'non-renewable resources'. Answer	Mark
8	**Knowledge 2, Application 2** **Knowledge** 1 mark for defining 'renewable resources' • An economic resource which is not depleted by use/ replenishes after use/ can be used continuously/ be used again and again **(1)**. 1 mark for defining 'non-renewable resources' • An economic resource that cannot be replaced/ replenished once used/ resource that is finite **(1)**. **Application** 1 mark for applying to the Canada's energy generation for a renewable resource, e.g.: • Hydro **(1)** • Other renewables could include solar/ wind **(1)** 1 mark for applying to the Canada's energy generation for a non-renewable resource, e.g.: • Coal/ Natural gas **(1)**. • Most electricity generated is renewable **(1)**	**(4)**

Question Number	Singapore's economy is highly dependent on trade with the rest of the world. In 2017, Singapore's exports were 173.3% of its GDP. Explain one role of financial markets in such an economy. Answer	Mark
9	**Knowledge 1, Application 1, Analysis 2** **Knowledge** 1 mark for identifying one role of financial markets, e.g.: • to make funds available to businesses and individuals/ • to facilitate the exchange of goods and services/ trade • to provide forward markets in commodities and currencies/ exchange of currencies • to provide a market for equities/ • to facilitate saving **(1)**. Or 1 mark for defining financial market The bringing together of buyers and sellers to exchange financial products **Analysis** Up to 2 marks for explaining how the role supports economic transactions e.g.: • So that firms can borrow money **(1)** to be able to buy capital goods from abroad **(1)**. • When consumers wish to purchase foreign goods they can pay using debit and credit cards **(1)** and banks will transfer money electronically to the foreign firm they buy from **(1)**. • With commodity prices being volatile this helps create stability in terms of having a predictable price **(1)** which can be traded on at a future date when the goods are imported **(1)**. • Enables firms to sell shares **(1)** to raise money to fund expansion to sell more goods to foreign customers **(1)**. • So that consumers can accumulate money **(1)** to be able to spend on goods from abroad **(1)**. **Application** Up to 1 mark for applying to how this facilitates more trade in goods and services, e.g.: • This will enable firms to increase output to be able to sell more products **(1)**. • As buying and selling goods becomes easier the volume of international trade is likely to increase **(1)**.	**(4)**

	• Contracts can be agreed with certainty ensuring more confidence and therefore more goods and services likely to be traded internationally **(1)**. • By firms being able to grow they will be able to increase the quantity of goods they buy from abroad and sell to abroad **(1)**. • Consumers are then able to use the savings to make larger purchases for example of cars from abroad **(1)**. • This helps exports to reach 173.3% of its GDP **(1)**. • Singapore depends on international trade **(1).**	

Question Number	In September 2017, Centrica increased the price of gas and electricity by 12.5%. Before the price rise Centrica had 12 800 000 customers but this fell by 800 000 after the price increase. Ceteris paribus, calculate the price elasticity of demand for gas and electricity from Centrica. Show your workings. Answer	Mark
10	**Knowledge 1, Application 3** Quantitative skills assessed: **QS8:** Make and interpret calculations of elasticity. **Knowledge** • 1 mark for the formula for price elasticity of demand: % change in quantity demanded / % change in price **(1)** **OR** • 1 mark for identifying that the good is relatively price inelastic. • The demand for Centrica's gas and electricity is price inelastic because the percentage change in price is greater than the percentage change in quantity demanded. **Application** Up to 3 marks for calculations: • Change in quantity ÷ original quantity -800 000 ÷ 12 800 000 x 100= -6.25% **(1)** • % Change in quantity ÷ % change in price -6.25%/12.5% **(1)** = -0.5 **(1)** **NB: if correct answer (-0.5) is given, award full marks regardless of working**	**(4)**

Question Number	Lithuania's population decreased from 3.7 million in 1989 to 2.9 million in 2015. Ceteris paribus, explain the likely impact of this change in population on Lithuania's production possibility frontier (PPF). Illustrate your answer with a diagram. Answer	Mark
11	**Knowledge 1, Application 1, Analysis 2** Quantitative skills assessed: **QS4**: Construct and interpret a range of standard graphical forms **Knowledge** 1 mark for defining production possibility frontier: • PPF is the maximum production potential using all available resources **(1)**. **OR** 1 mark for original PPF on diagram **Application** 1 mark for the following diagram, showing the shift in PPF:  **OR** 1 mark for reference to stem: • Population has decreased by 0.8m	

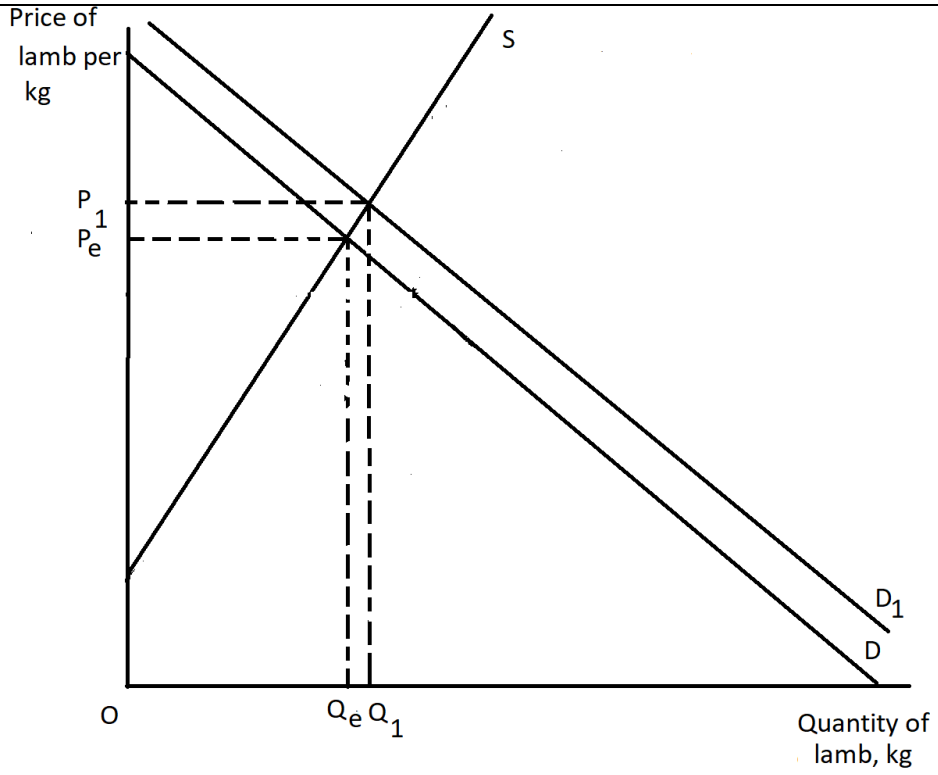
	Analysis Up to 2 marks for likely impact of this change: • Production possibilities fall **(1)** as less labour is available **(1)**. • Lithuania has fewer factors of production **(1)** so it can produce fewer consumer and capital goods **(1)**. • Economic growth rate is likely to decline **(1)** as it has a smaller labour force **(1)**.	**(4)**

Section C

Question Number	Define the term 'free good' (Extract A, line 7). Answer	Mark
12 (a)	**Knowledge 2** Up to 2 marks for defining a 'free good', e.g.: • A free good is a good with zero opportunity cost **(1)** This means it can be consumed in as much quantity as required without reducing the availability to others **(1)**. • Product is so abundant **(1)** that it is impossible for a price to be charged **(1)**. • Abundant in supply **(1)** with no opportunity cost **(1).** • A good that is not scarce **(1)** and does not have to be bought or traded **(1).**	**(2)**

Question Number	Between 2008 and 2016 weekly household real income increased by 2.7% in Australia. (b) With reference to Figure 1, explain the likely change in quantity demanded of lamb between 2008 and 2016. Answer	Mark
12 (b)	**Knowledge 2 Application 2** **Knowledge** Up to 2 marks for definitions of income elasticity of demand (YED) and inferior good: • The responsiveness of quantity demanded to a change in income. **OR** Formula for YED: $\frac{\%\text{ change in quantity demanded}}{\%\text{ change in income}}$ **(1)** • Inferior good has an income elasticity which is negative **(1)**. **Application** 1 mark for reference to the direction of change, e.g.: • The negative YED means that a rise in income will lead to a fall in quantity demanded /Quantity demanded will fall as income increases **(1)** 1 mark for reference to the actual change, e.g.: • The YED is less than 1 so quantity change will be less than proportional/ less than 2.7%/ 0.39% change **(1)** NB = **- (1)** 0.39% **(1)**	**(4)**

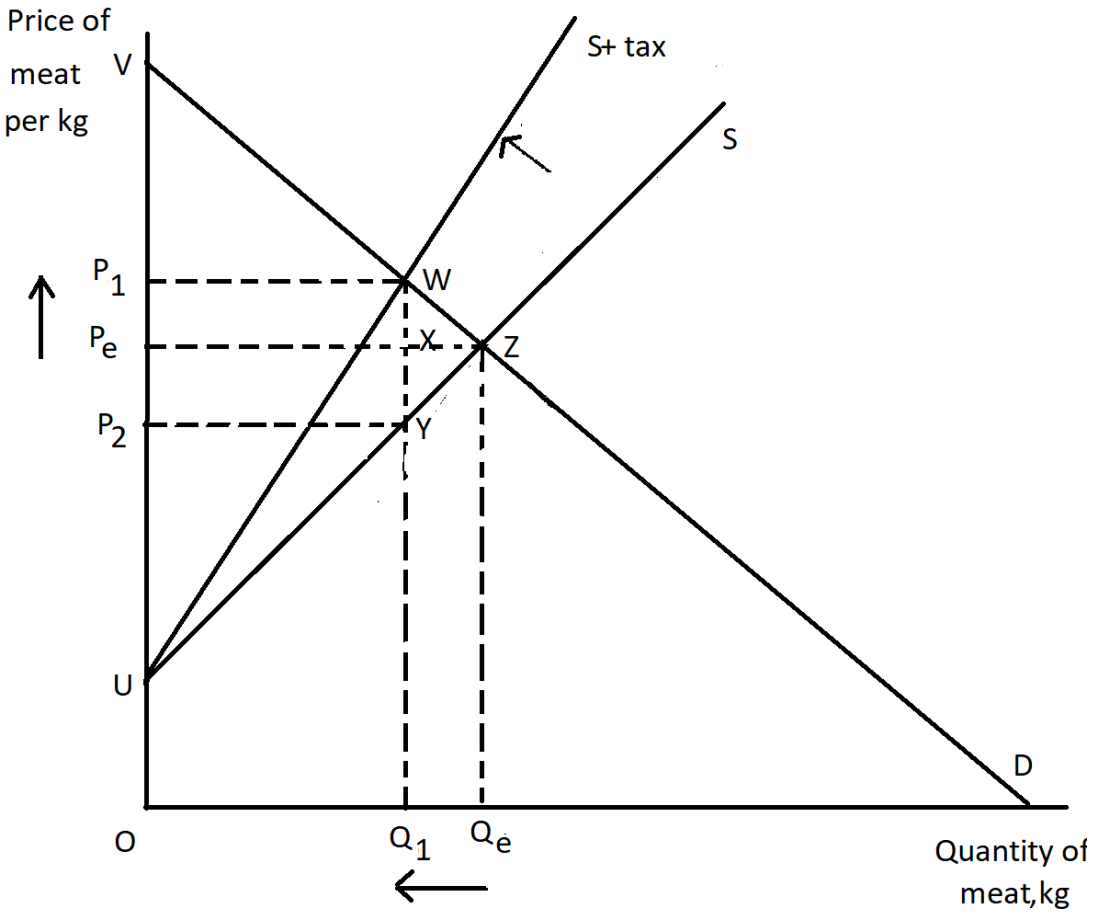
Question Number	With reference to Figure 2 and Extract A, analyse one reason why the price of lamb increased during 2017. Illustrate your answer with a supply and demand diagram. Answer	Mark
12 (c)	**Knowledge 2, Application 2, Analysis 2** Quantitative skills assessed: **QS4**: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical and tabular forms. **Knowledge** 1 mark for diagram showing original supply, demand and equilibrium **(1)**. 1 mark for identification of one reason from Extract A: • rising incomes / demand for Australian lamb rising 28%/ demand for lamb has risen in the USA/ advertising **(1)**. **Application** Up to 2 marks: 1 mark for the correct shift of demand on the diagram. 1 mark for interpreting data from Figure 2: • showing any change in price from 2017 e.g. from $5.00 in Jan 2017 to $5.80 in Dec 2017 **(1)**. NB accept reference to data from 2016 compared to 2017. **Analysis** Award 1 mark for development of how one reason leads to higher prices, e.g.: • Rising incomes mean they may eat more meat and therefore buy more lamb/ with lamb being a normal good an increase in global incomes will increase demand for lamb **(1).** • Demand for lamb rising in the USA means more competition for lamb which pushes up the price **(1)**. • The advertising campaign will generate more awareness/ interest in lamb pushing up demand **(1).** • The increase in demand sees an extension of supply **(1).** • PLUS 1 mark for diagram showing final equilibrium with higher price **(1)**.	



(6)

Question Number	With reference to Extract B, examine the external costs resulting from increased meat production. Answer	Mark
12(d)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Knowledge** Up to 2 marks for knowledge of external costs, e.g.: • Definition of external costs: negative impacts on third parties **(1)** • Where the marginal social costs are greater than the marginal private costs **(1)**. May be shown diagrammatically. **Application and Analysis** Up to 2 marks for each linked explanation showing the external costs of meat production up to a maximum of 4 marks, e.g.: • Meat production causes 15% of all global greenhouse gas emissions and extra greenhouse gases may contribute to global warming. This may affect farmer's ability to grow crops **(1+1)**. • Water pollution will affect water companies who have to invest more in cleaning the water/ will affect consumers who may become ill from drinking polluted water **(1+1)**. • Excessive use of antibiotics is also leading to resistance amongst humans which means when antibiotics need to be used they will be ineffective **(1+1)**. • Consuming too much meat damages health costing health services to treat those affected **(1+1)** **Evaluation** Up to 2 marks for two evaluative points or one evaluative point developed, e.g.: • Whilst firms involved in meat production benefit from production other producers lose out such as water industry **(1+1)**. • External costs must be balanced with private benefits of production/ employment is created by meat production **(1+1)**. • Magnitude: it depends on production as to the size of external costs and 15% represents a significant contribution to greenhouse gases **(1+1)**. • Training on how to produce in an environmentally friendly way can help reduce the size of external costs **(1+1)**. • Measurement of the size of any external costs is difficult to determine and quantify **(1+1).** • Meat consumption may be just as damaging as meat production. Over time, rates of obesity, diabetes and cancer	**(8)**

	will rise **(1+1)**	

Question Number	With reference to Extract B, discuss the likely effects of the introduction of an indirect tax on meat. Illustrate your answer with an appropriate diagram. Indicative content
12(e)	**Indicative content guidance** Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited. **Quantitative skills assessed** **QS4**: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical and tabular forms. **Knowledge, Application and Analysis (8 marks) – indicative content** • Definition of 'indirect taxation' – tax on expenditure. • Identification of ad valorem tax as percentage tax. • Indirect tax adds to production costs of meat producers. • Diagram of showing the introduction of an indirect tax on meat. 

	• Originally the price paid by consumers was P_e but rises to P_1 • Revenue earned by meat producers per unit sold falls from P_e x Q_e to P_2 x Q_1 • Consumer surplus falls from P_eVZ to P_1VW. A change/ Reduction of P_eP_1WZ. • Producer surplus falls from P_eUZ to P_2UY. • Government revenue earned from the tax P_1P_2YW. • Consumer incidence P_eP_1WX. • Producer incidence P_eP_2YX. • Quantity of meat consumed will fall from Q_e to Q_1 • External costs reduced: o Reduced greenhouse gas emissions o Reduced water pollution o Reduced chance of resistance to antibiotics o Reduced damage to health- obesity, diabetes and cancer- reducing costs to health services • Welfare loss from overconsumption will be reduced. • Deadweight loss WYZ. • Helps to meet Paris agreement target on carbon emissions. • 40% tax on beef, 20% on dairy products and 8.5% on chicken would save 500 000 lives a year and reduce emissions. • Total revenue earned by meat producers may fall. • Profits generated by meat producers may fall. • Employment in meat production may fall. • Impact on consumers living standards with such a large tax.	
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 3	7–8	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using

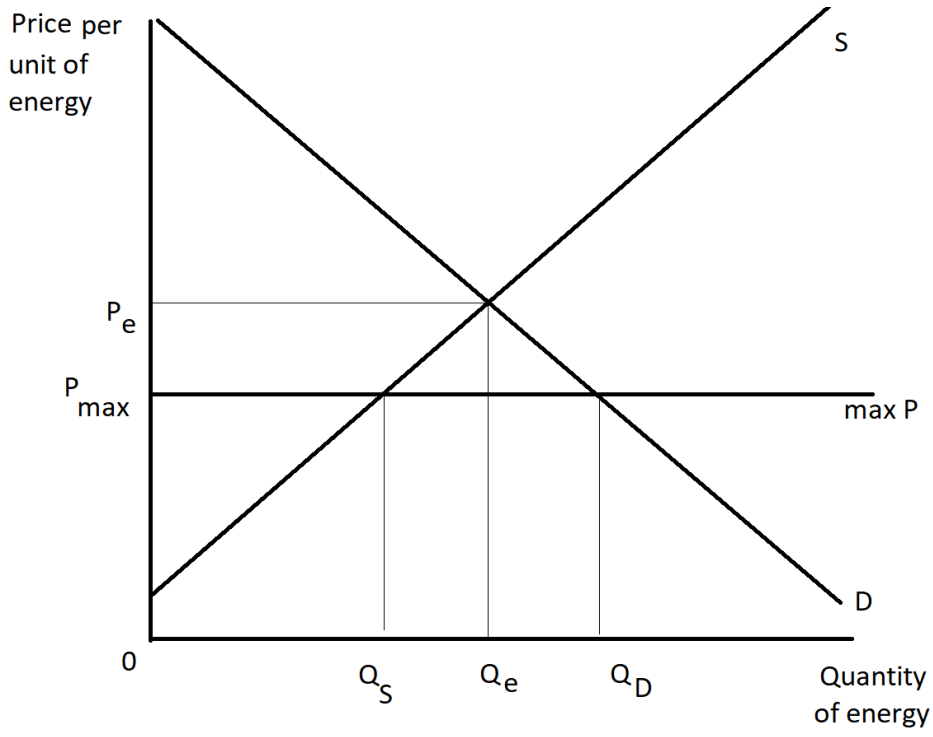
		relevant examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.
	Evaluation (6 marks) – indicative content • Magnitude of size of tax is important. Suggested 40% tax on beef significant so likely to have a large impact. • Measurement – it is hard to measure what the ideal tax rate is for each meat/ Hard to measure the external costs associated with each meat. • Farmers/ meat producers may earn less income and lead some to leave the industry. • May create government failure as some may trade illegally to avoid or evade taxation. • Demand for some meats may be price inelastic meaning little change in quantity demanded; larger change in price, larger consumer incidence. • Indirect tax affects lower income families more as the tax will represent more of their total income.	
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–2	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	5–6	Evaluation recognises different viewpoints and/or is critical of the evidence. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Section D

Question Number	'The HPV vaccine is recommended for all adults in the USA because it reduces the risk of cancer by 88%. If the HPV vaccine was given to all adults 925 000 cases of cancer would be prevented. However only 18.3% of adults were vaccinated between 2011 and 2014 preventing 170 000 cases of cancer.' Evaluate why only 18.3% of adults were vaccinated. Indicative content
13	**Indicative content guidance** Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. **Knowledge, application and analysis (12 marks) – indicative content** • Rational consumers – will maximise their utility. • They will maximise their utility by having the vaccine as it reduces their risk of developing cancer. • Reduces risk of cancers by 88%. • Prevented 170 000 cancers- could have prevented 925 000 • US has private healthcare and low take-up may relate to costs of the vaccine. • The influence of other people's behaviour (herding) may mean people do not have the vaccine as their friends may also avoid the vaccine. • Habitual behaviour- this is a new vaccine and people will not yet be in the habit of having this vaccine. • Inertia- customers may not have the energy to arrange appointments and to have the vaccination. • Poor computational skills may exist where they cannot calculate the benefit in terms of lower cancer risk. • Asymmetric information/ information gaps may exist where people do not have enough information to calculate possible benefits of receiving vaccine compared to the costs of vaccination. • Government needs to better inform people of the benefits of having the vaccine or the risks of not having the vaccine. • People may fear that the new vaccine may have side effects or unknown complications- a rational decision. • People may ignore any external benefits- reducing costs to health services and leads to under consumption of the vaccine. • External benefits- benefits to third parties- so consumers may under consume-as they do not consider the third-party effects • Low income families will be unable to afford vaccinations
Level	Mark | Descriptor

	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context, using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.
	Evaluation (8 marks) – indicative content • Measurement problem – it is difficult to measure the size of any external benefits/ it is difficult to measure truly how many cancers the vaccine would prevent- figures given are estimates. • Magnitude – a significant number not taking the vaccine with only 18.3% take up. • Time frame – in the short-term people may not take the vaccine but over the long-term with more information and more being protected more will take the vaccine. • Some may be acting rationally as they fear there are unknown problems with the vaccine. • Opportunity costs of having the vaccine. • Large numbers of poor households in the USA cannot afford the vaccine.	
Level	Mark	Descriptor
	0	No rewardable material.

Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Question Number	‘12 million consumers within the UK are on standard variable tariffs for their gas and electricity. One energy supplier, RWE npower, charged consumers on the standard variable rate £1 166 per year. However, its cheapest deal was £935 per year. Consequently the UK Government is introducing a maximum price for gas and electricity.’ Evaluate the likely impact of the introduction of a maximum price for gas and electricity. Indicative content
14	**Indicative content guidance** Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited. **Knowledge, application and analysis (12 marks) – indicative content** • Maximum price- the price ceiling above which price cannot be charged. • The idea is to protect consumers from being charged very high prices for gas and electricity. • When they pay £1 166 it is a high price compared to the cheapest deal- £231 more expensive. • Diagram may be offered.  • The price charged to standard variable rate customers should fall from P_e to $P_{max.}$ • This will see a **contraction** in quantity supplied to Q_s as providing

		the good is less profitable. • The lower price will see an **extension** in demand to Q_D as product is more affordable. • Maximum price causes excess demand/ a shortage. • Consumer surplus will rise for those being charged a lower price. • Producer surplus will fall. • Total revenue and profit may fall for electricity and gas providers. • Could reduce choice to consumers as some firms may decide to leave the market, further increasing the shortage in the future. • The emergence of informal activities, alternative sources of energy.
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.
	Evaluation (8 marks) – indicative content • Measurement problem – what level should maximum price be set at. • Magnitude – depends on level of maximum price as to whether it	

		will have desired impact/ 12 million may benefit from this policy. • Time frame – it will take time for the maximum price to be implemented. • Consumers may be worse off if they cannot secure a supplier as supply contracts. • Regulators will ensure customers still receive supply. • Firms may change the way they charge to get around the maximum price. • Long term energy supply problems if maximum prices discourage investment in the industry. • Demand likely to be inelastic so little change in quantity
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

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