PEARSON EDEXCEL IAL ECONOMICS · YEC11

ECONOMICS



MARK SCHEME

UNIT 1: CONSUMER BEHAVIOUR AND DEMAND

SCORE	PERCENTAGE
/116	%

STEMUP

These questions belong to Pearson Edexcel, not to us.

The examination questions, mark schemes and examiner comments in this pack were written and published by Pearson Edexcel. They are past assessment materials, reproduced here so that students can revise from them.

What we do not own

STEMUP is not affiliated with Pearson Edexcel and does not own, and makes no claim to own, any of the question, mark scheme or examiner report material in this pack. Pearson Edexcel has not endorsed, approved or been involved in the production of it. Pearson Edexcel and the qualification titles used here belong to their respective owners and appear for identification only.

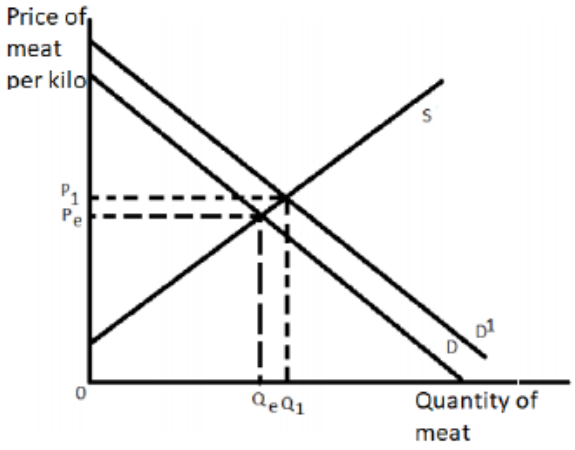
Where to find the originals

Pearson Edexcel publishes its past papers, mark schemes and examiner reports free of charge. Always check the current specification at qualifications.pearson.com before you revise, because content and wording can change between series.

If you hold the rights to any material in this pack and would like it amended or removed, contact admin@stemup.co.uk and we will act on it.

Mark Scheme

Q1.

Question	The cross elasticity of demand for meat with respect to fish is estimated to be +0.13 in Bangladesh Explain the likely impact of a 10% increase in the price of fish on the demand for meat in Bangladesh. **Answer**	Mark
	Knowledge 1, Application 1, Analysis 2 Quantitative skills assessed: **QS8**: Make calculations of elasticity and interpret the result. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** • 1 mark for definition or formula of cross elasticity of demand e.g.: Responsiveness of demand for one product to a change in the price of another product $\frac{\%\text{ change in quantity demanded of good x}}{\%\text{ change in price of good y}}$ (1) **Application** 1 mark for application to meat and fish • Meat and fish are substitutes (1) • XED between fish and meat is positive (1)	
	Analysis Up to 2 marks for calculating the likely impact on demand for meat • An increase in demand (1) of 1.3% (0.13 x 10) (1) **Or** Up to 2 marks for using a diagram to show the likely impact on demand for meat  • For showing increase in demand (1) • For showing increase in equilibrium price/quantity (1)	

	Or 2 marks for alternative written explanation. • If the price of fish increases consumers will buy more meat causing the demand for meat to increase (1) the percentage increase will be less than 10% as the cross elasticity is inelastic (1) • Not close substitutes (1) so the impact so will result in a less than proportionate impact on quantity of meat demanded (1)	**(4)**

Q2.

Question	Quantitative skills assessed	Answer	Mark
	–	D	**(1)**

Q3.

Question	*Ceteris paribus*, calculate the income elasticity of demand for cars between 2011 and 2021. Show your working. **Answer**	Mark
	Knowledge 1, Application 3 Quantitative skills assessed: **QS8:** Make calculations of elasticity and interpret the result. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** 1 mark for definition/the formula for income elasticity of demand % change in quantity demanded % change in income **OR** 1 mark for identifying that cars are normal goods **(1)** **Application** Up to 3 marks for calculations: • Change in quantity 14 926 900 – 12 741 800 = 2 185 100 Change in quantity ÷ original quantity x 100 2 185 100 ÷ 12 741 800 x 100 = 17.15% **(1)** • Change in income 44 225 – 31 024 = 13 201 Change in income ÷ original income x 100 13 201 ÷ 31 024 x 100 = 42.55% **(1)** % change in quantity demanded % change in income • 17.15 ÷ 42.55 = 0.40 **(1)** **NB: if correct answer (e.g. 0.40 to 2 d.p./0.403055 to 6 d.p./ 0.4030245 without any rounding) is given, award full marks regardless of working.**	**(4)**

Q4.

Question	*Ceteris paribus,* calculate the income elasticity of demand for cinema tickets. Show your working. **Answer**	**Mark**
	Knowledge 1, Application 3 Quantitative skills assessed: **QS8:** Make calculations of elasticity and interpret the result. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge** 1 mark for definition/the formula for income elasticity of demand % change in quantity demanded % change in income **(1)** **Application** Up to 3 marks for calculations: • Change in quantity 7.6-4.7=2.9 Change in quantity ÷ original quantity x 100 2.9÷4.7 x 100= 61.70 **(1)** • Change in income 4 166-4 022= 144 Change in income÷ original income x 100 144÷4 022 x 100= 3.58 **(1)** % change in quantity demanded % change in income 61.70÷3.58 = 17.23 **(1)** **NB: if correct answer (e.g. 17.23 to 2 d.p.) is given, award full marks regardless of working.** **Accept reasonable rounding from full calculation or from earlier stages in calculation i.e. 17.2** **(61.7021277÷3.58030383= 17.2337686)** **Award 3 if % sign is added to correct YED value**	**(4)**

Q5.

Question	*Ceteris paribus*, calculate the income elasticity of demand for new cars. Show your workings. **Answer**	Mark
	Knowledge 1, Application 3 Quantitative skills assessed: **QS2** Calculate, use and understand percentages, percentage changes and percentage point changes **QS8:** Make calculations of elasticity and interpret the result. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge** 1 mark for definition/the formula income elasticity of demand % change in quantity demanded % change in income **(1)** **Application** Up to 3 marks for calculations: • Change in quantity of car sales 23.56m – 21.52m = 2.04 Change in quantity ÷ original quantity x 100 2.04m ÷ 21.52m x 100= 9.48% **(1) 9.4795539033** • Change in income 114 029 – 106 837 = 7 192 Change in income ÷ original income x 100 7 192 ÷ 106 837 x 100= 6.73% **(1) 6.7317502363** % change in quantity demanded % change in income 9.48 ÷ 6.73 = + 1.41 **(1)** **Accept reasonable rounding e.g.** 9.5 ÷ 6.7 = +1.42 **NB: if correct answer (e.g. 1.41, 1.409, 1.4086, 1.408, 1.408186, 1.42) is given, award full marks regardless of working.** **Accept reasonable rounding from full calculation** **If 1.41% or -1.41 is given award 3 marks**	**(4)**

Q6.

Question	Ceteris paribus, calculate the price elasticity of demand for sugar. Show your workings. **Answer**	Mark
	Knowledge 1, Application 3 Quantitative skills assessed: **QS8:** Make calculations of elasticity and interpret the result. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** 1 mark for definition/the formula for price elasticity of demand % change in quantity demanded % change in price **(1)** **Application** Up to 3 marks for calculations: • Change in quantity ÷ original quantity x 100 -1 020 ÷ 172 620 x 100 = -0.59% **(1)** • Change in price ÷ original price x 100 3.78 ÷ 11.28 x 100 = 33.51% **(1)** % change in quantity demanded % change in price • -0.59 ÷ 33.51 = -0.0176 **(1)** **NB: if correct answer (e.g. -0.0176/-0.018/-0.02) is given, award full marks regardless of working.** **Award three marks if negative sign omitted.**	**(4)**

Q7.

Question	Explain **one** reason why many consumers behave in this way and remain with their current internet providers. Answer	Mark
	Knowledge 1, Application 1, Analysis 2 **Knowledge & Analysis** 1 mark for knowledge and a further 2 marks for linked analysis e.g.: • Irrational behaviour is where consumers fail to maximise their utility **(1)** • Rational behaviour is where consumers maximise their utility **(1)** • People may be influenced by others' behaviour **(1)** where they stay with the same provider because their friends and family do **(1)** • People exhibit habitual behaviour **(1)** where they have used the same internet provider and are in a habit of using them/ loyal to the provider **(1)** • Consumers experience inertia **(1)** where they lack the energy or desire to go through the process of switching internet providers **(1)** • Consumers have poor computational skills **(1)** meaning they find it difficult to calculate the amount they can save by switching **(1)** • Consumers feel valued by current internet providers **(1)** so remain loyal to them **(1)** • Consumers may not have information about the possible savings **(1)** and therefore may be unaware that they could get a better deal by switching provider **(1)** **Application** Up to 1 mark for applying to Canada's internet providers, e.g.: • Consumers can save 25% by switching to smaller providers **(1)** • Consumers tend to stay with more expensive providers **(1)**	**(4)**

Q8.

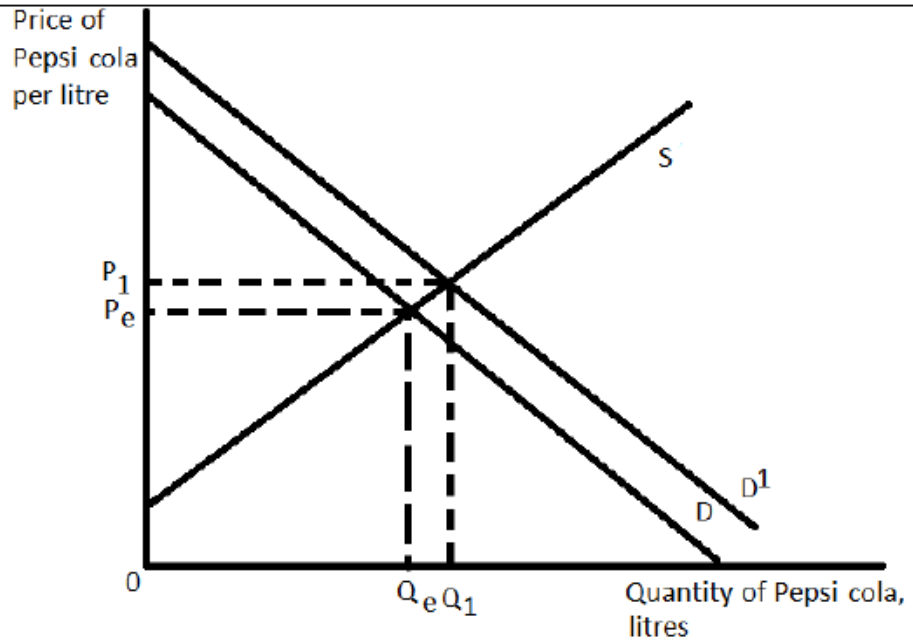
Question	Quantitative skills assessed	Answer	Mark
	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is D** **A** is not correct because if consumers felt undervalued they are more likely to leave **B** is not correct because if consumers have good computational skills they will calculate the fact they are paying £108 more **C** is not correct because the free-rider problem relates to the underprovision of public goods	**(1)**

Q9.

Question Number	Quantitative skills assessed	Answer	Mark
	QS9: Interpret, apply and analyse information in written, graphical and tabular forms	C	**(1)**

Q10.

Question Number	Answer	Mark
	Knowledge 1, Application 1, Analysis 2 Quantitative skills assessed: **QS4**: Construct and interpret a range of standard graphical forms **QS8:** Make calculations of elasticity and interpret the result. **Knowledge** 1 mark for definition/formula of cross elasticity of demand e.g.: Responsiveness of demand for one product to a change in the price of another product Or $\frac{\%\text{ change in quantity demanded of good x}}{\%\text{ change in price of good y}}$ **(1)** **Application** 1 mark for identifying that Pepsi cola and Coca Cola are substitutes • The XED is positive and therefore they are substitutes. **(1)** **Analysis** Up to 2 marks for likely impact on Pepsi cola • An increase in demand **(1)** of 12.4% (1.24 x 10) **(1)** **NB accept rounded figures** **OR**	**(4)**



- For showing increase in demand **(1)**
- For showing increase in equilibrium price/ quantity **(1)**

Or

- Verbal description of impact of increase in price of Coca Cola on demand for Pepsi cola
- As the price of Coca Cola increases consumers will substitute to the relatively cheaper Pepsi cola causing the demand to increase **(1)** the percentage increase will be greater than 10 as the cross elasticity is elastic **(1)**
- Close substitutes **(1)** so the impact so will result in a more than proportionate impact **(1)**

Q11.

Question	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B**- The demand for water will be most responsive to a change in the price of sugar-sweetened drinks **A** is not correct because coffee has the lowest cross elasticity of demand showing it will be least responsive **C** is not correct because an increase in the price of sugar sweetened drinks will lead to a less than proportionate increase in the demand for milk **D** is not correct because an increase in the price of sugar-sweetened drinks will lead to an increase in the demand for water, milk and coffee	**(1)**

Q12.

Question	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is D** **A** is not correct because the data provided is for cross elasticity of demand and not for income elasticity of demand **B** is not correct because the data provided is for cross elasticity of demand and not for income elasticity of demand **C** is not correct because fish and rice are substitutes as the value of XED is positive	**(1)**

Q13.

Question	Quantitative skills assessed	Answer	Mark
	QS4: Construct and interpret a range of standard graphical forms **QS8**: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is A** **B** is not correct because an increase in the price of one complement would result in a reduction in the quantity demanded for the other complement **C** is not correct because a change in the price of one good causes a change in demand for the other good **D** is not correct because there is no information on income	**(1)**

Q14.

Question	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** **A** is not correct because complements have a negative XED **C** is not correct because unrelated goods have an XED of 0 **D** is not correct because there is no information on income	**(1)**

Q15.

Question	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is D** **A** is not correct because there is no information on income elasticity of demand **B** is not correct because substitute goods have a positive XED **C** is not correct because the value of XED is not zero	**(1)**

Q16.

Question	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** **A** is not correct because complements have a negative XED **C** is not correct because there is no information on the income elasticity of demand **D** is not correct because there is no information on the income elasticity of demand	**(1)**

Q17.

Question	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is D** **A** is not correct because there is no information on the income elasticity of demand **B** is not correct because there is no information on the income elasticity of demand **C** is not correct because complements have a negative XED	**(1)**

Q18.

Question	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is A** **B** is not correct because the data provided are for cross elasticity of demand and not income elasticity of demand **C** is not correct because unrelated goods would have an XED of zero **D** is not correct because complements have an XED which is negative	**(1)**

Q19.

Question	Define the term 'complementary goods' (Extract A, line 8). **Answer**	Mark
	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge 2** Up to 2 marks for defining 'complementary goods', e.g.: • Goods that are used/consumed together/in joint demand **(1)** • Negative XED/XED value below 0 **(1)** • When the price of one increases the demand for the other decreases **or** when the price of one decreases the demand for the other increases **(1)** • Only accept explicit reference to Extract A: Tyres and cars are complementary goods **(1)**	**(2)**

Q20.

Question	Define the term 'price elasticity of demand' (Figure 2) **Answer**	Mark
	QS8: Make calculations of elasticity and interpret the result. **Knowledge 2** Up to 2 marks for defining 'price elasticity of demand.' e.g.: • The responsiveness of quantity demanded **(1)** to a change in price **(1)** • % change in quantity demanded/% change in price **(1+1)** • $\Delta Q_D/Q_D \div \Delta P/P$ **(1+1)** • PED of chicken is -0.55/ relatively inelastic **(1)**	**(2)**

Q21.

Question Number	Define the term 'substitutes' (Extract A, line 12).	Mark
	Knowledge 2 Up to 2 marks for defining a 'substitute', e.g.: • A good that meets the same need as another product **(1)** so consumers can switch demand from one to the other **(1)**. • A good with a positive cross elasticity of demand **(1)** such as tea and coffee **(1)**. Other relevant examples are accepted. • Where the price of one good increases and the quantity demanded for another good increases/ where the price of one good decreases and the quantity demanded of another good decreases **(1)**.	**(2)**

Q22.

Question	Define the term 'substitutes' (Extract A, line 8). **Answer**	Mark
	Knowledge 2 Up to 2 marks for defining a 'substitute', e.g.: • Two goods that serve the same need. **(1)** • Consumers can switch between the two goods and receive similar benefits **(1)** • A good which has a positive cross price elasticity of demand **(1)** • Where the price of one product increases it leads to an increase in quantity demanded of the other product **(1)** • Example from Extract A: Vanilla and vanillan **(1)**	**(2)**

Q23.

Question Number	Define the term 'substitutes' (Extract A, line 9). Answer	Mark
	Knowledge 2 Up to 2 marks for defining a 'substitute', e.g.: • Two goods that serve the same need **(1)** • Consumers can switch between the two goods and receive similar benefits **(1)** • A good which has a positive cross elasticity of demand/XED above zero **(1)** • Where the price of one product increases and it leads to an increase in quantity demanded of the other product **(1)** • Example from Extract A: sugar and artificial sweeteners **(1)** • Where the price of sugar increases and it leads to an increase in quantity demanded of artificial sweeteners **(1+1)**	**(2)**

Q24.

Question	Quantitative skills assessed	Answer	Mark
	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is C** **A** is not correct because this occurs when there is increasing marginal utility **B** is not correct because diminishing marginal utility is not related to the supply curve **D** is not correct because diminishing marginal utility means the utility will rise at a slower rate as more of the product is consumed	**(1)**

Q25.

Question	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** **A** is not correct because the demand for the railway tickets in Guadalajara is price inelastic **C** is not correct because an increase in the price of railway tickets in Monterrey will increase total revenue **D** is not correct because there is no data on income provided	**(1)**

Q26.

Question Number	Quantitative skills assessed	Answer	Mark
	QS8: Make and interpret calculations of elasticity	D	**(1)**

Q27.

Question	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is C** **A** is not correct because Caribbean holidays are a luxury/normal good **B** is not correct because healthcare does not have an income elasticity of demand value above +1 **D** is not correct because there is no data on price elasticity of demand	(1)

Q28.

Question Number	In 2017 floods in Bangladesh resulted in 8 million people having to move from their homes. 100 000 houses were destroyed and many crops were lost. The Institute of Water and Flood Management claim that there had been an under-investment in flood defences. Evaluate reasons for this under-investment in flood defences. Make reference to public goods in your answer.
	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** • Public goods defined- non-rival and non-excludable. • Non-rival: one person's consumption does not negatively impact on another consumption. • Non-excludable: one person's consumption does not prevent another from consuming. • Flood defence is a public good as ○ If flood defence is in place then protecting one house does not prevent the protection of another house ○ If flood defence is protecting one house it does not reduce the protection offered to the next house • Free riders: if one person puts in place flood defences others will benefit. • This means private individuals are unlikely to contribute to flood defences, as they know they would benefit anyway if they do not contribute/ or that others would benefit if they did. • This leads to an under-provision and under-investment in the public good of flood defences. • This is an example of market failure as there is an inefficient allocation of resources. • The cost of flood defences may exceed the costs of damage from flooding. • There may be imperfect market information- where people do not know the benefits of flood defence/ costs of not putting in place flood defences. • May be a lack of Government funds to afford flood defences/ May be difficult to effectively defend against flooding. • Bangladesh is a low-income country and finance for flood defences is limited. • May lack technology/ engineers to put in place flood defences

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 • The cost of flood defences may be less than the costs of damage from flooding as 8 million moved from their homes, crops destroyed and 100 000 homes lost. • It is not necessarily imperfect information but nature is unpredictable and it is hard to predict amount of rainfall or ice melting in mountains. • Measurement problem: it is hard to estimate the amount of flood defence that is needed. • Opportunity costs if resources are used for flood defence than funds are not available for education or health care. • Provision of information: Government could correct any information failure.	
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.

Q29.

Question	With reference to the last paragraph of Extract C, examine **two** likely effects on smartphone manufacturers of the growth in the market for refurbished smartphones. **Answer**	Mark
	Knowledge 2, Application 2, Analysis 2, Evaluation 2 Quantitative skills assessed: **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge and Analysis** Up to 2 marks for identifying two effects (K) and up to 2 marks for linked explanation (AN), e.g.: • New smartphone manufacturers lose revenue **(1K)** as consumers substitute to refurbished smartphones **(1AN)** • New smartphone manufacturers achieve lower profit/producer surplus **(1K)** as the demand for new smartphones decreases **(1AN)** • Manufacturers of refurbished smartphones gain revenue **(1K)** as consumers look to save money by purchasing the cheaper alternative **(1AN)** • Manufacturers of refurbished smartphones achieve higher profit/producer surplus **(1K)** they purchase the phones and sell them at a higher price **(1AN)** • Manufacturers of new smartphones have the incentive to encourage customers to return their smartphones after use **(1K)** and then refurbish these to add to the firms total revenue **(1AN)**	

	Application Up to 2 marks for reference to Extract A, e.g.: • The market for smartphones that have been refurbished is forecast to be worth $65 billion by 2024 **(1)** • Typically, a consumer can sell a one-year-old smartphone for 50% of its original price **(1)** • The manufacturer can sell the same refurbished smartphone for 80% of its original price **(1)** • Unwanted smartphones in developed countries are desired in emerging countries **(1)** **Evaluation** Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.: • We do not know how this value compares to revenues generated by producing new smartphones **(1+1)** • There may be other external costs involved in refurbishment that manufacturers do not take account of **(1+1)** • The consumers may find reliability issues/inferior product compared to new models **(1+1)** • Profits may be limited by production requiring a large amount of labour **(1+1)**	**(8)**

Q30.

Question Number	Answer	Mark
	Knowledge 2 Application 2 Quantitative skills assessed: **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge** Up to 2 marks for definitions: • Substitutes are goods with a positive cross elasticity of demand/ two goods that meet the same need **(1)** • Price elasticity of demand is the responsiveness of quantity demanded to a change in price/ or formula **(1)** • Elastic demand is where a change in price leads to a proportionally larger change in quantity demanded/ diagram showing elastic demand **(1)** **Application** Up to 2 mark for application to Extract A • Competing vegetable oils such as rapeseed, soybean and sunflower **OR** Crude oil is a substitute for palm oil (used in biodiesel) **(1)** • With so many substitutes an increase in the price of palm oil would see customers substitute to alternative- crude oil/ rapeseed/ soybean/ sunflower oil **(1)** meaning demand will be relatively elastic / cause the PED to increase **(1)**	**(4)**

Q31.

Question	Explain the likely impact of a 5% increase in the price of sugar-sweetened drinks on the demand for milk. **Answer**	Mark
	Knowledge 1, Application 1, Analysis 2 Quantitative skills assessed: **QS4**: Construct and interpret a range of standard graphical forms **QS8:** Make calculations of elasticity and interpret the result. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** • 1 mark for definition or formula of cross elasticity of demand e.g.: The responsiveness of quantity demanded of good A to a change in the price of good B **or** % change in quantity demanded of good X % change in price of good Y **(1)**	

Application

1 mark for identifying that the two goods are substitutes

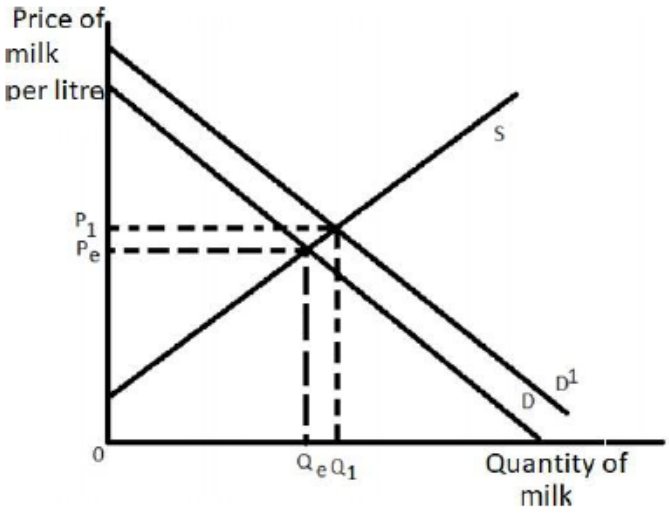
Milk and sugar-sweetened drinks are substitutes **(1)**

Analysis

Up to 2 marks for linked expansion

- The demand for milk will increase **(1)** by 1.25% **(1)**

Or



- For showing increase in demand **(1)**
- For showing increase in equilibrium price/quantity **(1)**

Or

- If the price of sugar-sweetened drinks increases, consumers will buy more milk causing the demand for milk to increase **(1)** the percentage increase will be less than 5% as the cross elasticity is inelastic **(1)**
- Not close substitutes **(1)** so the impact so will result in a less than proportionate impact on the quantity of milk demanded **(1)**

(4)

Q32.

Question Number	Answer	Mark
	Knowledge 2 Application 2 Quantitative skills assessed: **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge** 2 marks for definition of rational decision making: • Rational decision-making is where consumers maximise **(1)** utility/benefits/satisfaction **(1)** **Application** Up to 2 marks for application to Extract B: • Consumers would purchase the E-Golf/ With added indirect taxation the VW Golf is more expensive than the subsidised electric VW Golf **(1)** • Consumers will save money on the purchase of an electric car/on the lower running and fuel costs which can then be spent on other goods and services that gain utility **(1)**	**(4)**

Q33.

Question	With reference to this information, explain what is meant by 'rational decision making'. **Answer**	Mark
	Knowledge 2, Application 2 Quantitative skills assessed: **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** 1 mark for understanding of 'rational decision-making' • Where consumers maximise utility/satisfaction/benefit where producers maximise profit **(1)** 1 mark for link to how behaviour is rational • Switching to cheaper alternatives for better value **(1)** • Customers want to avoid the new higher prices **(1)** • By spending less enabling them to purchase other goods **(1)** • Consumers are good at computation so can calculate the savings from buying alternative products **(1)** • Consumers lack loyalty/habitual behaviour so when they see a better deal they will be happy to switch **(1)** • The higher price results in a smaller decrease in quantity demanded so revenues will rise **(1)** • If the increase in revenue is greater than the change in costs then profits will increase **(1)** **Application** Up to 2 marks for reference to data • 6.8% decrease in the number of items sold **(1)** • Increase in total costs of €4.4 billion **(1)** • Unilever increased prices, on average, by 13.2% in response to higher costs **(1)**	**(4)**

Q34.

Question	With reference to Figure 2, explain whether chicken is a normal good or an inferior good. **Answer**	Mark
	QS8: Make calculations of elasticity and interpret the result. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge 2 Application 2** **Knowledge** 1 mark for definition of normal good: • A positive value of YED/ an increase in income leads to an increase in demand **(1)** 1 mark for definition of inferior good: • A negative value of YED/ an increase in income leads to a decrease in demand/ decrease in income leads to an increase in demand **(1)** **Application** Up to 2 marks for application: • YED of chicken is +1.04 **(1)** • A normal good/luxury good **(1)** • The 6.8% increase in income in Beijing will result in a 7.07% increase in demand for chicken **(1)**	**(4)**

Q35.

Question	With reference to Figure 2, explain whether demand for **each** of the four selected food groups is price elastic or price inelastic. **Answer**	Mark
	QS8: Make calculations of elasticity and interpret the result. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge 2 Application 2** **Knowledge** 1 mark for definition of price elastic demand: • A value between -1 and -∞/ a larger than proportional change in quantity demanded to a change in price **(1)** 1 mark for definition of price inelastic demand • A value between 0 and -1/ a smaller than proportional change in quantity demanded to a change in price **(1)** **Application** Up to 2 marks for application: • Demand for vegetables, fish and meat is price inelastic **(1)** • Demand for rice is price elastic **(1)**	**(4)**

Q36.

Question	With reference to hotel breakfasts, explain why the above information illustrates 'diminishing marginal utility'. **Answer**	Mark
	Knowledge 1, Application 1, Analysis 2 Quantitative skills assessed: **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** 1 mark for understanding of 'diminishing marginal utility' • Where an additional unit of consumption leads to a smaller increase in utility/ where the marginal utility decreases/total utility increases but at a slower rate **(1)** **Application** 1 mark for reference to data • 80% of hotel guests go to the buffet three times **/** Only 10% visit five times **(1)** **Analysis** Up to 2 marks for analysis e.g. • 90% of hotel guests are satiated/full after consuming the 4th bowl/plate of food **(1)** so do not consume the 5th bowl/plate **(1)** • The last bowl/plate of food consumed increases total utility **(1)** but the gain in utility is smaller than for the last bowl **(1)**	**(4)**

Q37.

Question Number	Quantitative skills assessed	Answer	Mark
	–	**The only correct answer is C** **A** is not correct because is consumers were good at computation they would calculate that they could save 20% and switch **B** is not correct because if people aimed to maximise utility they would switch as the money they have could be spent on other goods **D** is not correct because if consumers felt undervalued by their current provider they would be more likely to look for a provider that does value them	**(1)**

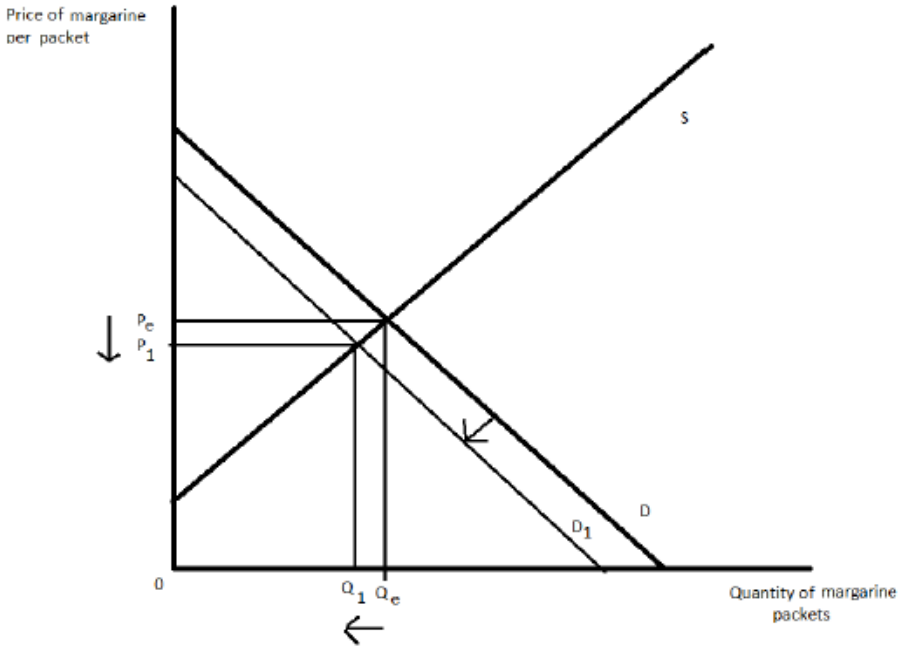
Q38.

Question Number	Quantitative skills assessed	Answer	Mark
	QS8: Make calculations of elasticity and interpret the result	**The only correct answer is B** **A** is not correct because a decrease in real income will result in a less than proportionate decrease in demand for butter **C** is not correct because a decrease in real income will result in a less than proportionate increase in the demand for margarine **D** is not correct because the data is about income elasticity and not price elasticity of demand.	**(1)**

Q39.

Question Number	Quantitative skills assessed	Answer	Mark
	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is D** **A** is not correct because the social optimum quantity is Q_2 and price is P_2 **B** is not correct because the market equilibrium quantity is Q_1 and price is P_1 **C** is not correct because RST is the area of welfare loss	**(1)**

Q40.

Question	Draw a diagram to illustrate the likely impact of this increase in real incomes on the equilibrium price and quantity of margarine. **Answer**	Mark
	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, tabular and numerical forms. **Knowledge** 1 mark for showing knowledge on diagram • Original supply and demand and correctly labelled axes **(1)** **Application** Up to 3 marks for the following information included on diagram: • Leftward shift of demand **(1)** • Original equilibrium price and quantity **(1)** • New equilibrium price and quantity **(1)**  	**(4)**