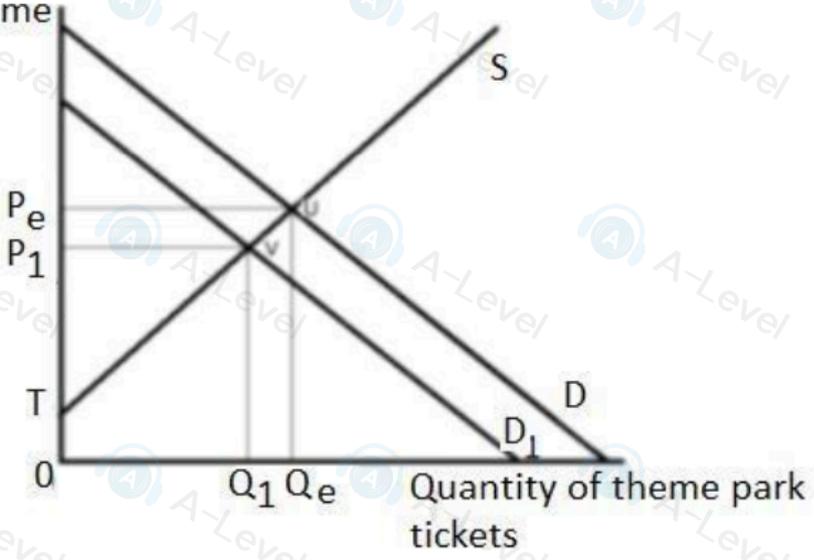| 6	**QS8**: Make calculations of elasticity and interpret the result **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is D** **A** is not correct because demand for battery electric vehicles will increase **B** is not correct because the demand for hybrid vehicles will increase by 3.2% **C** is not correct because the demand for hybrid vehicles will increase by 1.6%	**(1)**
5	**QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is C** **A** is not correct because if consumers experienced inertia they would not have used the energy to cancel their subscription **B** is not correct because if consumers experienced habitual behaviour they would keep their Amazon subscription **D** is not correct because rational consumers maximise their utility by switching	**(1)**
1	**QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** **A** is not correct because this is an advantage of a free market economy **C** is not correct because a free market economy does not have government intervention **D** is not correct because a free market economy is likely to result in an unequal distribution of income	**(1)**
4	**QS4**: Construct and interpret a range of standard graphical forms **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 market equilibrium quantity is at Q_1 **B** is not correct because the social optimum quantity is at Q_2 **C** is not correct because the welfare gain area is equal to the area UWX	**(1)**

Question	Quantitative skills assessed	Answer	Mark
1	**QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** **A** is not correct because resources are finite **C** is not correct because wants are unlimited and resources are finite **D** is not correct because wants are unlimited	**(1)**
2	**QS4**: Construct and interpret a range of standard graphical forms **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 maximum price is below the equilibrium so resulting in excess demand, not excess supply **B** is not correct because the maximum price is below the equilibrium so resulting in excess demand, not excess supply **C** is not correct because the higher price results in a contraction of demand and an extension of supply so excess demand decreases	**(1)**

Question	Ceteris paribus, explain the likely impact of this decrease in visitor numbers on the producer surplus for Legoland. **Answer**	Mark
11	**Knowledge 1, Application 1, Analysis 2** 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 definition of producer surplus e.g.: Producer surplus – the difference between the price charged and the price the firm is willing to sell at/above the supply line and below the equilibrium price **(1)** **Application** 1 mark for shifting demand to the left **(1)** **Analysis** Up to 2 marks for showing the change in producer surplus Original producer surplus decreased from P_eUT **(1)** to P_1VT **(1)** **Or** Producer surplus decreases **(1)** by P_eP_1VU **(1)** Shaded reduction in producer surplus **(1)**	**(4)**

Question	Ceteris paribus, calculate the income elasticity of demand for bus journeys. Show your workings. **Answer**	Mark

10	**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
	   Responsiveness of quantity demanded to a change in income
	
	/the formula of income elasticity of demand
	   <u>% change in quantity demanded</u>
	   % change in income **(1)**
	
	Application
	Up to 3 marks for calculations:
	   • % change in number of bus journeys
	      3.4-2.9/2.9 x 100 = 17.24137931% **(1)**
	   • % change in income
	      663-626/626 x 100 = 5.91054313% **(1)**
	   • YED calculation
	      17.24137931% ÷ 5.91054313%
	      = 2.917054986 **(1)**
	
	NB: if correct answer (e.g. 2.9/2.92/2.917) is given, award full marks regardless of working.
	Accept reasonable rounding from full calculation (e.g. 17/6= 2.833)
	Award the mark for 0.172 and 0.0591 where they have not multiplied by 100 for the % change in number of bus journeys or % change in income
	Award 3 marks for 2.92%
		(4)

Question	*Ceteris paribus*, calculate the price elasticity of supply for olive oil. Show your workings. **Answer**	Mark
10	**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 price elasticity of supply $\dfrac{\text{\% change in quantity supplied}}{\text{\% change in price}}$ **(1)** **Application** Up to 3 marks for calculations: - Change in quantity supplied 3.27 - 2.93 = 0.34 Change in quantity ÷ original quantity x 100 0.34 ÷ 2.93x 100= 11.60% **(1)** - Change in price 5 145 - 4 125 = 1 020 Change in price ÷ original price x 100 1020 ÷ 4 125 x 100= 24.73% **(1)** $\dfrac{\text{\% change in quantity supplied}}{\text{\% change in price}}$ 11.60 ÷ 24.73 = 0.47 **(1)** **NB: if correct answer (e.g. 0.47, 0.469, 0.4690659) is given, award full marks regardless of working.** **Accept reasonable rounding from full calculation** **If 0.47% or -0.47 is given award 3 marks** **Where the proportions are calculated for the change in quantity supplied or price award 1 mark for each (e.g. 0.116 and 0.2473)**	**(4)**

Question	Explain how the above table may be used to illustrate the concept of diminishing marginal utility. You may wish to use the last column in the table to show your workings. Answer	Mark
11	**Knowledge 1, Application 1, Analysis 2** 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 definition of diminishing marginal utility • As consumption increases the total utility gained grows at a slower rate / As successive units of a product are consumed the additional utility (satisfaction) gained from each successive unit decreases / where the marginal utility falls as consumption increases **(1)** **Application** 1 mark for two accurate calculations of marginal utility **(1)**	

Vegan protein bars	Total utility	Marginal utility
0	0	-
1	15	15
2	29	14
3	40	11
4	46	6
5	46	0

Analysis
Up to 2 marks for explanation:
- Diminishing marginal utility sets in with the consumption of the 2nd bar **(1)**
- When additional bars are consumed MU continues to fall / with the consumption of the 4th bar Sheena will be satiated **(1)**

(4)

Question	With reference to this information, explain what is meant by 'rational decision making'.	Mark
	Answer	
8	**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)