

Mark Scheme (Results)

January 2024

Pearson Edexcel International Advanced Level In Economics (WEC11)

Unit 1: Markets in Action

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.edexcel.com. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

January 2024

Question Paper Log Number P73482A

Publications Code WEC11_01_MS_2401

All the material in this publication is copyright

© Pearson Education Ltd 2024

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	Quantitative skills assessed	Answer	Mark
1	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 is an example of asymmetric information B is not correct because this is an example of asymmetric information D is not correct because market failure occurs when there is asymmetric information	(1)
2	QS9 : Interpret, apply and analyse information in written, graphical, tabular and numerical forms	A is not correct because consumer goods gain utility for an individual B is not correct because the sea defences have an opportunity cost C is not correct because the sea defences are non-excludable and non-rival whereas private goods are excludable and rival.	(1)
3	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)
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 A B is not correct because this is the area of consumer surplus C is not correct because the area the government will spend is GHKJ D is not correct because this is the total revenue to farmers	(1)
5	QS2 Calculate, use and understand percentages, percentage changes and percentage point changes QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is B A is not correct because more electricity is generated using renewable resources C is not correct because 21% is the total for non-renewable resources D is not correct because 79% is the total for renewable resources	(1)

6	QS4: Construct and	The only correct answer is C	
	interpret a range of		(1)
	standard graphical forms	A is not correct because Y is	
	QS9 : Interpret, apply and	unobtainable using current resources	
	analyse information in	B is not correct because the	
	written, graphical, tabular	opportunity cost is in terms of	
	and numerical forms	capital goods	
		D is not correct because the	
		movement from X to W results in a	
		decrease in efficiency/unemployment	

Section B

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		
	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)	

Question	With reference to Zimbabwe, explain the difference between a 'specific tax' and an 'ad valorem tax'.	Mark
	Answer	
9	Knowledge 2, Application 2	
	QS9 : Interpret, apply and analyse information in written, graphical, tabular and numerical forms.	
	Knowledge	
	1 mark for definition of specific tax e.g.:	
	 A fixed amount/set amount of tax added on a particular good/where there would be a parallel shift in supply (1K) 	
	Reward correctly drawn diagram clearly identified as specific	
	1 mark for definition of ad valorem tax	
	 A percentage tax based on the price of the item/ where there would be a pivot of the supply curve (1K) 	
	Reward correctly drawn diagram clearly identified as ad valorem	
	Application	
	Up to 2 marks for applying to stem e.g.:	
	 Tax on energy drinks of \$0.05 per litre/smartphones of \$50 per device are specific (1AP) 	
	 VAT (consumption tax) raised from 14.5% to 15% is ad valorem (1AP) 	
	da valorem (ZAI)	(4)

Question	Ceteris paribus, calculate the price elasticity of supply for olive oil. Show your workings.	Mark
	Answer	
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 % change in quantity supplied % 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 × 100 0.34 ÷ 2.93x 100= 11.60% (1) • Change in price 5 145 - 4 125 = 1 020 Change in price ÷ original price × 100 1020 ÷ 4 125 x 100= 24.73% (1) % change in quantity supplied % 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)	
	anu 0.27/3)	(4)

Question	Ceteris paribus, explain the likely impact of this change in production costs on producer surplus in the electric vehicle market.	Mark
	Illustrate your answer with a supply and demand diagram	
	Answer	
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.:	
	The difference between the market price and the price at which the suppliers are willing to sell/the cost of supply (1)	
	Application	
	1 mark for correct shift of supply to the right (1)	
	Price per S	
	vehicle	
	Pe P1 F F D	
	Quantity of electric V	
	Analysis Up to 2 marks for showing the change in producer surplus Old producer surplus FGPe (1) New producer surplus HJP1 (1) Producer surplus increases (1)	(4)

Section C

Question	Define the term 'price elasticity of demand' (Figure 2)	
	Answer	
12 (a)	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) ΔQ_D/Q_D ÷ ΔP/P (1+1) 	
	PED of chicken is -0.55/ relatively inelastic (1)	
		(2)

Question	With reference to Figure 2, explain whether chicken is a normal good or an inferior good. Answer	Mark		
12 (b)	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)		

Ques tion	With reference to Figure 1 and the first paragraph of Extract A, analyse one demand reason and one supply reason why the price of chicken increased by 147% between May 2020 and May 2022.		
	Illustrate your answer with a supply and demand diagram.		
	Answer		
12 (c)	,		
	Quantity of chicken in kg		
		(6)	

QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms Knowledge 2, Application 2, Analysis 2, Evaluation 2 Knowledge and Analysis Up to 2 marks for identifying two impacts and up to 2 marks for linked explanations, e.g.: • This leaves less water in the natural environment/ water becomes scarcer (1K) meaning animals and humans find it more difficult to find water for consumption (1AN) • The grain used for chicken feed means more land needs to be farmed (1K) which may result in deforestation as trees are removed to make room for growing crops resulting in habitat destruction for animals/loss of possible future medications (1AN) • Additional carbon dioxide emissions may cause global warming (1K) this may increase the risk of flooding as water levels rise/ increase the risk of wildfires as global temperatures rise causing damage to peoples' homes (1AN) • 1 Knowledge mark for accurate diagram showing external costs of production OR for correct definition of external costs (1K) Application Up to 2 marks for application to Extract A One kilogram of chicken uses: • Uses 957 litres of water per kg (1AP) • 0.9kg of grain to feed the chickens per kg (1AP) • 0.07kg of carbon dioxide per kg (1AP) • 0.7kg of carbon dioxide per kg (1AP) • 0.9kg of grain to feed the chickens per kg (1AP) • 0.9ft of sess negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) • Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) • 345 billion kg chicken produced- substantial impact (1) • The external costs may only be experienced in the long-run (1+1) • There may be external benefits, such as employment associated with chicken production (1+1) • Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging	Question	examine two external costs associated with chicken production.		
graphical, tabular and numerical forms Knowledge 2, Application 2, Analysis 2, Evaluation 2 Knowledge and Analysis Up to 2 marks for identifying two impacts and up to 2 marks for linked explanations, e.g.: • This leaves less water in the natural environment/ water becomes scarcer (1K) meaning animals and humans find it more difficult to find water for consumption (1AN) • The grain used for chicken feed means more land needs to be farmed (1K) which may result in deforestation as trees are removed to make room for growing crops resulting in habitat destruction for animals/loss of possible future medications (1AN) • Additional carbon dioxide emissions may cause global warming (1K) this may increase the risk of flooding as water levels rise/ increase the risk of wildfires as global temperatures rise causing damage to peoples' homes (1AN) • 1 Knowledge mark for accurate diagram showing external costs of production OR for correct definition of external costs (1K) Application Up to 2 marks for application to Extract A One kilogram of chicken uses: • Uses 957 litres of water per kg (1AP) • 0.9kg of grain to feed the chickens per kg (1AP) • 0.7kg of carbon dioxide per kg (1AP) • 0.7kg of carbon dioxide per kg (1AP) • 10 Evaluation Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.: • 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) • Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) • 345 billion kg chicken produced- substantial impact (1) • The external costs may only be experienced in the long-run (1+1) • There may be external benefits, such as employment associated with chicken production is less environmentally damaging		Answer		
Knowledge and Analysis Up to 2 marks for identifying two impacts and up to 2 marks for linked explanations, e.g.: • This leaves less water in the natural environment/ water becomes scarcer (1K) meaning animals and humans find it more difficult to find water for consumption (1AN) • The grain used for chicken feed means more land needs to be farmed (1K) which may result in deforestation as trees are removed to make room for growing crops resulting in habitat destruction for animals/loss of possible future medications (1AN) • Additional carbon dioxide emissions may cause global warming (1K) this may increase the risk of flooding as water levels rise/ increase the risk of wildfires as global temperatures rise causing damage to peoples' homes (1AN) • 1 Knowledge mark for accurate diagram showing external costs of production OR for correct definition of external costs (1K) Application Up to 2 marks for application to Extract A One kilogram of chicken uses: • Uses 957 litres of water per kg (1AP) • 0.9kg of grain to feed the chickens per kg (1AP) • 0.7kg of carbon dioxide per kg (1AP) Evaluation Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.: • 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) • Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) • 345 billion kg chicken produced- substantial impact (1+1) • The external costs may only be experienced in the long-run (1+1) • There may be external benefits, such as employment associated with chicken production (1+1) • Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging	12(d)	-		
Up to 2 marks for identifying two impacts and up to 2 marks for linked explanations, e.g.: • This leaves less water in the natural environment/ water becomes scarcer (1K) meaning animals and humans find it more difficult to find water for consumption (1AN) • The grain used for chicken feed means more land needs to be farmed (1K) which may result in deforestation as trees are removed to make room for growing crops resulting in habitat destruction for animals/loss of possible future medications (1AN) • Additional carbon dioxide emissions may cause global warming (1K) this may increase the risk of flooding as water levels rise/ increase the risk of wildfires as global temperatures rise causing damage to peoples' homes (1AN) • 1 Knowledge mark for accurate diagram showing external costs of production OR for correct definition of external costs (1K) Application Up to 2 marks for application to Extract A One kilogram of chicken uses: • Uses 957 litres of water per kg (1AP) • 0.9kg of grain to feed the chickens per kg (1AP) • 0.9kg of grain to feed the chickens per kg (1AP) • 0.7kg of carbon dioxide per kg (1AP) Evaluation Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.: • 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) • Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) • 345 billion kg chicken produced- substantial impact (1) • The external costs may only be experienced in the long-run (1+1) • There may be external benefits, such as employment associated with chicken products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging		Knowledge 2, Application 2, Analysis 2, Evaluation 2		
 linked explanations, e.g.: This leaves less water in the natural environment/ water becomes scarcer (1K) meaning animals and humans find it more difficult to find water for consumption (1AN) The grain used for chicken feed means more land needs to be farmed (1K) which may result in deforestation as trees are removed to make room for growing crops resulting in habitat destruction for animals/loss of possible future medications (1AN) Additional carbon dioxide emissions may cause global warming (1K) this may increase the risk of flooding as water levels rise/ increase the risk of wildfires as global temperatures rise causing damage to peoples' homes (1AN) 1 Knowledge mark for accurate diagram showing external costs of production OR for correct definition of external costs (1K) Application Up to 2 marks for application to Extract A One kilogram of chicken uses: Uses 957 litres of water per kg (1AP) 0.9kg of grain to feed the chickens per kg (1AP) 0.7kg of carbon dioxide per kg (1AP) Evaluation Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.: 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) 345 billion kg chicken produced- substantial impact (1) The external costs may only be experienced in the long-run (1+1) There may be external benefits, such as employment associated with chicken production (1+1) Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging 		Knowledge and Analysis		
becomes scarcer (1K) meaning animals and humans find it more difficult to find water for consumption (1AN) The grain used for chicken feed means more land needs to be farmed (1K) which may result in deforestation as trees are removed to make room for growing crops resulting in habitat destruction for animals/loss of possible future medications (1AN) Additional carbon dioxide emissions may cause global warming (1K) this may increase the risk of flooding as water levels rise/ increase the risk of wildfires as global temperatures rise causing damage to peoples' homes (1AN) 1 Knowledge mark for accurate diagram showing external costs of production OR for correct definition of external costs (1K) Application Up to 2 marks for application to Extract A One kilogram of chicken uses: Uses 957 litres of water per kg (1AP) O.9kg of grain to feed the chickens per kg (1AP) O.7kg of carbon dioxide per kg (1AP) Evaluation Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.: 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) 345 billion kg chicken production is difficult (1+1) There may be external benefits, such as employment associated with chicken products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging		, - , , , , , , , , , , , , , , , , , ,		
Up to 2 marks for application to Extract A One kilogram of chicken uses: Uses 957 litres of water per kg (1AP) O.9kg of grain to feed the chickens per kg (1AP) O.7kg of carbon dioxide per kg (1AP) Evaluation Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.: 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) 345 billion kg chicken produced- substantial impact (1) The external costs may only be experienced in the long-run (1+1) There may be external benefits, such as employment associated with chicken products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging		 becomes scarcer (1K) meaning animals and humans find it more difficult to find water for consumption (1AN) The grain used for chicken feed means more land needs to be farmed (1K) which may result in deforestation as trees are removed to make room for growing crops resulting in habitat destruction for animals/loss of possible future medications (1AN) Additional carbon dioxide emissions may cause global warming (1K) this may increase the risk of flooding as water levels rise/ increase the risk of wildfires as global temperatures rise causing damage to peoples' homes (1AN) 1 Knowledge mark for accurate diagram showing external costs of production OR for correct definition of external costs 		
 Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.: 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) 345 billion kg chicken produced- substantial impact (1) The external costs may only be experienced in the long-run (1+1) There may be external benefits, such as employment associated with chicken production (1+1) Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging 		Up to 2 marks for application to Extract A One kilogram of chicken uses: • Uses 957 litres of water per kg (1AP) • 0.9kg of grain to feed the chickens per kg (1AP)		
 Up to 2 marks for evaluative comments (2+0 or 1+1), e.g.: 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) 345 billion kg chicken produced- substantial impact (1) The external costs may only be experienced in the long-run (1+1) There may be external benefits, such as employment associated with chicken production (1+1) Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging 		Evaluation		
 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1) Difficult to quantify external costs, putting a value on the external costs of chicken production is difficult (1+1) 345 billion kg chicken produced- substantial impact (1) The external costs may only be experienced in the long-run (1+1) There may be external benefits, such as employment associated with chicken production (1+1) Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging 				
 costs of chicken production is difficult (1+1) 345 billion kg chicken produced- substantial impact (1) The external costs may only be experienced in the long-run (1+1) There may be external benefits, such as employment associated with chicken production (1+1) Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging 		• 50% less negative impact on the environment compared to 1965 so a reduction from approximately 2000 litres of water/ 1.8kg of grain/ 1.4kg CO2 (1+1)		
 (1) The external costs may only be experienced in the long-run (1+1) There may be external benefits, such as employment associated with chicken production (1+1) Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging 		costs of chicken production is difficult (1+1)		
 The external costs may only be experienced in the long-run (1+1) There may be external benefits, such as employment associated with chicken production (1+1) Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging 		,		
 There may be external benefits, such as employment associated with chicken production (1+1) Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging 		The external costs may only be experienced in the long-run		
 with chicken production (1+1) Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging 				
Other meat products may contribute more carbon dioxide emissions meaning chicken is less environmentally damaging				
_ _		Other meat products may contribute more carbon dioxide	(8)	

Question With reference to Extract B and your own knowledge, discuss the impact of the introduction of an indirect tax on 'junk food'.

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.

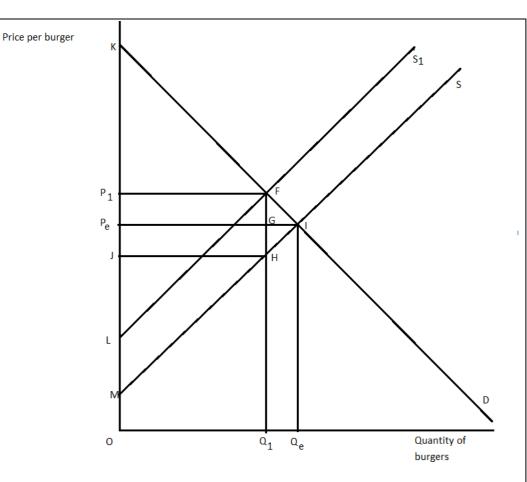
Quantitative skills assessed

QS4: Construct and interpret a range of standard graphical forms

QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms.

Knowledge, Application and Analysis (8 marks) - indicative content

- Indirect tax- expenditure tax
- Junk food- foods that are low in nutrients and high in calories, salt, sugar or fat.
- Junk food/ obesity increases the risk of cancer, heart disease and diabetes- these will reduce the quality of life and result in costs to health services/ government
- Tax introduced on junk food, such as burgers, fried chicken, pizza, chips and ice cream.
- Sales of junk foods increased from \$862 billion to \$972 billion and are expected to grow further to \$1 467 billion by 2028- tax is needed to reduce the quantity of junk food consumed
- The WHO estimated that junk food has contributed to 770 million people being obese in 2020/ will grow to over 1 billion by 2030 - this causes costs to health services- the tax would help reduce this number of obese people and health care costs associated with this/decrease the external costs of consumption
- Treating obesity-related issues account for 8.4% of expenditure on health care in developed countries- creating an opportunity cost as less funds are available for other treatments



- The indirect tax causes supply to pivot/shift left
- As costs of production rise
- The quantity consumed decreases from Q_e to Q_1 . In Hungary there was a 73% reduction in consumption of affected foods/in Mexico 7% reduction in junk food consumption
- With less quantity the amount of junk food consumed decreases and the instances of obesity/ healthcare costs reduce
- The price of junk food increases from P_e to P_1 . In Denmark resulted in food prices rising. The revenue for sellers of junk food decreases from OP_eIQ_e to $OJHQ_1$
- The tax revenue earned by the government will be FGHJP₁
- Producer incidence will be GHJPe
- Consumer incidence will be FGP_eP₁
- Consumer surplus decreases from KIP_e to KFP₁
- Producer surplus decreases
- As quantity of junk food sales decreases, employment may fall.
- In Hungary people switched to healthier choices e.g. demand for bottled water, fruit and vegetables increased- boost to non-junk food markets

NB Maximum Level 2 if diagram omitted

G	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.

Level 3	7–8	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. 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.
	Evalua	tion (6 marks) – indicative content
	•	Magnitude- depends on the level of the tax set- if too low then little impact on behaviour
		The numbers affected by junk food are estimates which may be inaccurate
		Junk food may have highly inelastic demand resulting in little impact on quantity demanded and most of the incidence of the tax being faced by consumers
		Junk food market results in external benefits in terms of employment opportunities
	•	Retailers of junk food do offer healthier alternatives
		Difficult to measure the size/value of external costs of consumption-so difficult to decide the level of tax to charge
		Denmark abandoned the tax as it resulted in food price inflation and job losses
		Firms may adjust the contents of the meals to reduce the fat, salt, and sugar content to avoid the tax
		Indirect taxes might result in government failure e.g. if they are set too high, information gaps, unintended consequences
		Indirect taxes might have a more significant impact on low income families
		Other methods e.g. increased information might be more effective than introducing indirect taxes
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 According to

According to a German insurance company, global natural disasters have become more common in recent years. For example, there was an increase in natural disasters from 400 in 1990 to 820 in 2019.

Evaluate the microeconomic effects of an increase in the number of natural disasters.

Include at least one appropriate diagram in your answer.

Indicative content

13

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.

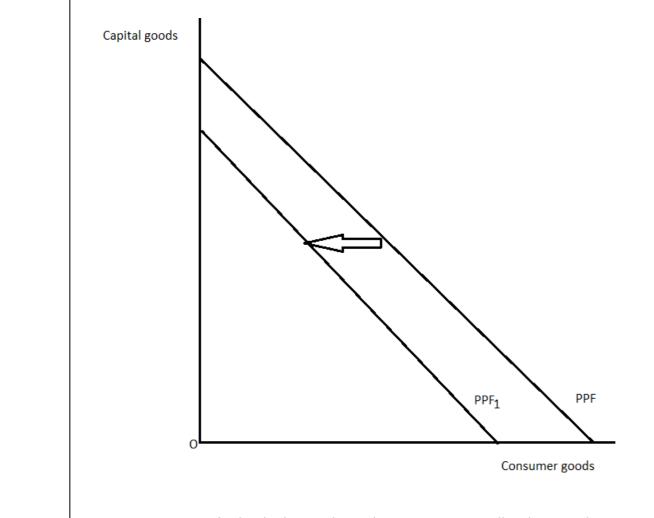
Indicative content guidance

Answers must be credited by using the level descriptors (below) in line with the general marking guidance.

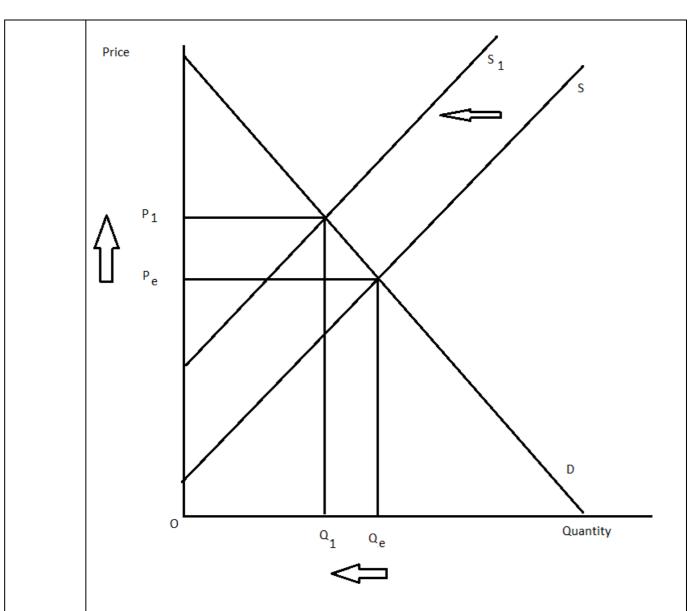
The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited.

Knowledge, application and analysis (12 marks) - indicative content

- Natural disasters include earthquakes, flooding, monsoons, tornados, wildfires etc.
- Increased number of natural disasters from 400 to 820 between 1990 and 2019
- Production possibility frontiers in countries affected will be shifted inwards
- Reducing productive potential of these countries



- Destruction of schools, hospitals, and power stations will reduce productive potential
- Supply in markets affected will be reduced- e.g. if crops are destroyed in a flood



- This will result in an increase in prices for these items as they are more scarce
- This will result in a reduction in quantity as less can be produced
- Some sectors will see increased demand and output-e.g. tents, blankets etc.
- Increased costs to insurance companies
- Financial loss to individuals if insurance pay-outs below value of items e.g. house rebuild costs

NB Award maximum of Level 3 if no diagram is included

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 There is no indication of the magnitude of the natural disasters- to determine the impact Size of the natural disaster will determine the size of reductions in supply or movement inwards of PPF e.g., more damaging earthquakes with epicentre in populous areas more damaging The Government is likely to step in to support areas affected- reducing impact on insurance markets and individuals Subsidies paid to support reconstruction, increase supply, lowering price and increasing quantity International support in terms of people and resources may reduce issues Consideration of difference between short-run and long-run microeconomic effects In the long-run resilience to natural disasters may improve- e.g., flood defences 	
Level	Mark	Descriptor No reverdable material
Level 1	1-3	No rewardable material. 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

In 2022 General Motors received a \$1 billion subsidy from the US Government to open two new electric vehicle factories in the USA. This was expected to generate 4 000 new jobs.

Evaluate the microeconomic effects of subsidies paid to electric vehicle manufacturers.

Include at least one appropriate diagram in your answer.

Indicative content

14

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.

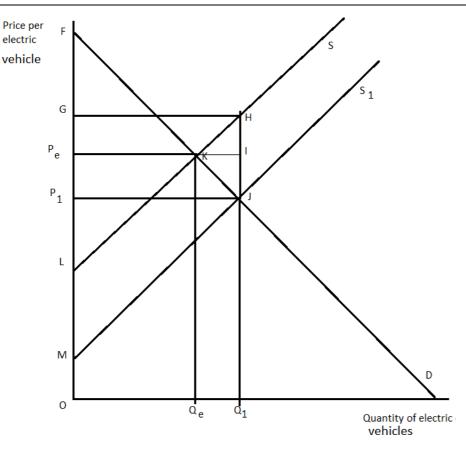
Indicative content guidance

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

- Subsidy- cash grant paid to encourage production
- Reduces electric vehicle manufacturers' costs of production
- Generates 4 000 new jobs in the USA
- The cost per job created is \$250 000



- Price of electric vehicles reduces P_e to P₁
- Quantity of electric vehicles increases Qe to Q1
- Subsidy costs the government GHJP₁
- Consumer subsidy PeIJP1
- Producer subsidy GHIPe
- Consumer surplus increases FKP_e to FJP_1 / increases by P_eKJP_1
- Producer surplus increases
- With higher electric vehicle production- the diesel or petrol vehicle market may suffer/decline
- Employment in the diesel/petrol market may decrease
- General Motors experienced much lower costs, higher profit/producer surplus/invest more in USA
- More electric vehicles reduces environmental damage as compared with diesel/ petrol vehicles

NB Award maximum of Level 3 if no diagram included

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.
Level 2	4-6	Descriptive approach, which has no chains of reasoning. 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.
	Evalua	ition (8 marks) – indicative content
		Opportunity costs as the \$1 billion given to General Motors cannot be spent on improving healthcare for the poor or spending on education If subsidies are paid to other electric vehicle manufacturers then the costs would be substantially higher Electric vehicle manufacturers may become dependent on subsidies Electric vehicle manufacturers may become complacent and less focused on cutting costs Two new factories being built cause environmental damage Is it fair on other vehicle manufacturers outside the USA that do not receive subsidies? Magnitude of the subsidy is substantial- although General Motors still have to spend billions starting production at these factories Production may be capital intensive meaning few people are employed External benefits 4 000 additional employees spending in local businesses Other indirect employment from suppliers to General Motors so more than 4 000 new jobs are created Balance the job losses in petrol and diesel with the job creation at General Motors Electric vehicles still need electricity to be generated and if this is generated using fossil fuels then environmental costs are higher than first thought
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.